

## FIRE AND SECURITY PRODUCTS

**ISSUE 27** 

www.espuk.com





#### About ESP\*

For more than 20 years ESP\* has been developing and supplying security related products to the UK electrical industry. As a leading safety and security product specialist, the company offers a comprehensive range of electronic security and fire detection solutions to meet the requirements of installers and contractors. The range includes Smart Security, CCTV, Access Control, a growing collection of Two Wire, Conventional and Addressable Fire Protection products, Duceri Emergency Lighting, Essentials, and Sangamo Time Switches and Heating Controls.

#### Central Location - England

Based in Worcestershire in the Midlands at our purpose built Head Office and Distribution Centre, we are ideally located to design, develop, manufacture and distribute our ever-expanding product range worldwide.

#### Delivering New Products

Our Product Development Team are constantly tracking market trends, approval standards and providing customised products according to unique specification. This ensures we continue to increase our product range to meet the ever-changing needs of our customers.

#### A Scolmore<sup>®</sup> Group Company

ESP\* has been part of the Scolmore\* Group of companies since 2011, and whilst the company operates independently, ESP\* benefits from the expertise, knowledge and support of the Scolmore\* Group and continues to create strong growth within its product categories.

Scolmore<sup>\*</sup> has been a leading UK manufacturer of electrical accessories and lighting products since 1989 and has earned a reputation worldwide for high quality products, innovative solutions and exemplary customer service. Key to the continued success of the group is the commitment to developing new products which incorporate the very latest in technological advancements, and provide contractors and installers with cost-efficient, easy to install solutions that help them remain highly competitive.

#### Scolmore<sup>®</sup> Group App

The Scolmore<sup>®</sup> Group app allows you to use your smart phone to browse our complete range of products, add products to your Favourites or to the Quote Basket and allows you to email the contents of the basket back to yourself.

With Scolmore<sup>®</sup>, Ovia<sup>®</sup> lighting, Esp<sup>®</sup> and Unicrimp<sup>®</sup> products available you can use the search facility to easily locate the products required.

Our App also has a useful tool kit featuring: Quick Quote Calculator, Zs Values, Cables Selection & Voltage Drop, Adiabatic Equation Calculator, Power Factor Calculator, KVA Converter, Lighting Cost Saving Calculator, Lighting No. Calculator and many more...





#### Online Ordering | espukonline.com/

The updated site now incorporates a number of improved features that allow users to access new information directly and more easily:

- Ordering 24 hours a day 7 days a week with the ability to check current stock levels as required, meaning you are not restricted to ordering during normal office hours.
- Access to on-line catalogues will keep you fully updated with the complete product range and provide information on new products as and when they become available.
- The order tracking service keeps you up to date with the progress of your shipment.
- Managing your administration paper work is now even easier with instant access to reports and essential documents at a click of a button.
- A 'quick buy tab' and the ability to store the most common orders for repeated use, adds to the versatility and flexibility of the revised system.

E-mail us at info@espuk.com or call our Sales Office on 01527 51 51 50 and one of our Sales Representatives will be more than happy to get you on-line.





#### Marketing Hub| spuk.com/marketing-hub

A brand new feature of the revamped site is the Marketing Hub area which provides ESP<sup>\*</sup> stockists with a range of tools to enhance their own marketing facilities, with very little effort or cost.

A number of templates featuring some of the most popular products are available to download and these can be customised with the stockist's own details to optimise sales opportunities.

#### ESP<sup>®</sup> Website | espuk.com

The refreshed new site provides customers with access to detailed product information for the company's extensive range of security products, which includes smart security, cctv, access control, fire protection, emergency lighting, essentials and sangamo time switches and heating controls.

Stockists can also take advantage of a comprehensive product image library, plus a range of literature covering every product category – all available to download at the click of a button. Visitors can keep informed of the latest new products and company developments via regular updates on the news section.





#### Smart Security Products



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#### Sangamo

Choice Plus Programmers
Choice Programmers
Choice Plus Thermostats
Choice Thermostats
Powersaver Plus Timers
Powersaver Controllers
Round Pattern Time Switches
DIN Rail Time Switches
Panel Time Switches





## **FORL** SMART SECURITY PRODUCTS

At ESP<sup>®</sup> we create simple, smart solutions for a safer and more comfortable home. Discover a whole range of smart home products. From smart alarm kits, smart cameras, smart sensors and smart door bells, all working together to make your home smarter and safer.



All of ESP's Fort products are compatible with the Click Smart+ app.

Peace of mind away from home. Easily check and change the status of your Fort devices wherever you are.





#### ECSPK1

Smart Alarm Kit





#### ECSPK2 Smart Alarm Kit

(3)

#### Kit Contains:

1 x Smart hub, 1 x PIR, 1 x Door/Window Contact, 1 x Remote Control

- Smart Alarm Kit
- WI-FI Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours
- Standby Time 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included

#### General Information

General Information	
Material	ABS
Operating Voltage	12VDC 1A
Backup Battery	Internal 7.4V600mAh Li-Po Battery
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Network Connection	Wi-Fi 2.4GHz
GSM (SIM Required)	850/900/1800/1900 MHz
Internal Siren	95dB
System Requirements	Mobile Device Running IOS 8 or Higher or Android 4.1x or Higher
Dimensions	109.5mm x 109.5mm x 40mm
Operating Conditions	-10°C ~ 55°C

Kit Contains:

1 x Smart hub, 2 x PIR, 1 x Door/Window Contact, 1 x Remote Control

- Smart Alarm Kit
- WI-FI Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included

#### General Information

deneral information	
Material	ABS
Operating Voltage	12VDC 1A
Backup Battery	Internal 7.4V600mAh Li-Po Battery
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Network Connection	Wi-Fi 2.4GHz
GSM (SIM Required)	850/900/1800/1900 MHz
Internal Siren	95dB
System Requirements	Mobile Device Running IOS 8 or Higher or Android 4.1x or Higher
Dimensions	109.5mm x 109.5mm x 40mm
Operating Conditions	-10°C ~ 55°C

#### Kit Contains:

1 x Smart hub, 3 x PIR, 2 x Door/Window Contact, 2 x Remote Control

- Smart Alarm Kit
- WI-FI Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz) 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included

Material ABS Operating Voltage 12VDC 1A Backup Battery Battery Battery
Backup Battery Internal 7.4V600mAh Li-Po
Backup Battery
Device Communication RF 433 MHz
Transmission Distance 80m (Open field)
Network Connection Wi-Fi 2.4GHz
GSM (SIM Required) 850/900/1800/1900 MHz
Internal Siren 95dB
System Requirements Mobile Device Running IOS 8 or Higher or Android 4.1x or Higher
Dimensions 109.5mm x 109.5mm x 40mm
Operating Conditions -10°C ~ 55°C



#### **ECSPK3**

Smart Alarm Kit



#### Kit Contains:

1 x Smart hub. 4 x PIR. 2 x Door/Window Contact. 2 x Remote Control

#### Smart Alarm Kit

- WI-FI Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included

#### noral Information

General Information	
Material	ABS
Operating Voltage	12VDC 1A
Backup Battery	Internal 7.4V600mAh Li-Po Battery
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Network Connection	Wi-Fi 2.4GHz
GSM (SIM Required)	850/900/1800/1900 MHz
Internal Siren	95dB
System Requirements	Mobile Device Running IOS 8 or Higher or Android 4.1x or Higher
Dimensions	109.5mm x 109.5mm x 40mm
Operating Conditions	-10°C ~ 55°C



#### ECSPK4 Smart Alarm Kit

WIFI











#### ECSPK5 Smart Alarm Kit

Smart Alarm Kit





#### **ECSPK6** Smart Alarm Kit



#### Kit Contains: 1 x Smart hub, 1 x Pet PIR, 1 x Door/Window Contact, 1 x Remote Control

Smart Alarm Kit

- WI-FI Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
   Built in since (05 dB)
- Built-in siren (95dB)
  Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included

#### General Information

erarimonnation	
erial	ABS
rating Voltage	12VDC 1A
kup Battery	Internal 7.4V600mAh Li-Po Battery
ice Communication	RF 433 MHz
smission Distance	80m (Open field)
work Connection	Wi-Fi 2.4GHz
1 (SIM Required)	850/900/1800/1900 MHz
rnal Siren	95dB
em Requirements	Mobile Device Running IOS 8 or Higher or Android 4.1x or Higher
ensions	109.5mm x 109.5mm x 40mm
rating Conditions	-10°C ~ 55°C

#### Kit Contains:

1 x Smart hub, 2 x Pet PIR, 2 x Door/Window Contact, 2 x Remote Control

- Smart Alarm Kit
- WI-FI Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included

#### General Information

Netv

erial	ABS
rating Voltage	12VDC 1A
kup Battery	Internal 7.4V600mAh Li-Po Battery
ce Communication	RF 433 MHz
smission Distance	80m (Open field)
vork Connection	Wi-Fi 2.4GHz
I (SIM Required)	850/900/1800/1900 MHz
rnal Siren	95dB
em Requirements	Mobile Device Running IOS 8 or Higher or Android 4.1x or Higher
ensions	109.5mm x 109.5mm x 40mm
rating Conditions	-10°C ~ 55°C

- Smart Alarm Hub
- WI-FI Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)

ABS 12VDC 1A

RF 433 MHz 80m (Open field) Wi-Fi 2.4GHz

95dB

850/900/1800/1900 MHz

Mobile Device Running IOS

8 or Higher or Android 4.1x

-10°C ~ 55°C

109.5mm x 109.5mm x 40mm

- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included

General Information

System Requirements

Operating Conditions



#### ECSPHB Smart Alarm Hub with Backup Battery



#### Smart Alarm Keypad

- Requires Smart Alarm Hub (ECSPHB)
- 80 Meter Open Field RF Transmission (433Mhz)
- Arm, Disarm, Home Mode and Panic Function

50

Operating Conditions -10°C ~ 55°C

RF 433 MHz 80m (Open field)

135mm x 90mm x 15mm

- Supports up to 50 Proximity Tags (ECSPPX)
- Battery Powered (Supplied)
- Low Power Indication
- Tamper Protection

General Information

Anti-Tamper



#### ECSPKY Smart Alarm Keypad



#### FOIL SMART SECURITY ALARM

#### SMART SECURITY ALARM



#### ECSPPIR

#### Smart Alarm PIR





#### **ECSPPET** Smart Alarm Pet PIR



#### Smart Alarm PIR

- 80 Meter Open Field RF Transmission (433Mhz)
- Detection Coverage: 8m/110°
- Requires Smart Alarm Hub (ECSPHB)
- Battery Powered (Supplied)
- Low Power Indication
- Tamper Protection

General Information Material

Operating Voltage

- Smart Alarm Door/Window Contact
- 80 Meters Open Field RF Transmission (433Mhz)
- Requires Smart Alarm Hub (ECSPHB)
- Suitable for Doors & Windows
- Battery Powered (Supplied)
- Low Power Indication
- Tamper Protection

General Information	
Vlaterial	ABS
Operating Voltage	1 x CR2477 3V Battery
Minimum Battery Life	1 Year (dependant on activations)
Device Communication	RF 433 MHz
Fransmission Distance	80m (Open field)
Anti-Tamper	Built-in Microswitch
Fransmitter Dimensions	55.7mm x 30.3mm x 16mm
Magnet Dimensions	25mm x 10mm x 9mm
Operating Conditions	-10°C ~ 55°C

#### **ECSPCT** Smart Alarm Contact



#### Smart Alarm PET PIR

80 Meter Open Field RF Transmission (433Mhz)

ABS

8m

<25kg

activations)

RF 433 MHz

80m (Open field)

Built-in Microswitch

ABS

8m

RF 433 MHz 80m (Open field) Built-in Microswitch

107mm x 53mm x 32mm

2 x AA Batteries 1 Year (dependan activations)

- Requires Smart Alarm Hub (ECSPHB)
- Detection Coverage: 8m/110°
- Battery Powered (Supplied)
- Pet Friendly < 25Kg</p>
- Low Power Indication
- Tamper Protection

General Information Material

Operating Voltage

PIR Detection Range

#### Smart Alarm Vibration Sensor

- Battery Powered (Supplied)
- Low Power Indication

General Information

Material

80 Meter Open Field RF Transmission (433Mhz)

ABS

1 x CR2477 3V Battery

1 Year (dependant on

60mm x 39mm x 17mm -10°C ~ 55°C

RF 433 MHz

80m (Open field)

10 - 50 grams

Requires Smart Alarm Hub (ECSPHB)



#### **ECSPVS** Smart Alarm Vibration Sensor



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#### FOIL SMART SECURITY ALARM



ECSPPX Smart Alarm Proximity Tag





Requires Smart Alarm Hub (ECSPHB) & Keypad (ECSPKY)

ABS

3mm x 0.7mm x 4.5mm

- Smart Alarm Proximity Tag (2 Pack)
- Disarm the System via Proximity

- Smart Alarm Remote Control
- 80 Meter Open Field RF Transmission (433Mhz)
- Arm, Disarm, Home Mode and Panic Function
- Requires Smart Alarm Hub (ECSPHB)
- Battery Powered (Supplied)
- Low Power Indication

Material	ABS
Operating Voltage	1 x CR2025 3V Battery
Minimum Battery Life	1 Year (dependant on activations)
Device Input	4 buttons - Disarm, Arm, Home Arm, SOS
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Dimensions	3.4mm x 1.1mm x 6.3mm
Operating Conditions	-10°C ~ 55°C



ECSPRC Smart Alarm Remote Control



Smart Alarm SOS Button

**General Information** Material

Operating Voltage

General Information Material

- Raise an Alert Instantly
- Battery Powered (Supplied)
- 80 Meter Open Field RF Transmission (433Mhz)

ABS

RF 433 MHz

80m (Open field)

-10°C ~ 55°C

1 Year (dependant on

3.4mm x 0.7mm x 6.3mm

Requires Smart Alarm Hub (ECSPHB)

Smart Alarm RF Signal Booster

General Information

Material

Operating Voltage

Backup Battery

- USB Powered with Recharging Backup Battery
- 80 Meter Open field RF Transmission (433Mhz)

ABS 5V 1.1A (USB)

RF 433 MHz

80m (Open field)

3.7V 300mAh Lithium Battery

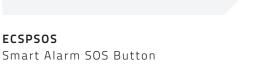
60mm x 39mm x 17mm

Requires Smart Alarm Hub (ECSPHB)



ECSPBST Smart Alarm Booster





ECSPSOS

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#### FOR SMART SECURITY ALARM





External Smart Siren Solar Powered

6

ECSPEXS

0

#### Smart Alarm External Solar Powered Siren

- Built-In Siren (110dB) and LED Indication
- Suitable for Outdoor Use (IP44 Ingress Protection)
- Compact Design: 162x182mm
- Rechargeable Backup Battery, with up to 40 Day Standby
- Low Power Indication
- Tamper Protection
- 80 Meter Open Field RF Transmission (433Mhz)
- For use with Smart Alarm Hub (ECSPHB)

- Full 1080p HD Live View & Recording
- Motion Activated Video Record (Storage Included)
- No Subscription or Additional Fees Required
- 10m Infrared LED Illumination
- 85° Wide Angle Camera View
- Clear Two-Way Audio

General Information

Dimensions

Camera Resolution



#### ECSPCAM

Smart Indoor Camera



General Information Material ABS Operating Voltage Solar Powered Lithium 18650 3.7V/2200mAh RF 433 MHz Transmission Distance 80m (Open field) Anti-Tamper Built-in Microswitch Ingress Protection IP44 Dimensions 162mm x 182mm x 65mm Operating Conditions -10°C ~ 55°C

- Smart Alarm External Mains Powered Siren
- Built-In Siren (110dB) and LED Indication
- Suitable for Outdoor Use (IP44 Ingress Protection)
- Compact Design: 162x182mm
- Rechargeable Backup Battery, with up to 40 Day Standby
- Low Power Indication
- Tamper Protection

Genera

- 80 Meter Open Field RF Transmission (433Mhz)
- For use with Smart Alarm Hub (ECSPHB)

- Full 1080p HD Live View & Recording
- No Subscription or Additional Fees Required

1920 x 1080

Wi-Fi 2.4GHz

Micro SD Card (128GB Max.)

5VDC1.1A (Micro-USB 1m supplied)

85°

- 355° Pan and 180° Tilt Remote Control Function
- 3-5m Infrared LED Illumination
- 140° Wide Angle View
- Motion Tracking and Record
- Clear Two-Way Audio
- 2.4Ghz Wi-Fi Connection Required



#### ECSPCAMPT Smart Indoor Pan and Tilt Camera



#### ECSPEXSW External Smart Siren Mains Powered

General Information	
Material	ABS
Operating Voltage	12V DC
Battery Backup	Lithium 18650 3.7V/2200
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Anti-Tamper	Built-in Microswitch
Ingress Protection	IP44
Dimensions	162mm x 182mm x 65mm
Operating Conditions	-10°C ~ 55°C

General Information	
Camera Resolution	1920 x 1080
Sensor Size	1/2.7"
Viewing Angle	140°
Infrared Distance	3-5 meters
Storage Device	Micro SD Card (128GB Max.)
Connectivity	Wi-Fi 2.4GHz
Power	5VDC1.1A (Micro-USB 1m su
Dimensions	Ø75mm x 114mm

#### FOR SMART SECURITY LIGHTS



#### **ECSPCAMSLW** WHITE **ECSPCAMSLB** BLACK Wi-Fi Smart Security Camera with Lights





**ECSPCAMFLW** WHITE **ECSPCAMFLB** BLACK Wi-Fi Smart Security Camera with Flood Lights



- Full 1080p HD Live View & Recording
- No Subscription or Additional Fees Required
- 110° Wide Angle Camera View
- 5000K LED Lamp
- 2500 Lumen Output (25w)
- Motion Activated Video Record
- Clear Two–Way Audio
- Remotely Activate or Dim LED Lamp
- IP65 Rated Ingress Protection
- Requires 2.4GHZ Wi-Fi Network Connection

1920 x 1080

110 - 220 VAC

IP65

Micro SD Card (128GB Max.)

258mm x 188mm x 184mm

- Operating Temperature: -10 +40°C
- Dimensions: 258 x 88 x 184mm

 Full 1080p HD Live View, Recording & Visitor Notifications

- No Subscription or Additional Fees Required
- Battery Powered with up to 750 Activations on Full Charge

1920 x 1080

Micro SD (up to 128GB)

2 x Rechargable 18650 3.7

3350mAh Lithium-Ion Batteries

140.51mm x 50mm x 29mm

Wi-Fi 2.4GHz

1/2.9"

130°

- Plug-in RF Chime Included
- IP54 Rated Ingress Protection
- 5m Infrared LED Illumination
- 3m PIR Detection Range
- 130° Wide Angle Camera View
- Motion Activated Video Record (Storage Included)
- Clear Two-Way Audio

General Information

Viewing Angle

Storage

Power

Fort

ECSPDB

Smart Door Bell



- Full 1080p HD Live View & Recording
- No Subscription or Additional Fees Required
- 110° Wide Angle Camera View
- 5000K LED Lamp

General Information

Angle of View

WiFi Frequency

Infrared Range

IP Rating

- 2000 Lumen Output (25w)
- Motion Activated Video Record
- Clear Two–Way Audio

General Information

- Remotely Activate or Dim LED Lamp
- IP65 Rated Ingress Protection
- Requires 2.4GHZ Wi-Fi Network Connection
- Operating Temperature: -10 +40°C
- Dimensions: 283 x 133 x 184 mm

- Full 1080p HD Live View & Recording
   No Subscription or Additional Food Page
  - No Subscription or Additional Fees Required
  - Battery Powered with up to 750 Activations on Full Charge
  - 8m Infrared LED Illumination
  - 7m PIR Detection Range
  - 130° Wide Angle Camera View
  - Motion Activated Video Record (Storage Included)
  - Clear Two-Way Audio
  - IP65 Rated Ingress Protection



#### ECSPCAM65 Smart Outdoor Camera

(IDBOP) (IATTERY NORTHERED (IAT) NOTIFICATION (IAT)

 Angle of View
 110°

 Storage Device
 Micro SD Card (128GB Max.)

 WiFi Frequency
 2.4GHz

 Infrared Range
 5~10m

 Light Output
 2000 Lumens (25 Watts)

 IP Rating
 IP65

 Power
 110° - 220 VAC

 Dimensions
 283mm x 133mm x 184mm

1920 x 1080

20 1000
20 x 1080
2.9″
Imm
5°
neters
neters
cro SD (up to 128GB)
-Fi 2.4GHz
: Rechargable 18650 3.7 50mAh Lithium-Ion Batterie:
0.72mm x 57mm x 59.93mm



## C C T V

The ESP<sup>\*</sup> CCTV range offers the installer a practical range of security and observation solutions reflecting the best features of established and emerging CCTV technology. The range includes cameras from 1080p (2 Megapixel) to 5 Megapixel resolution using the latest in analog and IP technology to deliver superior image quality.



#### CAMERA SELECTION GUIDE

To select the correct camera consider if the location is internal or external (bear in mind that external cameras are also suitable for internal use). Decide which lens size will achieve the desired image from the guide below.

	Viewing	< 3 meters >	< 10 meters >	< 15 meters >
	CAPABILITY			
	DISTANCE	0		
	FROM CAMERA	Peter and a second seco		
	10 meters	9-22mm Lens	2.8-12mm Lens	2.8-12mm Lens
	20 meters	5-50mm Lens	9-22mm Lens	4-9mm Lens
	30 meters	5-50mm Lens	9-22mm Lens	9-22mm Lens
_	50 meters	N/A	5-50mm Lens	9-22mm Lens

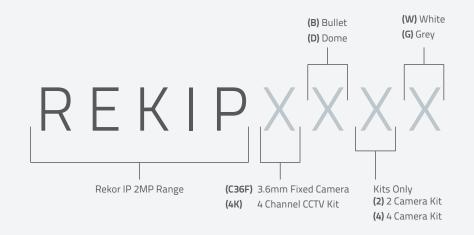


## 2 Megapixel IP POE Cameras and Kits

rekor IP

PWR HDD

## Get kitted out with the code finder

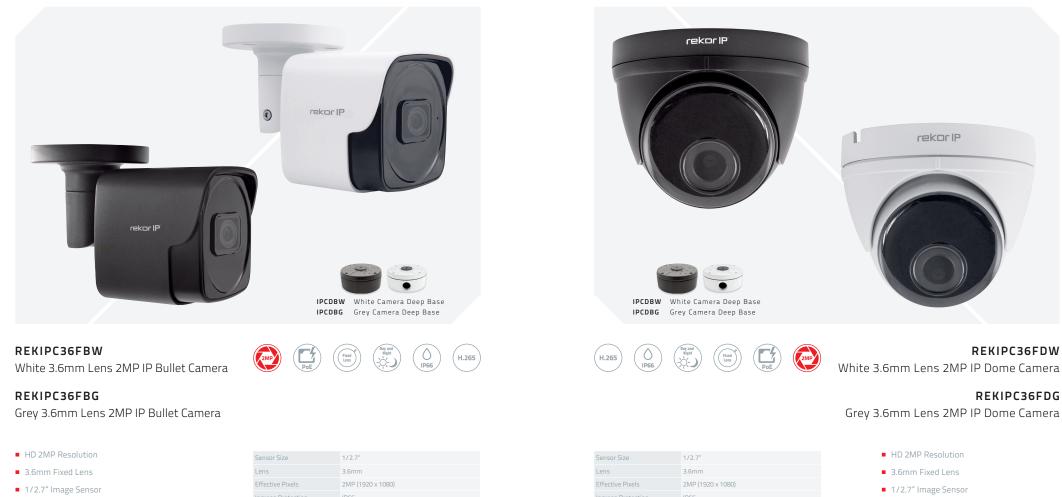




Code (White)	Code (Grey)	Description
Rekor IP 2MP Cameras	s & Kits	
REKIPC36FBW	REKIPC36FBG	Rekor IP Bullet POE 2MP Camera Fixed 3.6mm
REKIPC36FDW	REKIPC36FDG	Rekor IP Dome POE 2MP Camera Fixed 3.6mm
REKIP4KB2W	REKIP4KB2G	Rekor IP 4 Channel POE 2MP 2 Bullet Camera Kit (1TB)
REKIP4KB4W	REKIP4KB4G	Rekor IP 4 Channel POE 2MP 4 Bullet Camera Kit (1TB)
REKIP4KD2W	REKIP4KD2G	Rekor IP 4 Channel POE 2MP 2 Dome Camera Kit (1TB)
REKIP4KD4W	REKIP4KD4G	Rekor IP 4 Channel POE 2MP 4 Dome Camera Kit (1TB)

#### 2 MEGAPIXEL IP POE CAMERA **rekor IP**

#### **rekor IP**<sup>®</sup> 2 MEGAPIXEL IP POE CAMERA



- 30m Infrared LED Illumination
- 88° Viewing Angle
- H265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection

Sensor Size	1/2.7"
Lens	3.6mm
Effective Pixels	2MP (1920 x 1080)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,P PoE,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IC
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø71 X138mm
Weight	250g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

Sensor Size	1/2.7"
Lens	3.6mm
Effective Pixels	2MP (1920 x 1080)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PP- PoE,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø100x82 mm
Weight	260g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

- 30m Infrared LED Illumination
- 88° Viewing Angle
- H265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection

26			
26			
20			



#### REKIP4KB2G Grey **REKIP4KB2W** White 4 Channel CCTV System

- Complete with NVR, IP Cameras, Cable & System Power
- HD 2MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- 2 x 2MP, Day / Night, Weatherproof, Bullet Style IP Cameras
- H.265 Video Compression for Efficient Storage
- Pre-Installed 1TB Premium Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

System	
Operating System	LINUX
Recording Bandwidth	50Mbps
POE	4CH (<100 Meters per Channel)
Video & Audio	
Video Input	4CH
Audio Output	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160
Recording	
Compression	H.265/H.264
Resolution	2 Megapixel
Record Rate (Main Stream)	2 Megapixel
Recording Mode	Manual/Motion Detection/Schedule



- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR (HDD inc.), 2 x IP Cameras, 2 x 18.3 Meter Pre-terminated Network Cable, System Power Supply, Manual, HDMI Lead, Mouse Control

#### Playback & Backup Backup Mode Network/2 x USB2.0 Network RJ-45 port (100/1000M) HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP Network Monitori Web browser, Client Software, Android & IOS Storage General NVR Power Consumption <7W (without hard disk) IEEE802.3af 0°C-+55°C/10%-90% External Power Supply AC 110~240V Power Output



VIEW

- Complete with NVR, IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- 4 x 2MP, Day/ Night, Weatherproof, Bullet Style IP Cameras
- H.265 Video Compression for Efficient Storage
- Pre-Installed 1TB Premium Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

System			
Operating System	LINUX		
Recording Bandwidth	50Mbps		
POE	4CH (<100 Meters per Channel)		
Video & Audio			
Video Input	4CH		
Audio Output	1CH		
Display			
Output	1 × HDMI, 1 × VGA		
Display Split	1/4		
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160		
Recording			
Compression	H.265/H.264		
Resolution	2 Megapixel		
Record Rate (Main Stream)	2 Megapixel		
Recording Mode	Manual/Motion Detection/Schedule		

#### REKIP4KB4G Grey **REKIP4KB4W** White 4 Channel CCTV System

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

Contents: NVR (HDD inc.), 4 x IP Cameras, 4 x 18.3 Meter Pre-terminated Network Cable, System Power Supply, Manual, HDMI Lead, Mouse Control

Playback & Backup		
Sync Playback	2 Megapixel	
Backup Mode	Network/2 x USB2.0	
Network		
Ethernet	RJ-45 port (100/1000M)	
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP	
Network Monitoring	Web browser, Client Software, Android & IOS	
Storage		
Internal HDD	1TB HDD	
General		
NVR Power Consumption	<7W (without hard disk)	
NVR Power Source	IEEE802.3af	
Operation Condition	0°C-+55°C / 10%-90%	
Dimensions	300X227X53mm	
External Power Supply		
Power Input	AC 110~240V	
Power Output	DC48V/1.2A - 60W	

#### **rekor IP**<sup>°</sup> 2 MEGAPIXEL POE KITS



#### REKIP4KD2G Grey **REKIP4KD2W** White

4 Channel CCTV System

- Complete with NVR, IP Cameras, Cable & System Power
- HD 2MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- 4 x 2MP, Day / Night, Weatherproof, Dome Style IP Cameras
- H.265 Video Compression for Efficient Storage
- Pre-Installed 1TB Premium Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

ystem			
Operating System	LINUX		
Recording Bandwidth	50Mbps		
POE	4CH (<100 Meters per Channel)		
Video & Audio			
Video Input	4CH		
Audio Output	1CH		
Display			
Output	1 x HDMI, 1 x VGA		
Display Split	1/4		
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160		
Recording			
Compression	H.265/H.264		
Resolution	2 Megapixel		
Record Rate (Main Stream)	2 Megapixel		
Recording Mode	Manual/Motion Detection/Schedule		



- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR (HDD inc.), 4 x IP Cameras, 4 x 18.3 Meter Pre-terminated Network Cable, System Power Supply, Manual, HDMI Lead, Mouse Control

#### Playback & Backup Backup Mode Network/2 x USB2.0 Network RJ-45 port (100/1000M) HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP Network Monitorin Web browser, Client Software, Android & IOS Storage Internal HDD General NVR Power Consumption <7W (without hard disk) IEEE802.3af 0°C-+55°C / 10%-90% External Power Supply AC 110~240V



VIEW

- Complete with NVR, IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- 4 x 2MP, Day/ Night, Weatherproof, Dome Style IP Cameras
- H.265 Video Compression for Efficient Storage
- Pre-Installed 1TB Premium Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

5	System			
C	Operating System	LINUX		
F	Recording Bandwidth	50Mbps		
F	POE	4CH (<100 Meters per Channel)		
\	/ideo & Audio			
V	/ideo Input	4CH		
F	Audio Output	1CH		
D	Display			
C	Dutput	1 x HDMI, 1 x VGA		
	Display Split	1/4		
F	Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160		
F	Recording			
C	Compression	H.265/H.264		
F	Resolution	2 Megapixel		
F	Record Rate (Main Stream)	2 Megapixel		
F	Recording Mode	Manual/Motion Detection/Schedule		

#### REKIP4KD4G Grey **REKIP4KD4W** White 4 Channel CCTV System

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

Contents: NVR (HDD inc.), 4 x IP Cameras, 4 x 18.3 Meter Pre-terminated Network Cable, System Power Supply, Manual, HDMI Lead, Mouse Control

Playback & Backup		
Sync Playback	2 Megapixel	
Backup Mode	Network/2 x USB2.0	
Network		
Ethernet	RJ-45 port (100/1000M)	
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP	
Network Monitoring	Web browser, Client Software, Android & IOS	
Storage		
Internal HDD	1TB HDD	
General		
NVR Power Consumption	<7W (without hard disk)	
NVR Power Source	IEEE802.3af	
Operation Condition	0°C-+55°C / 10%-90%	
Dimensions	300X227X53mm	
External Power Supply		
Power Input	AC 110~240V	
Power Output	DC48V/1.2A - 60W	



## 5 Megapixel IP POE Cameras and NVRs



(C2 (C2 (C5 (C1	50VF) 1F) TZ) () () () ()	3.6mm Fixed Camera 2.8mm Fixed Camera 2.8mm -12mm Varifoc 5mm -50mm Varifoc 1.1mm Fisheye Came 4 Channel CCTV Reco 8 Channel CCTV Reco 16 Channel CCTV 32 Channel CCTV	a ocal Camera al Camera era ra ra rder	(2TB (4TB (8TB (12T	A's Only 2TB Hard Drive 4TB Hard Drive BTB Hard Drive 12TB Hard Drive 13TB Hard Drive
HD	view IP	5MP Range		Cameras Only (B) Bullet (D) Dome	Cameras Only (W) White (G) Grey
Code (White)		Code (Grey)	Description		
	c	_			
HDview IP 5MP HDVIPC36FBW	Lameras	5		t POE 5MP Camera 3.6m	m
HDVIPC38FBW HDVIPC28FDW2		HDVIPC28FDG2		e POE 5MP Camera 3.8m	
HDVIPC20FDVV2		HDVIPC28FBG2		t POE 5MP Camera 2.8m	
HDVIPC28FDWAV				e POE 5MP Camera Eixed	
HDVIPC2812VFBV	-	HDVIPC2812VFBG2		t POE 5MP Camera Varifo	
HDVIPC2812VFDV		HDVIPC2812VFDG2	HDview IP Dome	POE 5MP Camera Varifo	ocal 2.8-12mm
HDVIPC2812VFDV	VAV	HDVIPC2812VFDGAV	HDview IP Dome	e POE 5MP Camera Varifo	ocal 2.8-12mm Vandal
HDVIPCPTZ			HDview IP PTZ D	ome POE 5MP Camera	
HDVIPC28FDW			HDview IP Dome	POE 5MP Camera Mini	2.8mm Internal
HDVIPC11FDW			HDview IP Fishe	ye POE 5MP Camera 1.1	mm
HDVIPC550VFBW			HDview IP Bullet	t POE 5MP Camera 5-50r	mm
Code			Description		
HDview IP NVR's	5				
HDVIP4R				Innel NVR 5MP (1TB)	
HDVIP4R2TB				Innel NVR 5MP (2TB)	
HDVIP4R4TB HDVIP4R8TB				innel NVR 5MP (4TB) innel NVR 5MP (8TB)	
HDVIP4R81B HDVIP8R				innel NVR 5MP (81B)	
HDVIP8R2TB				innel NVR 5MP (11B)	
HDVIP8R4TB				innel NVR 5MP (4TB)	
HDVIP8R8TB				innel NVR 5MP (8TB)	
HDVIP16R				annel NVR 5MP (4TB)	
HDVIP16R8TB			HDview IP 16 Ch	annel NVR 5MP (8TB)	
HDVIP16R12TB			HDview IP 16 Ch	annel NVR 5MP (12TB)	
HDVIP16R16TB				annel NVR 5MP (16TB)	
HDVIP32R				annel NVR 5MP (4TB)	
HDVIP32R8TB				annel NVR 5MP (8TB)	
			LID. January ID 33 Ch		
HDVIP32R12TB HDVIP32R16TB				annel NVR 5MP (12TB) annel NVR 5MP (16TB)	





#### HDVIPC36FBW

White 3.6mm Lens 5MP IP Bullet Camera





#### HDVIPC28FBG2

IP 5MP Bullet 2.8mm Camera Grey



- HD 5MP Resolution3.6mm Fixed Lens
- John Fixed Lens
  1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 88° Viewing Angle
- H265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection

Sensor Size	1/2.7"
Lens	3.6mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5~1/20000s
IR Distance	30 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DD- NS,RTP/RTSP,PPPoE,SMTP,NT P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software Android & IOS
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø71 X138mm
Weight	250g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

- HD 5MP Resolution2.8mm Fixed Lens
- 1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 97° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD Storage / Microphone
- IP66 Housing Ingress Protection
- 12vDC/PoE

Ingree

IR Dis Comp Video

Powe

- <7W Power Consumption</p>
- Operating Temperature: -30 +55°C

or Size	1/2.7"
Size	2.8mm
tive Pixels	5MP (2592 x 1944)
ss Protection	IP66
num Illumination	0.05 Lux
Electronic Shutter	1/5 - 120000s
stance	30 metres
pression	H.265
Bit Rate	256Kbps - 8Mbps
face	RJ45 10/100 BASE-T
ork Protocol	TCP/IP,HTTP,DHCP,DNS,DD- NS,RTP/RTSP, SMTP,NTP,UPn- P,SNMP,HTTPS,FTP
ge	Micro SD Card (<256GB)
er	12V DC/PoE
umption	<9W
nsions	100mm x 100mm 82mm
ht	250g

<b>–</b> H	D 5MP	Resolu	tion
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- 2.8~12mm Varifocal Lens (Motorized)
- 1/2.7" Image Sensor
- 45m Infrared LED Illumination
  102° 31° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD storage / Audio I/O
- IP66 Housing Ingress Protection
- 256kbps~8Mbps bit Rate

Sensor Size	1/2.7"
Lens	2.8-12mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5~1/20000s
IR Distance	45 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DD- NS,RTP/RTSP,PPPoE,SMTP,NT P,UPnP,SNMP,HTTPS,FTP
letwork Monitoring	Web browser, Client Software Android & IOS
Storage	microSD Card (<128G Capcity
Audio	1/0
Power	12vDC/PoE
Consumption	<9W
Dimension	Ø88X240mm
Weight	805g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C



5 MEGAPIXEL IP POE CAMERA



- HD 5MP Resolution
- 2.8~12mm Varifocal Lens (Motorized)
- 1/2.7" Image Sensor
- 45m Infrared LED Illumination
- 103 51° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD storage / Alarm Trigger Input / Audio I/O
- IP66 Housing Ingress Protection

Sensor Size	1/2.7"
Lens	2.8-12mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5~1/20000s
IR Distance	45 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DD- NS,RTP/RTSP,PPPoE,SMTP,NT P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software Android & IOS
Storage	microSD Card (<128G Capcity
Alarm	1/0
Audio	1/0
Power	12vDC/POE
Consumption	<7W
Dimension	Ø126 X 102mm
Weight	720g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C



IPCDBW White Camera Deep Base



HDVIPC2812VFDW White 2.8-12mm Lens 5MP IP Dome Camera







IPCDBG Grey Camera Deep Base

#### HDVIPC2812VFDG2

Grey 2.8-12mm Lens 5MP IP Dome Camera





IPCDBG Grey Camera Deep Base

HDVIPC28FDW2 IP 5MP Dome 2.8mm Camera White IP 5MP Dome 2.8mm Camera Grey HDVIPC28FDG2



- HD 5MP Resolution
- 2.8-12mm Varifocal Lens (Motorized)
- 1/2.7" Image Sensor 45m Infrared LED Illumination
- 31 102° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD Storage / Audio I/O
- IP66 Housing Ingress Protection256Kbps-8Mbps Bit Rate
- 12vDC/PoE
- <9W Power Consumption</p>

Sensor Size	1/2.7"
Lens Size	2.8 - 12mm
Effective Pixels	5MP (2592 x 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 - 120000s
IR Distance	45 metres
Compression	H.265
Video Bit Rate	256Kbps - 8Mbps
Interface	RJ45 10/100 BASE-T
Network Protocol	TCP/IP,HTTP,DHCP,DNS,DD- NS,RTP/RTSP, SMTP,NTP,UPn- P,SNMP,HTTPS,FTP
Storage	Micro SD Card (<256GB)
Audio	1/0
Power	12V DC/PoE
Consumption	<9W
Dimensions	126mm x 126mm x 103mm
Weight	735g

- HD 5MP Resolution
- 2.8mm Fixed Lens
- 1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 97° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD Storage / Microphone
- IP66 Housing Ingress Protection
- 12vDC/PoE

<7W Power Consumption</p>

Sensor Size	1/2.7"
Lens Size	2.8mm
Effective Pixels	5MP (2592 x 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 - 120000s
IR Distance	30 metres
Compression	H.265
Video Bit Rate	256Kbps - 8Mbps
Interface	RJ45 10/100 BASE-T
Network Protocol	TCP/IP,HTTP,DHCP,DNS,DD- NS,RTP/RTSP, SMTP,NTP,UPn- P,SNMP,HTTPS,FTP
Storage	Micro SD Card (<256GB)
Power	12V DC/PoE
Consumption	<9W
Dimensions	72mm x 72mm 151mm
Weight	250g

- HD 5MP Resolution
- 5~50mm Varifocal Lens (Motorized)
- 1/2.7" Image Sensor
- 60m Infrared LED Illumination
- 45~7° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection

Sensor Size	1/2.7"
Lens	5-50mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	60 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DD- NS,RTP/RTSP,PPPoE,SMTP,NT- P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Power	12vDC/POE
Consumption	<8W



- 4.8-86.4mm Varifocal Lens (18x Zoom)
- Full Pan, tilt and zoom operation
- Full 360° rotation pan function
- 1/2.5" Image Sensor
- 60m Infrared LED Illumination
- 61.2~2.32° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection
- Powered via Supplied PSU or POE Injector Required

Sensor Size	1/2.5″
Lens	4.8-86.4mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.1 Lux
Auto Electronic Shutter	1/2 ~ 1/20000s
IR Distance	60 Meters
Compression	H.265/H.264
Video bit rate	8Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCF IP, UDP, IGMP, ICMP, DHCP, PPP
Network Monitoring	Web browser, Client Software
Power	12vDC/POE
Consumption	< 30W
Dimension	208 X 251mm (Excludes brack
Weight	4Kg
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C



5 MEGAPIXEL IP POE CAMERA

#### HDVIPC550VFBW

White 5-50mm Lens 5MP IP Bullet Camera





#### HDVIPCPTZ 4.8-86.4mm Lens 5MP IP PTZ Camera









- Input & output /Audio I&O/Reset

Sensor Size	1/2.7"
Lens	2.8-12mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Impact Rating	IK10
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5~1/2000s
IR Distance	45 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DD- NS,RTP/RTSP,PPPoE,SMTP,NT- P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	microSD Card (<128G Capcity)
Alarm	1/0
Audio	1/0
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø147X117mm
Weight	1067g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

HDVIPC2812VFDWAV

White 2.8-12mm Lens 5MP IP Vandal Resistant Dome Camera

#### HDVIPC2812VFDGAV

Grey 2.8-12mm Lens 5MP IP Vandal Resistant Dome Camera





#### HDVIPC28FDWAV2

White 2.8mm Lens 5MP IP Vandal Resistant Dome Camera



- 2.8~12mm Varifocal Lens (Motorized) 1/2.7" Image Sensor
- 45m Infrared LED Illumination
- 103 51° Viewing Angle
- H.265 Compression

HD 5MP Resolution

- ONVIF Compliant
- Additional Features: SD storage / Alarm Trigger
- IP66 Housing Ingress Protection IK10 Impact Protection

- HD 5MP Resolution
- 2.8 mm Fixed Lens
- 1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 92° Viewing Angle
- H.265 Compression
- ONVIF Compliant

Effec Ingre Impa Mini Auto IR Di Com Vide

Cons Weig Stora

- IP66 Housing Ingress Protection
- IK10 Impact Protection

sor Size	1/2.7"
5	2.8mm
ctive Pixels	5MP (2592 X 1944)
ess Protection	IP66
act Rating	IK10
mum Illumination	0.05 Lux
Electronic Shutter	1/5~1/20000s
istance	30 Meters
pression	H.265/H.264
o bit rate	256Kbps ~ 8Mbps
rface	RJ45 10M / 100M Ethernet
work Functions	TCP/IP,HTTP,DHCP,DNS,DD- NS,RTP/RTSP,PPPoE,SMTP,NT- P,UPnP,SNMP,HTTPS,FTP
work Monitoring	Web browser, Client Software, Android & IOS
er	12vDC/POE
sumption	<7W
ension	Ø115mm x 91.6mm
ght	520g
age Temperature	-30°C~60°C
rating Temperature	-30°C~55°C

- HD 5MP Resolution
- 2.8mm Fixed Lens
- 1/2.7" Image Sensor
- 10m Infrared LED Illumination
- 92° Viewing Angle
- H265 Compression
- ONVIF Compliant
- Additional Features: SD storage / Microphone
- IP66 Housing Ingress Protection

Sensor Size	1/2.7"
Lens	2.8mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5~1/20000s
IR Distance	10 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/ RTSP,PPPoE,SMTP,NTP,UPnP,SN- MP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	microSD Card (<128G Capcity)
Audio	Mic.
Power	12vDC/POE
Consumption	<7W
Dimension	Ø120X64mm
Weight	450g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C



#### HDVIPC28FDW White 2.8mm Lens 5MP IP Dome Camera



#### HD 5MP Resolution

- 1.1mm Fixed Lens
- 1/2.9" Image Sensor
- 5m Infrared LED Illumination
- 360° Viewing Angle
- H265 Compression
- ONVIF Compliant
- Additional Features: SD Storage / Alarm Trigger Input & Output/Audio I&O / Video Output
- IP64 Housing Ingress Protection
- Suitable for NVR Models HDVIP16R, HDVIP32R Only and PC Viewing

Sensor Size	1/2.9"
Lens	1.1mm
Effective Pixels	5MP (2160 x 2160)
Ingress Protection	IP64
Minimum Illumination	0.1 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	5 Meters
Compression	H.265/H.264
Video bit rate	8Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PP- PoE,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	microSD Card (<128G Capcity)
Alarm	1/0
Audio	Mic.
Video Out	CVBS
Power	12vDC/POE
Consumption	< 5W
Dimension	Ø120*55mm
Weight	400g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C



#### HDVIPC11FDW White 1.1mm Lens 5MP IP Dome Camera











#### HDVIP4R 4 Channel HD 1TB NVR

- HD 5MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- H.265 Video Compression for Efficient Storage
- ONVIF Compliant
- Premium Surveillance Hard Drive (1TB, 2TB, 4TB, 8TB Options)
- Remote Monitoring via APP (Android / IOS) or PC

System	
Operating System	LINUX
Recording Bandwidth	50Mbps
POE	4CH (<100 Meters per Channel)
Video & Audio	
Video Input	4CH
Audio Output	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160
Recording	
Compression	H.265/H.264
Resolution	5 Megapixel
Record Rate (Main Stream)	5 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

ESP		
	5МР	Premium
		Surveillance

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)

- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR, Power Supply, Manual, HDMI Lead, Mouse

#### Playback & Backup

Sync Playback	5 Megapixel
Backup Mode	Network/2 x USB2.0
Network	
Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	
Internal HDD	<8TB HDD
General	
NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C-+55°C/10%-90%
Dimensions	300X227X53mm
External Power Supply	
Power Input	AC 110~240V
Power Output	DC48V/1.2A - 60W



- HD 5MP Resolution Viewing and Recording
- 8CH POE NVR- Power Over Ethernet
- H.265 Video Compression for Efficient Storage
- ONVIF Compliant
- Premium Surveillance Hard Drive (1TB, 2TB, 4TB, 8TB Options)
- Remote Monitoring via APP (Android / IOS) or PC

System	
Operating System	LINUX
Recording Bandwidth	80Mbps
POE	8CH (<100 Meters per Channel)
Video & Audio	
Video Input	8CH
Audio Output	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4/6/8/9
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160
Recording	
Compression	H.265/H.264
Resolution	5 Megapixel
Record Rate (Main Stream)	5 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

#### HDVIP8R 8 Channel HD 1TB NVR

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)

- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR, Power Supply, Manual, HDMI Lead, Mouse Control

Playback & Backup	
Sync Playback	5 Megapixel
Backup Mode	Network/2 x USB2.0
Network	
Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	
Internal HDD	<8TB HDD
General	
NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C-+55°C / 10%-90%
Dimensions	300X227X53mm
External Power Supply	
Power Input	AC 110~240V
Power Output	DC48V/1.5A - 80W







#### HDVIP16R 16 Channel HD 4TB NVR

- HD 5MP Resolution Viewing and Recording
- 16CH POE NVR- Power Over Ethernet
- H.265 Video Compression for Efficient Storage
- ONVIF Compliant
- Premium Surveillance Hard Drive (4TB, 8TB, 12TB, 16TB Options)
- Remote Monitoring via APP (Android / IOS) or PC

#### System

System	
Operating System	LINUX
Recording Bandwidth	320Mbps
POE	16CH (<100 Meters per Channel, Requires 4-Twisted Pair Cable)
Video & Audio	
Video Input	16CH
Audio Output	1CH
Line In	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4/6/8/9/10/13/14/16
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160
Recording	
Compression	H.265/H.264
Resolution	5 Megapixel
Record Rate (Main Stream)	5 Megapixel
Recording Mode	Manual/Motion Detection/Schedule
Playback & Backup	
Sync Playback	5 Megapixel
Backup Mode	Network / 2 x USB2.0 / 1 x USB3.0 / e-SATA

## 3

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
  - USB Backup for Evidence Transfer
  - Mouse Driven User Menu
  - Contents: NVR, Power Supply, Manual, HDMI Lead, Mouse Control

#### Network

The control in the second seco	
Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	
Internal HDD	<16TB HDD
External HDD	e-SATA < 4x6TB
Interface	
Alarm In	16CH
Alarm Out	1CH
Data	RS485
General	
NVR Power Consumption	<12W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C-+55°C / 10%-90%
Dimensions	380X340X50mm
Internal Power Supply	
Power Input	AC 110~240V
Power Output	DC12V/8A, 53V DC/4.2A -280W

#### VIEW SMP

- HD 5MP Resolution Viewing and Recording
- 32CH NVR/ 16CH Video Input with POE Power Over Ethernet
- H.265 Video Compression for Efficient Storage
- ONVIF Compliant
- Premium Surveillance Hard Drive (4TB, 8TB, 12TB, 16TB Options)
- Remote Monitoring via APP (Android / IOS) or PC

System	
Operating System	LINUX
Recording Bandwidth	320Mbps
POE	16CH (<100 Meters per Channel, Requires 4-Twisted Pair Cable)
Video & Audio	
Video Input	16CH
Audio Output	1CH
Line In	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4/6/8/9/10/13/14/16/17/19/22/25/32/36
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160
Recording	
Compression	H.265/H.264
Resolution	5 Megapixel
Record Rate (Main Stream)	5 Megapixel
Recording Mode	Manual/Motion Detection/Schedule
Playback & Backup	
Sync Playback	5 Megapixel
Backup Mode	Network / 2 x USB2.0 / 1 x USB3.0 / e-SATA

#### HDVIP32R 32 Channel HD 4TB NVR

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)

- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR, Power Supply, Manual, HDMI Lead, Mouse Control

Network	
Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	
Internal HDD	<16TB HDD
External HDD	e-SATA < 4x6TB
Interface	
Alarm In	16CH
Alarm Out	1CH
Data	RS485
General	
NVR Power Consumption	<12W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C-+55°C / 10%-90%
Dimensions	380X340X50mm
Internal Power Supply	
Power Input	AC 110~240V
Power Output	DC12V/8A, 53V DC/4.2A -280W

## HDview

## 4 Megapixel Cameras, **DVRs and Kits**



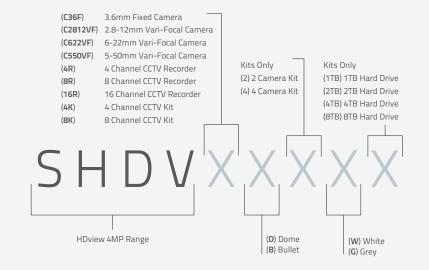












Code (White)	Code (Grey)		
SHDVC36FDW	SHDVC36FDG		
SHDVC2812VFDW	SHDVC2812VFDG		
SHDVC622VFDW	N/A		
SHDVC36FBW	SHDVC36FBG		
SHDVC2812VFBW	SHDVC2812VFBG		
SHDVC622VFBW	SHDVC622VFBG		
SHDVC550VFBW	SHDVC550VFBG		
SHDV4R			
SHDV8R			
SHDV16R			
SHDV4KD2W	SHDV4KD2G		
SHDV4KD4W	SHDV4KD4G		
SHDV8KD4W	SHDV8KD4G		
SHDV4KB2W	SHDV4KB2G		
SHDV4KB4W	SHDV4KB4G		
SHDV8KB4W	SHDV8KB4G		

Description
4MP Super HD Dome CCTV Camera, 3.6mm Fixed Lens
4MP Super HD Dome CCTV Camera, 2.8-12mm Vari-Focal Lens
4MP Super HD Dome CCTV Camera, 6-22mm Vari-Focal Lens
4MP Super HD Bullet CCTV Camera, 3.6mm Fixed Lens
4MP Super HD Bullet CCTV Camera, 2.8-12mm Vari-Focal Lens
4MP Super HD Bullet CCTV Camera, 6-22mm Vari-Focal Lens
4MP Super HD Bullet CCTV Camera, 5-50mm Vari-Focal Lens
4MP Super HD 4 Channel CCTV Recorder
4MP Super HD 8 Channel CCTV Recorder
4MP Super HD 16 Channel CCTV Recorder
MP Super HD 4 Channel CCTV Dome Kit - 2 Cameras (500GB, 1TB, 2TB, 4TB & 8TB hard drive options)
MP Super HD 4 Channel CCTV Dome Kit - 4 Cameras (500GB, 1TB, 2TB, 4TB & 8TB hard drive options)
MP Super HD 8 Channel CCTV Dome Kit - 4 Cameras (1TB, 2TB, 4TB & 8TB hard drive options)
MP Super HD 4 Channel CCTV Bullet Kit - 2 Cameras (500GB, 1TB, 2TB, 4TB & 8TB hard drive options)
MP Super HD 4 Channel CCTV Bullet Kit - 4 Cameras (500GB, 1TB, 2TB, 4TB & 8TB hard drive options)

4MP Super HD 8 Channel CCTV Bullet Kit - 4 Cameras (1TB, 2TB, 4TB & 8TB hard drive options)

#### Hoview 4 Megapixel cameras

# SHDVCDBLG Large Grey Camera Deep Base SHDVCDBLW Large White Camera Deep Base



Grey 5-50mm Lens 4MP HD Camera White 5-50mm Lens 4MP HD Camera









SHDVC622VFBG SHDVC622VFBW

Grey 6-22mm Lens 4MP HD Camera
White 6-22mm Lens 4MP HD Camera

5 to 50mm Varifocal Lens

- High Definition 4MP AHD sensor
- Built in 50m Infrared LED Illumination
- Viewing Angle 42.1~ 6.3°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing in Metal

Sensor Size	1/3″
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	50 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/720mA
Lens	5-50mm Manual Zoom
Dimension	Ø104 x 276 (L) mm inc. Bracket
Weight	1190g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max

- 6 to 22mm Varifocal Lens
- High Definition 4MP AHD sensor
- Built in 50m Infrared LED Illumination
- Viewing Angle 37.2~ 14.4°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control

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- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing in Metal

1/3″
NTSC/ PAL:2560(H)x1440(V)
4 MP (2688 x 1520)
0.1 Lux
Progressive
NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
50 Meters
1Vpp, 75 ohms
Auto
DC12V(+/-10%)/720mA
6-22mm Manual Zoom
Ø104 x 276 (L) mm inc. Bracket
1190g
-30 ~ +60°C RH95% Max
-10 ~ +50°C RH95% Max

- 2.8 to 12mm Varifocal Lens
- High Definition 4MP AHD sensor
- Built in 30m Infrared LED Illumination
- Viewing Angle 98~ 34°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	30 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/400mA
Lens	2.8-12mm Manual Zoom
Dimension	Ø75 x 211 (L) mm inc. Bracket
Weight	720g
Storage Temperature	-30 ~ +60 °C RH95% Max
Operating Temperature	-10 ~ +50 ° C RH95% Max

#### 3.6mm Fixed Lens

- High Definition 4MP AHD sensor
- Built in 25m Infrared LED Illumination
- Viewing Angle 76°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing in Metal

Sensor Size	1/3″
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	25 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/300mA
Lens	3.6mm Fixed Lens
Dimension	Ø68 x 162 (L) mm inc. Bracke
Weight	400g
Storage Temperature	-30 ~ +60 °C RH95% Max
Operating Temperature	-10 ~ +50 °C RH95% Max

## 4 MEGAPIXEL CAMERAS Hoview



#### SHDVC2812VFBG Grey 2.8-12mm Lens 4MP HD Camera SHDVC2812VFBW White 2.8-12mm Lens 4MP HD Camera





Grey 3.6mm Lens 4MP HD Camera SHDVC36FBG SHDVC36FBW White 3.6mm Lens 4MP HD Camera

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#### HDview 4 MEGAPIXEL CAMERAS

#### 4 MEGAPIXEL CAMERAS Hoview



#### SHDVC622VFDW

White 6-22mm Lens 4MP HD Camera





SHDVC2812VFDGGrey 2.8-12mm Lens 4MP HD CameraSHDVC2812VFDWWhite 2.8-12mm Lens 4MP HD Camera

Vandal	resistant	

- 6 to 22mm Varifocal Lens
- High Definition 4MP AHD sensor
- 30m Infrared LED Illumination
- Viewing Angle 40~ 15°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control

Scan Auto

IR Dis Video

Powe

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- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Dome Housing

or Size	1/3″
tive Pixels	NTSC/ PAL:2560(H)x1440(V)
lution	4 MP (2688 x 1520)
mum Illumination	0.1 Lux
ning System	Progressive
Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
stance	30 Meters
o Output	1Vpp, 75 ohms
Gain Control	Auto
er/Current	DC12V(+/-10%)/450mA
	6-22mm Manual Zoom
ension	Ø 138 x 119 (H) mm inc. Base
ht	1070g
age Temperature	-30 ~ +60°C RH95% Max
ating Temperature	-10 ~ +50°C RH95% Max

- 2.8 to 12mm Varifocal Lens
- High Definition 4MP AHD sensor
- 30m Infrared LED Illumination
- Viewing Angle 98~ 34°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control

Scanning S

Storage Te

- High Light Compensation
- IP66 Weatherproof Dome Housing in Metal

ze	1/3″
Pixels	NTSC/ PAL:2560(H)x1440(V)
n	4 MP (2688 x 1520)
Illumination	0.1 Lux
System	Progressive
tronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
e	30 Meters
put	1Vpp, 75 ohms
Control	Auto
irrent	DC12V(+/-10%)/360mA
	2.8-12mm Manual Zoom
n	Ø 140 x 105 (H) mm inc. Base
	690g
emperature	-30 ~ +60°C RH95% Max
Temperature	-10 ~ +50°C RH95% Max

- 3.6mm Fixed Lens
- High Definition 4MP AHD sensor
- Built in 25m Infrared LED Illumination
- Viewing Angle 76°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- IP66 Weatherproof Dome Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	25 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/220mA
Lens	3.6mm Fixed Lens
Dimension	Ø114 x 83 (H) mm inc. Base
Weight	350g
Storage Temperature	-30 ~ +60 ° C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max



SHDVCDBW White Camera Deep Base

#### SHDVC36FDW White 3.6mm Lens 4MP HD Camera



- 3.6mm Fixed Lens
- High Definition 4MP AHD sensor
- Built in 25m Infrared LED Illumination
- Viewing Angle 76°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- IP66 Weatherproof Dome Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	25 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/220mA
Lens	3.6mm Fixed Lens
Dimension	Ø114 x 83 (H) mm inc. Base
Weight	350g
Storage Temperature	-30 ~ +60 ° C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max



SHDVC36FDG

Grey 3.6mm Lens 4MP HD Camera



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#### SHDV4R 4 Channel Full HD 500GB DVR SHDV8R 8 Channel Full HD 1TB CCTV DVR

- Hard drive options: SHDV4R 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras) 4 Megapixel live view and recording
- Recording options Continuous / Scheduled / Motion
- Remote view via ESP® HDview APP for smartphones
- USB back up of recordings for easy evidence transfer
- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video & Audio	
Video Input	SHDV4R - 4 channel BNC SHDV8R - 8 channel BNC
Audio Input	SHDV4R - 4 channel RCA SHDV8R - 4 channel RCA
Audio Output	1 channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4R - 1 and 4 SHDV8R - 1, 4 and 10
Resolution	1024 ×768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 2560×1440
Recording	
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4R - 4ch 4MP recording SHDV8R - 8ch 2MP recording
Recording Mode	Manual/Motion Detection/Schedule



- CMS software included for remote viewing via a pc.
- Remote monitoring via wired connection or PowerLine Adapter (PLA)

ESP

4MP

- Mouse driven comprehensive user interface
- RS485 control for PTZ cameras
- Silent DVR operation

#### Playback & Backup

Sync Playback	SHDV4R - 4ch 4MP recording SHDV8R - 8ch 2MP recording
Backup Mode	Network/USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 8TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C-+55°C / 10%-90%
Dimensions	250(W)x230(D)x45(H)mm



- Hard drive options: 2TB, 4TB, 8TB, 12TB & 16TB
- 16 Channel System (Supports up to 16 cameras)
- Recording options Continuous / Scheduled / Motion
- Remote Monitoring via APP (Android / IOS) or PC
- USB back up of recordings for easy evidence transfer
- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed
- Programmable Spot Output
- CMS software included for remote viewing via a PC

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video & Audio	
Video Input	16 channel BNC
Audio Input	4 channel RCA
Audio Output	1 channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	1, 4, 6, 9,16 and 20
Resolution	1024 ×768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 2560×1440
Recording	
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	2 Megapixel
Record Rate (Main Stream)	16ch Recording
Recording Mode	Manual/Motion Detection/Schedule

#### SHDV16R 16 Channel Full HD 2TB CCTV DVR

- Remote monitoring via wired connection or PowerLine Adapter (PLA)
- Mouse driven comprehensive user interface
- RS485 control for PTZ cameras
- Programmable alarm inputs & outputs
- Audio inputs & outputs

Silent DVR operation

Playback & Backup	
Sync Playback	16ch Recording
Backup Mode	Network/USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & IOS APP
Storage	
Internal HDD	2 SATA HDD, up to 8TB per HDD
Auxiliary Interface	
Alarm Input	4 Channel
Alarm Output	1 Channel
PTZ Control	RS485 with multi-protocol
USB Interface	2
General	
Power Supply	DC12V/5A
Power Consumption	<15W (without hard disk)
Operation Condition	–10°C – +55°C / 10% – 90%
Dimensions	326(W) x 243(D) x 52(H) mm

#### 



#### SHDV4KD2G

#### 4 Channel Full HD 500GB CCTV System

- Complete with DVR, Cameras, Cable & System Power Supply
   Video outputs HDMI / VGA for connection to a monitor
- 2 x 4MP HD day/night dome Cameras SHDVC36FDG/
- SHDVC36FDW
- Hard drive options: SHDV4KD 500GB, 1TB, 2TB, 4TB or 8TB CMS software included for remote viewing via a pc
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options Continuous / Scheduled / Motion
  - Silent DVR operation

Remote view via ESP<sup>®</sup> HDview APP for smartphones USB back up of recordings for easy evidence transfer

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video & Audio	
Video Input	SHDV4KD - 4 channel BNC SHDV8KD - 8 channel BNC
Audio Input	SHDV4KD - 4 channel RCA SHDV8KD - 4 channel RCA
Audio Output	1 channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4KD - 1 and 4 SHDV8KD - 1, 4 and 10
Resolution	1024 ×768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 2560×1440
Recording	
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4KD - 4ch 4MP recording SHDV8KD - 8ch 2MP recording
Recording Mode	Manual/Motion Detection/Schedule



- Premium Surveillance Hard Drive pre-installed
- Programmable Spot Output
- Remote monitoring via wired connection or PowerLine
- Adapter (PLA) Mouse driven comprehensive user interface

#### Playback & Backup

Sync Playback	SHDV4KD - 4ch 4MP recording SHDV8KD - 8ch 4MP recording
Backup Mode	Network/USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 8TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C-+55°C / 10%-90%
Dimensions	250(W)x230(D)x/(5(H)mm



- Complete with DVR, Cameras, Cable & System Power Supply
- 4 x 4MP HD day/night dome Cameras SHDVC36FDG/ SHDVC36FDW
- Hard drive options: SHDV4KD 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options Continuous / Scheduled / Motion
- Remote view via ESP<sup>®</sup> HDview APP for smartphones
- USB back up of recordings for easy evidence transfer

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video & Audio	
Video Input	SHDV4KD - 4 channel BNC SHDV8KD - 8 channel BNC
Audio Input	SHDV4KD - 4 channel RCA SHDV8KD - 4 channel RCA
Audio Output	1 channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4KD - 1 and 4 SHDV8KD - 1, 4 and 10
Resolution	1024 ×768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 2560×1440
Recording	
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4KD - 4ch 4MP recording SHDV8KD - 8ch 2MP recording
Recording Mode	Manual/Motion Detection/Schedule

SHDV4KD4G	4 Channel Full HD 500GB CCTV System
SHDV8KD4G	8 Channel Full HD 1TB CCTV System

- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed
- Programmable Spot Output
- CMS software included for remote viewing via a pc Remote monitoring via wired connection or PowerLine Adapter (PLA)
- Mouse driven comprehensive user interface
- Silent DVR operation

Playback & Backup	
Sync Playback	SHDV4KD - 4ch 4MP recording SHDV8KD - 8ch 4MP recording
Backup Mode	Network/USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 8TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C-+55°C / 10%-90%
Dimensions	250(W)x230(D)x45(H)mm

#### 



#### SHDV4KB2G

#### 4 Channel Full HD 500GB CCTV System

- Complete with DVR, Cameras, Cable & System Power Supply
- 2 x 4MP HD day/night bullet Cameras SHDVC36FBG/
- SHDVC36FBW
- Hard drive options: SHDV4KB 500GB, 1TB, 2TB, 4TB or 8TB CMS software included for remote viewing via a pc
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options Continuous / Scheduled / Motion
- Remote view via ESP® HDview APP for smartphones
- USB back up of recordings for easy evidence transfer

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video & Audio	
Video Input	SHDV4KB - 4 channel BNC SHDV8KB - 8 channel BNC
Audio Input	SHDV4KB - 4 channel RCA SHDV8KB - 4 channel RCA
Audio Output	1 channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4KB - 1 and 4 SHDV8KB - 1, 4 and 10
Resolution	1024 ×768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 2560×1440
Recording	
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4KB - 4ch 4MP recording SHDV8KB - 8ch 2MP recording
Recording Mode	Manual/Motion Detection/Schedule



- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed
- Programmable Spot Output
- Remote monitoring via wired connection or PowerLine Adapter (PLA)
- Mouse driven comprehensive user interface
- Silent DVR operation

#### Playback & Backup

Sync Playback	SHDV4KB - 4ch 4MP recording SHDV8KB - 8ch 4MP recording
Backup Mode	Network/USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 8TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C-+55°C / 10%-90%
Dimensions	250(W)x230(D)x45(H)mm



Please add colour to the code. G=Grey, W=White. e.g. SHDV4KB4W4TB

#### Complete with DVR, Cameras, Cable & System Power Supply

- 4 x 4MP HD day/night bullet Cameras SHDVC36FBG/
- SHDVC36FBW
- Hard drive options: SHDV4KB 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options Continuous / Scheduled / Motion
- Remote view via ESP® HDview APP for smartphones
- USB back up of recordings for easy evidence transfer

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video & Audio	
Video Input	SHDV4KB - 4 channel BNC SHDV8KB - 8 channel BNC
Audio Input	SHDV4KB - 4 channel RCA SHDV8KB - 4 channel RCA
Audio Output	1 channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4KB - 1 and 4 SHDV8KB - 1, 4 and 10
Resolution	1024 ×768, 1280 ×720, 1280 ×1024, 1440 ×900 1920 ×1080, 2560×1440
Recording	
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4KB - 4ch 4MP recording SHDV8KB - 8ch 2MP recording
Recording Mode	Manual/Motion Detection/Schedule

Video outputs HDMI / VGA for connection to a monitor

Premium Surveillance Hard Drive pre-installed

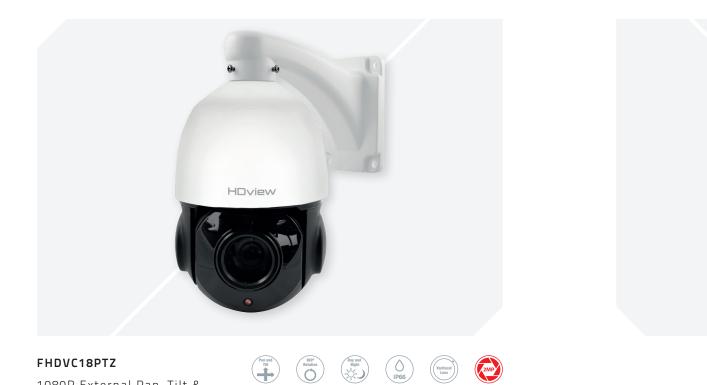
4 Channel Full HD 500GB CCTV System SHDV4KB4G

8 Channel Full HD 1TB CCTV System SHDV8KB4G

- Programmable Spot Output
- CMS software included for remote viewing via a pc
  - Remote monitoring via wired connection or PowerLine Adapter (PLA)
  - Mouse driven comprehensive user interface
  - Silent DVR operation

Playback & Backup			
Sync Playback	SHDV4KB - 4ch 4MP recording SHDV8KB - 8ch 4MP recording		
Backup Mode	Network/USB2.0 devices		
Network			
Ethernet	RJ45 10M/100M		
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP		
Network Monitoring	Web browsers, CMS, Android & iPhone apps		
Storage			
Internal HDD	1 SATA HDD, up to 8TB per HDD		
Auxiliary Interface			
USB Interface	2		
General			
Power Supply	DC12V/2A		
Power Consumption	<10W (without hard disk)		
Operation Condition	0°C-+55°C / 10%-90%		
Dimensions	250(W)x230(D)x/(5(H)mm		

#### HDview PAN, TILT AND ZOOM CAMERAS



Day and Night

360° Rotation

Pan and Till

#### FHDVC18PTZ

1080P External Pan, Tilt & Zoom Camera

#### True High Definition 2MP AHD sensor

- 4.7-84.6mm varifocal lens
- Full pan, tilt and zoom operation
- Full 360° rotation pan function
- 18 x optical zoom
- Up to 50m IR night illumination
- Complete with 2 amp power supply
- IP66 weatherproof rating

Rated Voltage	12V DC
Max Current	1.25A
IR Effective Distance	50M
Protection	IP66
Pan Rotation	360° Endless rotation
Speed	Pan 0.6-200° /s Tilt 3.5-30° /s
Working Conditions	-10°C - +50°C
Dimensions	150(W) x 235(H) x 205(D)mm

Protocol	Pelco-P, Pelco-D, Panasonic, HikVision, Samsung, RULE, Dahua, SAE
Baud Rate (bps)	1200, 2400, 4800, 9600, 19200
Max Camera Support	255
Controllers Supported	16 in total (15 auxiliary)
Power Supply	DC 12V±10%
Power Consumption	6W MAX
Working Temperature	0°C-50°C
Dimensions	420 x 260 x 170mm
Outputs	BNC, Audio
VESA Wall Hanging	100 x 100mm
Power Supply	AC100-240V~50/60 Hz 1.1A

PTZCON

PTZ

- For use with PTZ Cameras
- Keyboard for programming and Camera control
- Integrated LCD display
- 3D joystick for control of Camera pan, tilt and zoom functions



## 2 Megapixel Wire Free Cameras and Kits





2MP Cameras

Fixed Lens Cameras

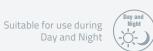
Ingress Protection Rating



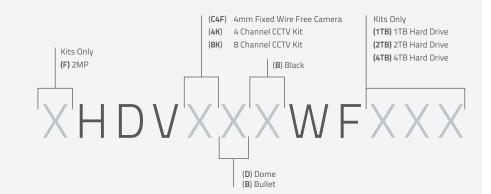
Premium Surveillance Hard Drive



HDview WF App for Smart Devices



**IP66** 



Code (White)	Code (Black)

2MP Bullet Cameras & Kits

Description

FHDVC4FBWF	FHDVC4FBBWF	WIFI CCTV Bullet Camera - 2MP/1080P
FHDV4KBWF	FHDV4KBBWF	4 Channel 2 Bullet Camera 500GB WIFI CCTV Kit - 2MP/1080P (500GB, 1TB, 2TB & 4TB hard drive options)
FHDV4KB4WF	FHDV4KBB4WF	4 Channel 4 Bullet Camera 500GB WIFI CCTV Kit - 2MP/1080P (500GB, 1TB, 2TB & 4TB hard drive options)
FHDV8KB4WF	FHDV8KBB4WF	8 Channel 4 Bullet Camera 1TB WIFI CCTV Kit - 2MP/1080P (500GB, 1TB, 2TB & 4TB hard drive options)

#### 2MP Dome Cameras & Kits

FHDVC4FDWF	FHDVC4FDBWF	WIFI CCTV Dome Camera - 2MP/1080P
FHDV4KDWF	FHDV4KDBWF	4 Channel 2 Dome Camera 500GB WIFI CCTV Kit - 2MP/1080P (500GB, 1TB, 2TB & 4TB hard drive options)
FHDV4KD4WF	FHDV4KDB4WF	4 Channel 4 Dome Camera 500GB WIFI CCTV Kit - 2MP/1080P (500GB, 1TB, 2TB & 4TB hard drive options)
FHDV8KD4WF	FHDV8KDB4WF	8 Channel 4 Dome Camera 1TB WIFI CCTV Kit - 2MP/1080P (500GB, 1TB, 2TB & 4TB hard drive options)

## HDview 2 Megapixel wire free cameras

# Haview

#### FHDVC4FBWF 4mm Lens 1080P Wire Free HD Camera - White

IPG6 (Find Control of Control of



4mm Lens 1080P Wire Free HD Camera - Black

#### 4mm Fixed Lens

- High definition 2MP sensor
- Built in 20m Infrared LED Illumination
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing
- 12vDC PSU Included

Sensor Size	1/2.8"
Lens	4mm Fixed Lens
Resolution	1080p
Minimum Illumination	0.1 Lux/F2.00 0 Lux (with IR LED ON)
IR Distance	< 20 Meters
Power	DC12V 240mA
Weight	575g
Operating Temperature	-10~+50°C
Dimensions (Excluding antenna)	180(W) x 65(H) x 65(D)mm

- 4mm Fixed Lens
- High definition 2MP sensor
- Built in 20m Infrared LED Illumination
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing
- 12vDC PSU Included

Sensor Size	1/2.8"
Lens	4mm Fixed Lens
Resolution	1080p
Minimum Illumination	0.1 Lux/F2.00 0 Lux (with IR LED ON)
IR Distance	< 20 Meters
Power	DC12V 240mA
Weight	575g
Operating Temperature	-10 ~ +50 ° C
Dimensions (Excluding antenna)	180(W) x 65(H) x 65(D)mm

Sensor Size	1/2.8″
Lens	4mm Fixed Lens
Resolution	1080p
Minimum Illumination	0.1 Lux/F2.00 0 Lux (with IR LED ON)
IR Distance	< 20 Meters
Power	DC12V 240mA
Weight	575g
Operating Temperature	-10 ~ +50 ° C

## 2 MEGAPIXEL WIRE FREE CAMERAS HOVE

- 4mm Fixed Lens
- High definition 2MP sensor
- Built in 20m Infrared LED Illumination
- IP66 Weatherproof Dome Housing
- 12vDC PSU Included



#### **FHDVC4FDWF** 4mm Lens 1080P Wire Free HD Camera - White



- 4mm Fixed Lens
- High definition 2MP sensor
- Built in 20m Infrared LED Illumination
- IP66 Weatherproof Dome Housing
- 12vDC PSU Included

Sensor Size	1/2.8″
Lens	4mm Fixed Lens
Resolution	1080p
Minimum Illumination	0.1 Lux/F2.00 0 Lux (with IR LED ON)
IR Distance	< 20 Meters
Power	DC12V 240mA
Weight	575g
Operating Temperature	-10 ~ +50 ° C



**FHDVC4FDBWF** 4mm Lens 1080P Wire Free HD Camera - Black



60

FHDVC4FBBWF

## HOVIEW 2 MEGAPIXEL WIRE FREE KITS



#### FHDV4KBWF

#### 4 Channel Full HD 500GB Wire Free CCTV System

- Wire Free 1080p CCTV kit
- 2 camera kit expandable to 4 cameras
- Offers 150 meter wire free open field range
- 2 x 2MP HD day/night bullet cameras (PSUs Included)
- Remote Cloud monitoring via LAN connection
- Hard drive options: 500GB, 1TB, 2TB or 4TB
- Mobile monitoring with Android or iPhone ESP<sup>®</sup> APP

3520V 200
LINUX system
4 IP cameras
1 x HDMI, 1 x VGA
1 and 4
1024 ×768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080
H.264
1080P
4ch 1080P recording
Manual/Alarm/Motion Detection/Schedule
4ch 1080P playback
Network/USB



- Triplex operation Playback / Record / Remote view simultaneously
- VGA or HDMI output (HDMI lead supplied)
- Recording options Continuous / Scheduled / Motion
- USB back up of recordings for easy evidence transfer
- Mouse driven comprehensive user interface
- Silent operation

Network

#### RJ45 10M/100M

Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 4TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Weight	1.7kg
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C-+55°C
NVR Dimensions (Excluding	257(W) x 206(D) x 42(H) mm



- Wire Free 1080p CCTV kit
- 4 camera kit
- Offers 150 meter wire free open field range
- 4 x 2MP HD day/night bullet cameras (PSUs Included)
- Remote Cloud monitoring via LAN connection
- Hard drive options: 500GB, 1TB, 2TB or 4TB
- Mobile monitoring with Android or iPhone ESP® APP

System	
Main Processor	3520V 200
Operating System	LINUX system
Video	
Video Support	4 IP cameras
Display	
Video Output	1 x HDMI, 1 x VGA
Display Split	1 and 4
Resolution	1024 ×768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080
Recording	
Video/Audio Compression	H.264
Resolution	1080P
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Alarm/Motion Detection/Schedule
Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	Network/USB

		Playback	/ Record	/	Remote	
view sin	nultaneous	slv				

- VGA or HDMI output (HDMI lead supplied)
- Recording options Continuous / Scheduled / Motion
- USB back up of recordings for easy evidence transfer
- Mouse driven comprehensive user interface
- Silent operation

Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 4TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Weight	1.7kg
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C-+55°C
NVR Dimensions (Excluding antenna)	257(W) × 206(D) × 42(H) mm

## HOVIEW | 2 MEGAPIXEL WIRE FREE KITS



#### FHDV4KDWF

#### 4 Channel Full HD 500GB Wire Free CCTV System

- Wire Free 1080p CCTV kit
- 2 camera kit
- Offers 150 meter wire free open field range
- 2 x 2MP HD day/night dome cameras (PSUs Included)
- Remote Cloud monitoring via LAN connection
- Hard drive options: 500GB, 1TB, 2TB or 4TB
- Mobile monitoring with Android or iPhone ESP<sup>®</sup> APP

Syst	em	
Main	Process	

System	
Main Processor	3520V 200
Operating System	LINUX system
Video	
Video Support	4 IP cameras
Display	
Video Output	1 x HDMI, 1 x VGA
Display Split	1 and 4
Resolution	1024 ×768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080
Recording	
Video/Audio Compression	H.264
Resolution	1080P
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Alarm/Motion Detection/Schedule
Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	Network/USB



- VGA or HDMI output (HDMI lead supplied)
- Recording options Continuous / Scheduled / Motion
- USB back up of recordings for easy evidence transfer
- Mouse driven comprehensive user interface
- Silent operation

Network

Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 4TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Weight	1.7kg
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C-+55°C
NVR Dimensions (Excluding antenna)	257(W) x 206(D) x 42(H) mm



For Black kits please add **B**=Black to the code. e.g. FHDV4KD**B**4WF1TB

ESP

- Wire Free 1080p CCTV kit
- 4 camera kit
- Offers 150 meter wire free open field range
- 4 x 2MP HD day/night dome cameras (PSUs Included)
- Remote Cloud monitoring via LAN connection
- Hard drive options: 500GB, 1TB, 2TB or 4TB
- Mobile monitoring with Android or iPhone ESP® APP

System	
Main Processor	3520V 200
Operating System	LINUX system
Video	
Video Support	4 IP cameras
Display	
Video Output	1 x HDMI, 1 x VGA
Display Split	1 and 4
Resolution	1024 ×768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080
Recording	
Video/Audio Compression	H.264
Resolution	1080P
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Alarm/Motion Detection/Schedule
Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	Network/USB

4 Channel Full HD 500GB Wire Free CCTV System	FHDV4KD4WF
8 Channel Full HD 1TB Wire Free CCTV System	FHDV8KD4WF

- Triplex operation Playback / Record / Remote view simultaneously
- VGA or HDMI output (HDMI lead supplied)
- Recording options Continuous / Scheduled / Motion
- USB back up of recordings for easy evidence transfer
- Mouse driven comprehensive user interface
- Silent operation

Network		
Ethernet	RJ45 10M/100M	
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP	
Network Monitoring	Web browsers, CMS, Android & iPhone apps	
Storage		
Internal HDD	1 SATA HDD, up to 4TB per HDD	
Auxiliary Interface		
USB Interface	2	
General		
Weight	1.7kg	
Power Supply	DC12V/2A	
Power Consumption	<10W (without hard disk)	
Operation Condition	0°C-+55°C	
NVR Dimensions (Excluding antenna)	257(W) × 206(D) × 42(H) mm	

## rekor HD

## 2 Megapixel Cameras and Kits





Premium Surveillance Burveillance



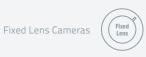
Hard Drive



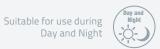
ESP View App for Smart Devices

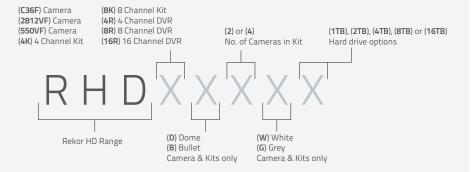


360° Rotation









Code (White)	Code (Grey)	Description
RekorHD Cameras		
RHDC36FBW	RHDC36FBG	3.6mm Lens Full HD Bullet Camera
RHDC36FDW	RHDC36FDG	3.6mm Lens Full HD Dome Camera
RHDC2812VFDW	RHDC2812VFDG	2.8-12mm Lens 2MP HD Analog Dome Camera
RHDC2812VFBW	RHDC2812VFBG	2.8-12mm Lens 2MP HD Analog Bullet Camera
RHDC550VFBW	RHDC550VFBG	5-50mm Lens 2MP HD Analog Bullet Camera
RHDC2812VFDWAV	RHDC2812VFDGAV	2.8-12mm Lens 2MP HD Analog Vandal Resistant Dome Camera
RekorHD Kits		
RHD4KB2W	RHD4KB2G	4 Channel HD 500GB CCTV System - 2 x Bullet
RHD4KB2W1TB	RHD4KB2G1TB	4 Channel HD 1TB CCTV System - 2 x Bullet
RHD4KB2W2TB	RHD4KB2G2TB	4 Channel HD 2TB CCTV System - 2 x Bullet
RHD4KB4W	RHD4KB4G	4 Channel HD 500GB CCTV System - 4 x Bullet
RHD4KB4W1TB	RHD4KB4G1TB	4 Channel HD 1TB CCTV System - 4 x Bullet
RHD4KB4W2TB	RHD4KB4G2TB	4 Channel HD 2TB CCTV System - 4 x Bullet
RHD8KB4W	RHD8KB4G	8 Channel HD 1TB CCTV System - 4 x Bullet
RHD8KB4W2TB	RHD8KB4G2TB	8 Channel HD 2TB CCTV System - 4 x Bullet
RHD8KB4W4TB	RHD8KB4G4TB	8 Channel HD 4TB CCTV System - 4 x Bullet
RHD4KD2W	RHD4KD2G	4 Channel HD 500GB CCTV System - 2 x Dome
RHD4KD2W1TB	RHD4KD2G1TB	4 Channel HD 1TB CCTV System - 2 x Dome
RHD4KD2W2TB	RHD4KD2G2TB	4 Channel HD 2TB CCTV System - 2 x Dome
RHD4KD4W	RHD4KD4G	4 Channel HD 500GB CCTV System - 4 x Dome
RHD4KD4W1TB	RHD4KD4G1TB	4 Channel HD 1TB CCTV System - 4 x Dome
RHD4KD4W2TB	RHD4KD4G2TB	4 Channel HD 2TB CCTV System - 4 x Dome
RHD8KD4W	RHD8KD4G	8 Channel HD 1TB CCTV System - 4 x Dome
RHD8KD4W2TB	RHD8KD4G2TB	8 Channel HD 2TB CCTV System - 4 x Dome
RHD8KD4W4TB	RHD8KD4G4TB	8 Channel HD 4TB CCTV System - 4 x Dome
RekorHD DVRs		
RHD4R		4 Channel Full HD 500GB DVR
RHD4R1TB		4 Channel Full HD 1TB DVR
RHD4R2TB		4 Channel Full HD 2TB DVR
RHD8R		8 Channel Full HD 1TB DVR
RHD8R2TB		8 Channel Full HD 2TB DVR
RHD8R4TB		8 Channel Full HD 4TB DVR
RHD16R		16 Channel Full HD 2TB DVR
RHD16R4TB		16 Channel Full HD 4TB DVR
RHD16R8TB		16 Channel Full HD 8TB DVR

#### **rekor HD** 2 MEGAPIXEL REKOR HD CAMERAS



### RHDC36FBW

#### White 3.6mm Lens Full HD Camera





#### RHDC36FBG Grey 3.6mm Lens Full HD Camera





 $\Diamond$ IP66

#### HD 2MP Resolution

- 3.6mm Fixed Lens 1/2.8" Image Sensor
- 30 Infrared LED Illumination
- 87° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30 ~ +50°C
- Dimensions: Ø71 X 151 mm
- Weight: 350g

Sensor Size	1/2.8"
Effective Pixels	NTSC/ PAL:1920(H) × 1080(V)
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	30m
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power	12vDC
Lens	3.6mm
Dimensions	Ø71mm x 151mm
Weight	350g
Operating Temperature	-30 ~ +50° C

- HD 2MP Resolution
- 3.6mm Fixed Lens
- 1/2.8" Image Sensor
- 30 Infrared LED Illumination
- 87° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30 ~ +50°C
- Dimensions: Ø71 X 151 mm
- Weight: 350g

ensor Size	1/2.8"
ffective Pixels	NTSC/ PAL:1920(H) x 1080(V)
lesolution	1080p
Ainimum Illumination	0.05 Lux
canning System	Progressive
hutter Speed	Automatic
R Distance	30m
'ideo Output	1Vpp, 75 ohms
uto Gain Control	Auto
lower	12vDC
ens	3.6mm
limensions	Ø71mm x 151mm
Veight	350g
perating Temperature	-30 ~ +50°C

HD	2MP	Resolution

- 3.6mm Fixed Lens
- 1/2.8" Image Sensor
- 30 Infrared LED Illumination
- 87° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30 ~ +50°C
- Dimensions: Ø100 X 82 mm
- Weight: 400g

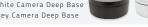
Sensor Size	1/2.8"
Effective Pixels	NTSC/ PAL:1920(H) x 1080(V)
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	30m
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power	12vDC
Lens	3.6mm
Dimensions	Ø100mm x 82mm
Weight	400g
Operating Temperature	-30 ~ +50°C

#### 2 MEGAPIXEL REKOR HD CAMERAS

- HD 2MP Resolution
- 3.6mm Fixed Lens
- 1/2.8" Image Sensor
- 30 Infrared LED Illumination
- 87° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30 ~ +50°C
- Dimensions: Ø100 X 82 mm
- Weight: 400g

Sensor Size	1/2.8″
Effective Pixels	NTSC/ PAL:1920(H) x 1080(V)
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	30m
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power	12vDC
Lens	3.6mm
Dimensions	Ø100mm x 82mm
Weight	400g
Operating Temperature	-30 ~ +50°C











RHDC36FDG Grey 3.6mm Lens Full HD Camera

Bay and Night





#### **rekor HD** 2 MEGAPIXEL REKOR HD CAMERAS

#### 2 MEGAPIXEL REKOR HD CAMERAS



RHDC2812VFBWWhite 2.8~12mm Lens Full HD CameraRHDC2812VFBGGrey 2.8~12mm Lens Full HD Camera





IPCDBW White Camera Deep Base IPCDBG Grey Camera Deep Base

RHDC550VFBWWhite 5~50mm Lens Full HD CameraRHDC550VFBGGrey 5~50mm Lens Full HD Camera

HD 2MP	Resolution	
--------	------------	--

- 2.8-12mm Varifocal Lens
- 1/2.7" Image Sensor
- 35 Infrared LED Illumination
- 113~30° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30~ + 50°C
- Dimensions: Ø88 X 240 mm

Sensor Size	1/2.7"
Effective Pixels	1936 x 1096
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	35m
Video Output	1Vpp, 75 ohms
Gain Control	Auto
Power	12VDC
Lens	2.8~12mm Varifocal Lens
Ingress Protection	IP66
Dimensions	Ø88mm x 240 mm
Weight	980g
Operating Temperature	-30~ + 50° C

- HD 2MP Resolution5-50mm Varifocal Lens
- 1/2.8" Image Sensor
- 60m Infrared LED Illumination
- 49~7° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC

- Operating Temperature: -30~ + 50°C
- Dimensions: Ø108 X 301 mm

Sensor Size	1/2.8″
Effective Pixels	1936 x 1096
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	60m
Video Output	1Vpp, 75 ohms
Gain Control	Auto
Power	12VDC
Lens	5~50mm Varifocal Lens
Ingress Protection	IP66
Dimensions	Ø108mm x 301 mm
Weight	1450g
Operating Temperature	-30~ + 50° C

•	HD	2MP	Reso	lution
---	----	-----	------	--------

- 2.8-12mm Varifocal Lens
- 1/2.7" Image Sensor
- 40 Infrared LED Illumination
- 113~30° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30~ + 50°C
- Dimensions: Ø126 X 102 mm

Sensor Size	1/2.7"
Effective Pixels	1936 x 1096
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	40m
Video Output	1Vpp, 75 ohms
Gain Control	Auto
Power	12VDC
Lens	2.8~12mm Varifocal Lens
Ingress Protection	IP66
Dimensions	Ø126mm x 102 mm
Weight	735g
Operating Temperature	-30~ + 50° C



Grey 2.8~12mm Lens Full HD Camera RHDC2812VFDG White 2.8~12mm Lens Full HD Camera RHDC2812VFDW



- HD 2MP Resolution
- 2.8-12mm Varifocal Lens
- 1/2.7" Image Sensor
- 30 Infrared LED Illumination
- 113~30° Viewing Angle
- IP66 Housing Ingress Protection
- IK10 Impact Protection
- 12vDC
- Operating Temperature: -30~ + 50° C
- Dimensions: Ø147 X 117 mm

Sensor Size	1/2.7"
Effective Pixels	1936 x 1096
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	30m
Video Output	1Vpp, 75 ohms
Gain Control	Auto
Power	12VDC
Lens	2.8~12mm Varifocal Len
Ingress Protection	IP66
Impact Resistance	IK10
Dimensions	Ø147 X 117 mm
Weight	800g



Grey 2.8-12mm Lens Full HD Vandal Resistant Camera RHDC2812VFDGAV White 2.8-12mm Lens Full HD Vandal Resistant Camera RHDC2812VFDWAV



# RHD4R 4 Channel Full HD 500GB DVRRHD8R 8 Channel Full HD 1TB DVR

- HD 2MP Resolution Viewing and Recording
- 4CH Analog DVR
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage
- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

System	
Operating System	LINUX
Video & Audio	
Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	01-04-2021 00:00:00
Resolution	1024 x 768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 1080 x 1440, 3840 x 2160
Recording	
Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule
Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices



- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

Ethernet R/45 10W/100M Network Functions HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP Storage Internal HDD 1 SATA Auxiliary Interface 2 General Power Supply DC12V/SA
Network Functions SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP Network Monitoring CMS, Android & iPhone apps Storage Internal HDD 1 SATA Auxiliary Interface USB Interface 2 General
Storage Internal HDD 1 SATA Auxiliary Interface USB Interface 2 General
Internal HDD 1 SATA Auxiliary Interface USB Interface 2 General
Auxiliary Interface USB Interface 2 General
USB Interface 2 General
General
Deven Swanky
Power Supply DC12V/5A
Power Consumption <10W (without hard disk)
Operation Condition 0°C - +55°C / 10% - 90%
Dimensions 300mm x 227mm x 53mm
Power Supply DC12V/2A
DVR Power Consumption <10W
Operating Temperature 0°C~+40°C
Relative Humidity Resistance Less than 90%RH
Dimensions 300mm x 227mm x 53mm



Residence Contraction Contraction

- HD 2MP Resolution Viewing and Recording
- 16CH Analog DVR
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage
- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

#### **RHD16R** 16 Channel Full HD 2TB DVR

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System		Network
)perating System	LINUX	Ethernet
/ideo & Audio		Network F
/ideo Input	16 Channel BNC	
ludio Input	4 RCA Inputs	Network N
ludio Output	1 Channel RCA	Storage
Display		Internal H
/ideo Output	1 x HDMI, 1 x VGA & 1 x BNC	Auxiliary
Display Split	1/4/9/16/20	USB Interf
Resolution	1024 x 768, 1280 ×720, 1280 ×1024, 1440 ×900,	General
)	1920×1080, 1080 x 1440, 3840 x 2160	Power Sup
Recording		Power Cor
/ideo/Audio Compression	H.265	Operation
Resolution	1080P @15fps	Dimensior
Record Rate (Main Stream)	16ch 1080P recording	Power Sup
Recording Mode	Manual/Motion Detection/Schedule	DVR Powe
Playback & Backup		Operating
iync Playback	16ch 1080P playback	Relative H
Backup Mode	USB2.0 devices	Dimensior

rk	
t	RJ45 10M/100M
k Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
k Monitoring	CMS, Android & iPhone apps
e	
HDD	2 SATA 2TB HDD
ry Interface	
erface	2
al	
iupply	DC12V/5A
onsumption	<10W (without hard disk)
on Condition	0°C-+55°C / 10%-90%
ions	300mm x 227mm x 53mm
Supply	DC12V/2A
wer Consumption	<10W
ng Temperature	0°C~+40°C
Humidity Resistance	Less than 90%RH
ions	380mm x 340mm x 50mm



# 4 Channel HD 500GB CCTV System

- Complete with 4 Channel DVR, Cameras, Cables & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 2 x 2MP, Day/ Night, Weatherproof Cameras
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage

System	
Operating System	LINUX
Video & Audio	
Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	Single / Quad
Resolution	1024 x 768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 1080 x 1440, 3840 x 2160
Recording	
Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule

۱	•	Pre-Installed Premium	Hard Drive
	_	Demoste Meniteria e de	

- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA 500GB HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C-+55°C / 10%-90%
Dimensions	300mm x 227mm x 53mm



For 2TB or 4TB kits please add 2TB or 4TB to the code. e.g. RHD8KD4G2TB (8 Channel)

4 Channel HD 500GB CCTV System 8 Channel HD 1TB CCTV System

RHD4KD4G Grey RHD4KD4W White RHD8KD4G Grey RHD8KD4W White

- Complete with 4 Channel DVR, Cameras, Cables & System
   Pre-Installed Premium Hard Drive Power Supply
- HD 2MP Resolution Viewing and Recording
- 4 x 2MP, Day / Night, Weatherproof Cameras
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage

- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System		Playback & Backup
Operating System	LINUX	Sync Playback
Video & Audio		Backup Mode
Video Input	4 Channel BNC	Network
Audio Input	4 RCA Inputs	Ethernet
Audio Output	1 Channel RCA	Network Functions
Display		Network Monitoring
Video Output	1 x HDMI, 1 x VGA & 1 x BNC	Storage
Display Split	Single / Quad	Internal HDD
Resolution	1024 x 768, 1280 ×720, 1280 ×1024, 1440 ×900,	Auxiliary Interface
Resolution	1920 ×1080, 1080 x 1440, 3840 x 2160	USB Interface
Recording		General
Video/Audio Compression	H.265	Power Supply
Resolution	1080P @15fps	Power Consumption
Record Rate (Main Stream)	4ch 1080P recording	Operation Condition
Recording Mode	Manual/Motion Detection/Schedule	Dimensions

back & Backup	
Playback	4ch 1080P playback
up Mode	USB2.0 devices
vork	
net	RJ45 10M/100M
ork Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
ork Monitoring	CMS, Android & iPhone apps
age	
nal HDD	1 SATA 500GB HDD
liary Interface	
nterface	2
eral	
r Supply	DC12V/5A
r Consumption	<10W (without hard disk)
ation Condition	0°C-+55°C / 10%-90%
nsions	300mm x 227mm x 53mm



#### RHD4KB2G Grey RHD4KB2W White 4 Channel HD 500GB CCTV System

- Complete with 4 Channel DVR, Cameras, Cables & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 2 x 2MP, Day / Night, Weatherproof Cameras
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage

System	
Operating System	LINUX
Video & Audio	
Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	Single / Quad
Resolution	1024 x 768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 1080 x 1440, 3840 x 2160
Recording	
Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule



- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA 500GB HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C-+55°C / 10%-90%
Dimensions	300mm x 227mm x 53mm



H.265 Video Compression for Efficient Storage

1 x HDMI, 1 x VGA & 1 x BNC

1080P @15fps

1024 x 768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 1080 x 1440, 3840 x 2160

Manual/Motion Detection/Schedule

System

Display

Recording

Video/Audio Compression H.265

Record Rate (Main Stream) 4ch 1080P recording

Video & Audio

Mouse Driven User Menu

4ch 1080P playback USB2.0 devices RJ45 10M/100M
RJ45 10M/100M
HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
CMS, Android & iPhone apps
1 SATA 500GB HDD
2
DC12V/5A
<10W (without hard disk)
0°C-+55°C / 10%-90%
300mm x 227mm x 53mm

# HDview LED CCTV MONITORS

# LED CCTV MONITORS HDview



#### MON18L 18.5" LED CCTV Monitor



#### MON21L 21.5" LED CCTV Monitor

Energy efficient wide screen

- 18.5" LED-Backlit Screen
- VGA, HDMI, BNC input for DVR/NVR connection
- Audio Input
- 2 X 2W Speakers
- Complete with desktop stand
- VESA Standard wall mount option
- Internal Power Supply
- Operating Temperature 0° 40°
- Operating Humidity 10%-80%
- HDMI & VGA Cable Included

Energy efficient wide screen

Complete with desktop stand
 VESA Standard wall mount option
 Internal Power Supply
 Operating Temperature 0° - 40°
 Operating Humidity 10%-80%
 HDMI & VGA Cable Included

21.5" LED-Backlit Screen

Audio Input2 X 2W Speakers

Size	18.5" LED
Aspect Ratio	16:09:00
Resolution (H x V)	1360 x 768
Colours	16.7M
Viewing Angle	H: 170° V: 160°
Contrast Ratio	10000:1 (DCR)
Response Time	5ms
Speakers	2 each (2 watts)
Inputs	BNC, HDMI, VGA, Audio
VESA Wall Hanging	100 x 100mm
Power Supply	AC100-240V~50/60 Hz 1.1A

VGA, HDMI, BNC input for DVR/ NVR connection

16:09:00 1920 x 1080 16.7M H: 178° V: 178°

8ms

BNC, HDMI, VGA, Audio

AC100-240V~50/60 Hz 1.1A

- Energy efficient wide screen
- 23.8" LED-Backlit Screen
- VGA, HDMI, BNC input for DVR/ NVR connection
- Audio Input
- 2 X 2W Speakers
- Complete with desktop stand
- VESA Standard wall mount option
- Internal Power Supply
- Operating Temperature 0° 40°
- Operating Humidity 10%-80%
- HDMI & VGA Cable Included

Size	23.8" LED
Aspect Ratio	16:09:00
Resolution (H x V)	1920 x 1080
Colours	16.7M
Viewing Angle	H: 178° V: 178°
Contrast Ratio	10000:1 (DCR)
Response Time	8ms
Speakers	2 each (2 watts)
Inputs	BNC, HDMI, VGA, Audio
VESA Wall Hanging	75 x 75mm
Power Supply	AC100-240V~50/60 Hz 1.1/



MON23L 23.8" LED CCTV Monitor

- Energy efficient wide screen LED panel
- Sleek black design
- HDMI x 2, DP, VGA, Audio, RS232 In/Out

Screen Size (Diagonal)	31.5"
Aspect Ratio	16:09:00
Supported Resolutions	640x480; 800x600; 1024x768; 1280x1024; 1920x1080; 3840x2160
Viewing Angle	H: 170° V: 170°
Constrast Ratio	3000:1
Response Time	9.5ms
Inputs	2 x HDMI, 1 x Display Port, 1 x VGA, 1 x Audio, 1 x RS232
Outputs	1 x RS232
VESA Wall Mount	200mm x 100mm
Power Input	100 - 240V AC
Power Consumption	<55W



#### MON324K LED CCTV 31.5" Monitor Black



# DATA CABLE, PRE-TERMINATED WITH RJ45

- CABIP10 10m Data Cable
- CABIP20 20m Data Cable
- CABIP40 40m Data Cable
- CABIP80 80m Data Cable



HDVIP1632RRMB Rack Mount Bracket For Models: HDVIP16R, HDVIP32R

- Rack Mount Bracket for Models: HDVIP16R, HDVIP32R
- Suitable for Standard 19" Server Rack Mounting

<b>1</b>	Channel	POEI	njecto

- 30 Watt
- IEEE802.3 Standards
- 100 Meters Transmission

Power Supply	
Input	AC 100-240V
Voltage Range	DC53V
Output	30 Watts
Network Rate	10/100/1000Mbps
Standards	IEEE802.3af/at
Supply Mode	Mid-span
Dimensions	115 x 62.5 x 31 mm
Weight	150g
Storage Temperature	-30°C+60°C
Operating Temperature	0°C~55°C



**IPIN1POE** 1 Channel POE Injector



IPCDBWWhite Camera Deep BaseIPCDBGGrey Camera Deep Base

- IP66 Rated
- Metal Construction
- G3/4 Cable Gland Supplied
- Suitable for IP Range; REKIPC36FB, REKIPC36FD, HDVIPC36FB, HDVIPC28FD\*2, HDVIPC2812VFB, HDVIPC2812VFD, HDVIPC28FD
- Dimensions: 146 x 59 mm



- IPCDBWAV White Camera Deep Base IPCDBGAV Grey Camera Deep Base
- IP66 Rated
- Metal Construction
- G3/4 Cable Gland Supplied
- Suitable for IP Range; HDVIPC2812VFD\*AV
- Dimensions: 146 x 59 mm

- 4 Channel POE Switch
- 60 Watt
- 1 Channel Uplink
- IEEE802.3 Standards
- 100 Meters Transmission Per Port
- Mounting Brackets Supplied

Power Supply	
External	53VDC/1.25A
Voltage Range	DC48~56V
Output	60 Watts
Downlink RJ-45 Port	4*10/100Mbps
Uplink RJ-45 Port	1*10/100Mbps
Standards	IEEE802.3af/at
Supply Mode	End-span
Dimensions	160x94x27mm
Weight	425g
Storage Temperature	-30°C+60°C
Operating Temperature	0°C~55°C



**IPSW4POE** 4 Channel POE Switch



IPSW8POE 8 Channel POE Switch



**CABIPCOUP** Data Cable Coupler

- 8 Channel POE Switch
- 120 Watt
- 1 Channel Uplink
- IEEE802.3 Standards
- 100 Meters Transmission Per Port
- Mounting Brackets Supplied

Power Supply	
External	53VDC/2.5A
Voltage Range	DC48~56V
Output	120 Watts
Downlink RJ-45 Port	8*10/100Mbps
Uplink RJ-45 Port	1*10/100Mbps
Standards	IEEE802.3af/at
Supply Mode	End-span
Dimensions	220x105x27mm
Weight	612Kg
Storage Temperature	-30°C+60°C
Operating Temperature	0°C~55°C

Data Cable Coupler with RJ45 Ports

- Plug and play installation
- One Input and one output PoE
- Bandwidth10/100Mbps
- Short Circuit and Overload Protection
- Requires PoE Supply from NVR or Network Switch

Port	One RJ45 port for PoE input, one RJ45 port for PoE output
PoE Power Supply Mode	Powered via PoE input port, support Mid-Span and End-Span
Transmission Media	standard cat5e/6 or above
PoE Power Output	15.4W(max)
Bandwidth	10/100Mbps
Standard Compliance	IEEE802.3 10BASE- T?IEEE802.3u 100BASE-TX/100BASE-FX- ?IEEE802.3az?IEEE802.3af
Working Status	PoE Indicator, Link/Act Indicator
Dimensions (L*W*H)	83.0mm x 51.5mm x 24.0mm
Weight	88.6g
Environment	
Working Temperature	-10° ~ 55°C
Storage Temperature	-40° ~ 85°C
Relative Humidity	5% ~ 95% (non-condensing)



IPX100POE PoE Extender



HDVIPCPTZC IP Pan, Tilt, and Zoom Controller

- For use with IP PTZ Cameras
- Keyboard for Programming and Camera Control
- Integrated LCD Display
- Powered VIA 12V or PoE

Protocol	Onvif
Maximum Supported Devices	999
Supported Decoding Formats	H.265 & H.265
Power Supply	DC12V-2A
PoE Compatible	Yes
Power Consumption	<5W
Operating Temperature	-10°C ~ 55°C
Dimensions	118.7mm x 297mm x 210mm



#### CPS4 4 WAY 4 AMP BOXED POWER SUPPLY CPS9 9 WAY 9 AMP BOXED POWER SUPPLY CPS16 16 WAY 16 AMP BOXED POWER SUPPLY

- 12VDC power limited output
- Protected outputs
- 100VAC-240VAC (50/60Hz) universal input
- Filtered and electronically regulated output
- Short circuit and thermal overload protection
- AC input and DC output LED indicators
- CPS4 dimensions 182(W) x 260(H) x 66(D)mm
- CPS9 dimensions 322(W) x 322(H) x 86(D)mm
   CPS9 dimensions 322(W) x 322(H) x 86(D)mm
- CPS16 dimensions 322(W) x 322(H) x 86(D)mm



# SHDVCDBGGrey Camera Deep BaseSHDVCDBWWhite Camera Deep Base

- IP66 Rated
- Metal Construction
- 25mm Cable Entry
- Suitable for HDview 4 Megapixel Range; SHDVC36FBG, SHDVC2812VFBG, SHDVC36FDG, SHDVC36FBW, SHDVC2812VFBW, SHDVC36FDW
- Dimensions: Ø112.5 x 50(H)mm



**CPS9W** 9 WAY 12VDC 5AMP CCTV POWER SUPPLY **CPS18W** 18 WAY 12VDC 10AMP CCTV POWER SUPPLY

- 100VAC-240VAC (50/60Hz) universal input
- 1.1A Automatic PTC fuse per output
- Surge & short circuit protection
- Internal on/off power switch
  AC input and DC output LED indicators
- Actingut and DC output LED indicators
   Individual LED indicators per output



#### **PSIL1W** CAMERA POWER SUPPLY

- For use with CCTV Cameras
- 12 volt
- 1 amp



**TFT-BRA1** Fixed Monitor Bracket

- Closest to wall fit
- Picture style finish
- To fit screens 12-28" (30-71cm)
- Supports 20kg (44lbs)



TFT-BRA2 Tilt, Pivot & Rotate Monitor Bracket

- 27° tilt 180° swivel
- Close to wall fit
- To fit screens 12-28" (30-71cm)
- Supports 20kg (44lbs)



#### TFT-BRA4 CCTV Monitor VESA Mount Bracket Black

- 15° Tilt
- Close to wall fit
- To fit screens up to 47"
- Supports up to 25kg
- VESA Compatibility up to 200mm x 200mm



SHDVCDBLG Large Grey Camera Deep BaseSHDVCDBLW Large White Camera Deep Base

- IP66 Rated
- Metal Construction
- 25mm Cable Entry
- Suitable for HDview 4 Megapixel Range;
   SHDVC622VFBG, SHDVC550VFBG, SHDVC2812VFDG,
   SHDVC622VFBW, SHDVC550VFBW, SHDVC2812VFDW
- Dimensions: 145(W) x 145(H) x 53(D)mm

#### accessories **CCTV ACCESSORIES**

# CCTV ACCESSORIES ACCESSORIES



#### **PTZCBRKT** PTZ Camera Corner Bracket

- Compatible with external PTZ range
- Improves PTZ viewing coverage
- Metal construction
- White finish



#### DUAL FUNCTION, POWER & BNC CABLES

- CAB-10 10m Power and BNC Video Cable
- CAB-20 20m Power and BNC Video Cable
- CAB-40 40m Power and BNC Video Cable
- CAB-80 80m Power and BNC Video Cable



#### HDBALUNV Single Channel HD Passive Balun

- AHD camera transmission over CAT5 cable
- Single Channel HD Passive Balun
- Transmitter and Receiver pack
- Compatible with AHD and analogue CCTV cameras



#### HDBALUNVP Single Channel HD Video & Power Balun

- AHD camera transmission and power over CAT5 cable
- Single Channel HD Video & Power Balun
- Transmitter and Receiver pack
- Compatible with AHD and analogue CCTV cameras



HD CCTV TESTER

#### **DVRWLA** Wireless USB Network Adaptor

- Enables DVR Wi-Fi connection
- Up to 150mbps wireless transmission
- 4 types of encryption supported
- Compact design

#### TMPROSHD CCTV Test Monitor

- Compatible with standard definition, 720P, 1080P & 4 Megapixels CCTV cameras
- Durable design with quality carry case
- 4" LCD Touchscreen
  - 12vDC 1A power output for Camera
  - Lithium battery rechargeable (7 hrs working time)
  - PTZ Camera control and testing



#### HDBALUNVPCT Single Channel HD Video & Power Transmitter Balun

- AHD camera transmission and power over CAT5 cable
- Single Channel HD Video & Power Transmitter Balun
- Compatible with AHD and analogue CCTV Cameras



#### WARN1 External Warning Sign

- External durable use
- Dimensions 420mm x 300mm
- Space available to add scheme ownership details

# ACCESS CONTROL

A complete and flexible range of superb quality video door entry equipment. Simple installation and high performance in colour – with the option of call points with integral PIN access – means you need look no further to find the ideal video door entry solution.

aperta

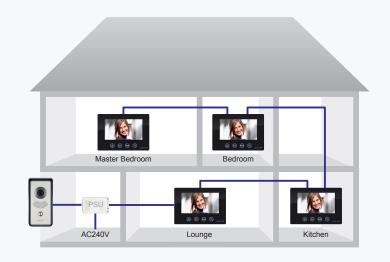
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Introducing the next generation of Access Control products from ESP<sup>\*</sup>. The new Aperta range not only includes proximity reader systems and accessories such as magnetic door locks but also a completely new simplified and easy to install video door entry systems for both single house and multi way apartment applications.



#### SINGLE WAY SYSTEM EXAMPLE COMPONENTS









APPOWSWDR Combined Power Supply & BUS Separator (Connect up to 5 devices)

A flexible range of superb quality hands-free colour video door entry products specifically for installation in single dwellings. Simplicity of installation is the key to Aperta single way systems, requiring only 2 wires throughout and all outdoor stations and monitors powered by a single power supply.

The range includes 2 quick and easy to select base kits with options for combined keypad entry or a stylish but simple bell push outdoor station. Alternatively you can build your own system from 2 outdoor station and 4 monitor options. You really need look no further to find the ideal single way video door entry solution.

# aperta ▶ | single way video door entry

# SINGLE WAY VIDEO DOOR ENTRY | **aperta**♪



APKITC/W White MonitorAPKITBLKC/W Black MonitorColour Video Door Entry System



APKITKPC/W White MonitorAPKITKPBLKC/W Black MonitorColour VideoDoor Entry Keypad System

Simple 2 core cable installation

- Single power supply (included) supports all monitors and outdoor stations in a flexible combination of up to 5 devices
- Clear high resolution colour picture on 7" hands free TFT monitor

Station	
Image sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Power	24VDC
Operating Temp.	-20°C ~ + 40°C
Dimensions	85mm(W)x 165mm(H)x 53mm(D)
Weight	390g
Monitor	
Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~+40°C
Consumption	300mA
Dimensions	215mm(W)x152mm(H)x18mm(D)
Weight	450g

- Simple 2 core cable installation
- Single power supply (included) supports all monitors and outdoor stations in a flexible combination of up to 5 devices
- Clear high resolution colour picture on 7" hands free TFT monitor
- Outdoor station with built in keypad for code door unlocking

Station	
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llumination	6 LEDs
.ens	3.6mm
Power	24VDC
Operating Temp.	-20°C~+40°C
Dimensions	87mm(W)x 200mm(H)x 53mm(D)
Veight	640g
Vonitor	
Power	24VDC
nstallation	Surface Mounted
Operational Temp.	0°C~+40°C
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Dimensions	85mm(W)x 165mm(H)x 53mm(D)
Weight	390g
Monitor	
Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~+40°C
Consumption	350mA
Dimensions	183mm(W)x185mm(H)x20mm(D)
Weight	550g



C/W White Monitor APKITG C/W Black Monitor APKITGBLK Colour Video Door Entry System with Record Facility

- Simple 2 core cable installation
- Single power supply (included) supports all monitors and outdoor stations in a flexible combination of up to 5 devices
- Clear high resolution colour picture on 7" hands free TFT monitor
- Outdoor station with built in keypad for code door unlocking

1/3" Colour CCD
0.1 LUX
6 LEDs
3.6mm
24VDC
-20°C~+40°C
87mm(W)x 200mm(H)x 53mm(D)
640g
24VDC
Surface Mounted
0°C~+40°C
350mA
183mm(W)x185mm(H)x20mm(D)
550g



C/W White Monitor **APKITKPG** C/W Black Monitor **APKITKPGBLK** Colour Video Door Entry Keypad System with Record Facility

# aperta ≸ | single way video door entry

# SINGLE WAY VIDEO DOOR ENTRY | **aperta**♪



Single Way Video Door Station with Keypad

•	Waterproof	IP55 m	ietal outo	loor station
---	------------	--------	------------	--------------

- High resolution colour Camera
- Built in keypad for door code unlocking
- Simple 2 core cable installation

Image Sensor     1/3° Colour CCD       Min. Illumination     0.1 LUX       Illumination     6 LEDs
Illumination 6 LEDs
Lens 3.6mm
Viewing Angle 70°
Power 24VDC
Operating Temp20°C ~ + 40°C
Dimensions 87mm(W)x 200mm(H)x 53mm(D)
Weight 640g

- Waterproof IP55 outdoor station
- High resolution colour Camera
- Simple 2 core cable installation

Image Sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Viewing Angle	70°
Power	24VDC
Operating Temp.	-20°C ~ + 40°C
Dimensions	85mm(W)x 165mm(H)x 53mm(D)
Weight	390g



APDSSW Single Way Video Door Station



 Flush mount kit for APDSMW, APDSSWKP and APDSPXMW

#### Bracket

Frame Dimensions	126 (W) x 244 (H)
Mount box Dimensions	101 (W) x 210 (H) x 25 (D)
Weight	230g

- Single Way system component
- 24VDC/800mA power output
- Dimensions 60mm(W)x90mm(H)x110mm(L)
- Only 1 power supply per system required



APPOWSWDR Combined Power & Bus Separator Unit for Single Way System

# APDSKPFMS

APDSSWKP

Flush Mount Kit

# aperta ✓ | AUDIO DOOR ENTRY HANDSET



#### Suitable for Single or Multi way installations

- Simple 2 core cable installation
- Clear two-way audio
- Lock release facility
- Magnetic receiver holster
- Durable white gloss casing

# Power 24VDC Installation Surface Mounted Operational Temp. 0°C-+40°C Consumption 200mA Dimensions 78mm(W)x245mm(H)x50mm(D) Weight 315g

#### **APAUDH** Door Entry Handset



- Suitable for Single or Multi way installations
- Simple 2 core cable installation
- Clear two-way audio
- Lock release facility
- Magnetic receiver holster
- Durable black gloss casing

#### Handset

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~+40°C
Consumption	200mA
Dimensions	78mm(W)x245mm(H)x50mm(D)
Weight	315g

- Simple 2 core cable installation
- 7" TFT screen with clear high resolution colour picture
- Durable white or black casing

Installation Surface Mounted Operational Temp. 0°C-+40°C
Operational Temp. 0°C~ + 40°C
Consumption 300mA
Dimensions 215mm(W)x152mm(H)x18mm(D)
Weight 450g



video door entry monitor | aperta

Black **APMONB** White **APMONW** Colour Video Door Entry Monitor

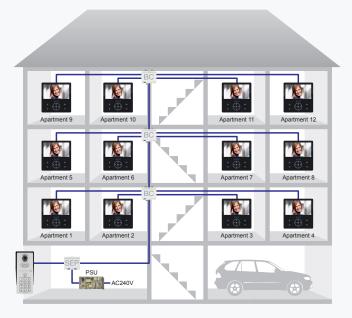
- 7" TFT screen with clear high resolution colour picture
- Simple 2 core cable installation
- On screen menu for simple system set up & customisation
- Optional still or video recording and playback of callers (4GB SD card included)
- Durable white or black casing

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~+40°C
Consumption	350mA
Dimensions	183mm(W)x185mm(H)x20mm(D)
Weight	550g



Black **APMONBG** White **APMONWG** Colour Video Door Entry Monitor with Record Facility

APAUDHBLK Door Entry Handset



#### MULTI WAY SYSTEM EXAMPLE COMPONENTS

APBC4MW







**APPOWMW** 

APDSMW Multi Way

APMONW | APMONB | APMONWG | APMONBG

Branch Controller Power BUS Separator (A maximum of (Connects to the System 4 monitors to Power Supply and 1 Branch controller) 1st Branch controller)

APSEPMW

System Power Supply

A flexible range of superb quality hands-free colour video door entry products specifically for installation in multiple apartments. Simplicity of installation is the key to Aperta multi way systems, supporting up to 32 apartments in one system and requiring only 2 wires throughout with all outdoor stations and monitors powered by a single power supply. The keypad multi way door station allows both apartment calling plus door unlocking by passcode, no need for 2 separate keypads.

The keypad apartment calling also means that no additional buttons or panels are required, keeping the installation simple, neat and compact. You really need look no further to find the ideal multi way door entry solution.

- Waterproof IP55 metal multi way outdoor station
- High resolution colour Camera
- Built in keypad for door calling and code unlocking
- Simple 2 core cable installation
- Supports up to 32 apartments (Address Numbers 1-32)

Image Sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Viewing Angle	70°
Capacity	32 ID
Status Indication	Audio
Relay Operation	NO/NC
Working Temp.	-20°C~+40°C
Ingress Protection	IP55
Construction	Aluminium
Voltage	24VDC
Dimensions	87mm(W)x 200mm(H)x 53mi
Weight	640g



APDSKPFMS Flush Mount Kit

APDSMW

Multi Way Video Door Station Multi Way Video Door Station with Custom Apartment Addresses APDSMWSP1

Waterproof IP55 metal multi way outdoor station

- High resolution colour camera
- Simple 2 core cable installation
- Supports up to 32 apartments (Address Numbers
- Capacitive keypad for apartment calling, proximity & code unlocking
- Complete with 10 pre-registered user tags
- 10,000 user tags supported

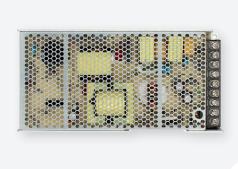
EZT3ST10 Additional Proximity Tags (10 Pack

Image Sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Viewing Angle	70°
Capacity	32 ID 10,000 Tags
Reader Frequency	125KHz
Effective Distance	<5CM
Status Indication	Audio
Relay Operation	NO/NC
Working Temp.	-20°C~+40°C
Ingress Protection	IP55
Construction	Aluminium
Voltage	24VDC
Dimensions	87mm(W)x 200mm(H 53mm(D)
Weight	640g



Multi Way Video Door Station Multi Way Video Door Station with Custom Apartment Addresses APDSPXMWSP1

APDSPXMW



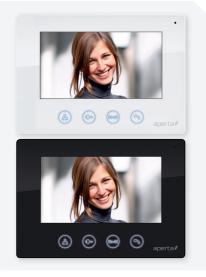
#### APPOWMW

Power Supply Unit For Multi Way System

- Multi Way system component
- 24VDC/4.2A power output
- Dimensions 100mm(W)x200mm(L)x40mm(D)
- Only 1 power supply per system required

- Simple 2 core cable installation
- 7" TFT screen with clear high resolution colour picture
- Durable white or black casing

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~+40°C
Consumption	300mA
Dimensions	215mm(W)x152mm(H)x18mm(D)
Weight	450g



Black **APMONB** White **APMONW** Colour Video Door Entry Monitor



#### APSEPMW

Power Bus Separator Unit For Multi Way System

- Multi Way system component
- For use with APPOWMW power supply

 7" TFT screen with clear high resolution colour picture

- Simple 2 core cable installation
- On screen menu for simple system set up & customisation
- Optional still or video recording and playback of callers (4GB SD card included)
- Durable white or black casing

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~+40°C
Consumption	350mA
Dimensions	183mm(W)x185mm(H)x20mm(D)
Weight	550g



Black **APMONBG** White **APMONWG** Colour Video Door Entry Monitor with Record Facility



#### APBC4MW

4-Way Branch Controller For Multi Way System

- Multi Way system component
- 1 unit supports wiring to 4 apartments or 4 outdoor stations (APDSMW)

# aperta ∮ | wi-fi video door entry

# WI-FI VIDEO DOOR ENTRY | aperta



#### APWIFIDS2K

Wired 2K Wi-Fi Video Door Station with Record Facility



#### APWIFIDSBLKBP2 Black APWIFIDSBP2 Silver

Battery Powered Wi-Fi Door Station with Record Facility

- Full 2K (4MP) Live View & Recording
- No Subscription or Additional Fees Required
- 170° Wide Angle Camera View
- Motion or Human Activated Video Record
- Clear Two–Way Audio
- Supplied with Angle Bracket Kit
- Supports Alexa Dot Door Chime function and Mechanical Bell Converter
- IP65 Rated Ingress Protection
- Operates on 2.4GHz, 5 GHz Wi-Fi & Ethernet Network Connection
- Operating Temperature: -20 ~ +60°C

Sensor Size	1/1.9"
Lens	Field of View 170°
Resolution	1440p
Audio	Full Duplex
R LED	5pcs
R distance	5 Meters
Vemory	128GB Max (8GB Supplied)
Construction	Polycarbonate
ngress Protection	IP65
Connection	2.4GHz & 5GHz Wi-Fi
System Range	150 Meters to RFChime
nterface	Ethernet (VIA USB-C)
Power	8~24VAC or 5~30VDC
Neight	125g
Operating Temperature	-20°C ~ 60°C
Dimensions	115mm x 45mm x 25mm

- Alerts user to visitors via smart-phone APP
- Up to 6 months battery life, based on 2 activations per day
- High Definition colour image and 2-way audio
   Visitor record function, Smart Detection (PIR +
- Motion Detection)

   No subscription or additional fees required to
- access recorded files
- Complete with internal hub that houses recorded files for system security and operates as a wire-free door chime
- Contemporary housing
- Infra-red LEDs for low light use

Door

Powe

- Weatherproof rating: Ingress protection IP55
- Inbuilt rechargeable battery
- Requires 2.4GHZ Wi-Fi connection

Station	
or Size	1/2.8"
	Field of View 150°
lution	1080p
)	Full Duplex
itivity	1Lux
	1pcs
Distance	3 Meters
truction	Polycarbonate
ss Protection	IP55
ection	2.4GHz Wi-Fi
em Range	150 Meters to HUB
er	
ery	Rechargeable 3.7v 5000mAh Li-polymer Battery
ge Time	4 Hours
ge Port	Micro USB
ht	233g
ing Temperature	0°C~/50°C
	MG1 v DD6 v H1/Emma

- Alerts user to visitors via smart-phone APP
- High Definition colour image and 2-way audio
- Visitor record function, Smart Detection (Motion Detection)
- No subscription or additional fees required to access recorded files
- Complete with internal wire-free door chime
- Contemporary housing
- Infra-red LEDs for low light use
- Weatherproof rating: Ingress protection IP55Optional Ethernet and door lock release
- connections Requires 2.4GHZ Wi-Fi connection and 12vdc Supply

Door Station	
Sensor Size	1/2.7"
Lens	Field of View 140°
Resolution	1080p
Audio	Full Duplex
Sensitivity	1Lux
IR LED	5pcs
IR distance	5 Meters
Memory	128GB Max (8GB Supplied)
Construction	Aluminum and Polycarbonate
Ingress Protection	IP55
Connection	2.4GHz Wi-Fi
System Range	150 Meters to RFChime
Interface	Ethernet
Lock Relay	2A/24V
Chime Relay	2A/24V
Power	9~48vDC
Weight	170g
Working Temperature	-10°C ~ 40°C
Dimensions	132mm (H) x 55mm (W) x 24mm (I



- High Definition colour image and 2-way audio
- Visitor record function, Smart Detection (Motion Detection)
- No subscription or additional fees required to access recorded files
- Complete with internal wire-free door chime
- Contemporary housing
- Infra-red LEDs for low light use
- Weatherproof rating: Ingress protection IP55
- Optional Ethernet and door lock release connections
- Requires 2.4GHZ Wi-Fi connection and 12vdc Supply

Door Station	
Sensor Size	1/2.7"
Lens	Field of View 140°
Resolution	1080p
Audio	Full Duplex
Sensitivity	1Lux
IR LED	5pcs
IR distance	5 Meters
Memory	128GB Max (8GB Supplied)
Construction	Aluminum and Polycarbonat
Ingress Protection	IP55
Connection	2.4GHz Wi-Fi
System Range	150 Meters to RFChime
Interface	Ethernet
Lock Relay	2A/24V
Chime Relay	2A/24V
Power	9~48vDC
Weight	170g
Working Temperature	-10°C ~ 40°C
Dimensions	132mm (H) x 55mm (W) x 24mm



APWIFIDS2 Wired Wi-Fi Door Station with Record Facility



#### APWIFIDSBLK2 Wired Wi-Fi Door Station with Record Facility

# aperta ▶ | single way audio door entry



APKITAO Audio Door Entry System



#### APKITAOH Additional APKITAOH Audio Handset

Handset	
Input range	DC12V
Output power	<=0.6W
Working current	<=50mA
Dimension	215mm x 85mm x 60mm

#### Two-wire connection

- Durable/Weatherproof door station
- Clear 2 Way audio
- Lock release option
- Wiring distance up to 100 meters
- Easy DIY installation

Handset	
Input range	DC12V
Output power	<=0.6W
Working current	<=50mA
Dimension	215mm x 85mm x 60mm
Call Point	
Input range	DC12V
Output power	<=0.6W
Working current	<=50mA
IP rating	55
Dimension	150mm x 65mm x 50mm

SINGLE DOOR ENTRY PROXIMITY ENTRY KITS	rta
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- Easy install, simple self-contained programming
- Up to 1,010 key tag holders or Pin numbers
- 2 separate user groups
- 2 relay outputs
- Anti tamper option
- Weather/dust proof robust construction IP65
- Complete with 10 tags



Zone 1 : 1000 Card/ Tag Combination Zone 2 : 10 Card/ Tag Combination
125KHz
<5CM
Red/ Green LED
NO/NC: 4A@30vDC
01-99sec
-10 ~ +55°C
IP65
Aluminium
DC: 12V-24V AC: 12V~24V
<120mA
<90mA
150(H)x43(W)x23(D)



**EZTAG3** Proximity and Keypad Door Entry

- Easy install, simple self-contained programming
- Up to 1,010 key tag holders or Pin numbers
- 2 separate user groups
- 2 relay outputs
- Anti tamper option
- Weather/dust proof robust construction IP65
- Complete with 10 tags

EZT3ST10 Additional Proximity Tags (10 Pack)

Capacity	Zone 1 : 1000 Card/ Tag Combination Zone 2 : 10 Card/ Tag Combination
Reader Frequency	125KHz
Effective Distance	<5CM
Status Indication	Red/ Green LED
Relay Operation	NO/NC: 4A@30vDC
Relay Duration	01-99sec
Working Temp.	-10 ~ +55°C
Ingress Protection	IP65
Construction	Aluminium
Voltage	DC: 12V-24V AC: 12V~24V
Working Current	<120mA
Standby Current	<90mA
Dimensions	150(H)x43(W)x23(D)



#### **EZTAG3B** Proximity and Keypad Door Entry

#### SINGLE DOOR ENTRY PROXIMITY ENTRY KITS aperta

#### aperta 🖻 SINGLE DOOR ENTRY PROXIMITY ENTRY KITS



EZTAG3PRO Silver EZTAG3PROB Black Proximity and Keypad Door Entry Kit



EZTAG3PROM Silver EZTAG3PROMB Black Proximity Keypad and Mushroom Exit Button Door Entry Kit

- Complete entry system in one box comprising of:
- EZ-TAG3 IP65 Proximity Door Entry Keypad

• Complete entry system in one box comprising of:

EZ-TAG3 IP65 Proximity Door Entry Keypad

EVEXITM Push to Exit Mushroom Button

EZT3ST10 Proximity Tags

EVML-250 Electromagnetic Lock

EVBPSBB Boxed Power Supply

EV-EBG Emergency Break Glass

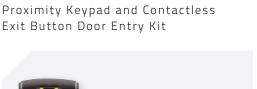
- EZT3ST10 Proximity Tags
- EVML-250 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EV-EXIT Push to Exit Button
- EV-EBG Emergency Break Glass

- Complete entry system in one box comprising of:
- EZTAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- EV-ML-250 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EVEXITC Contactless Exit Button
- EV-EBG Emergency Break Glass



#### EZTAG3PROC Silver EZTAG3PROBC Black Proximity Keypad and Contactless Exit Button Door Entry Kit

- Complete entry system in one box comprising of:
- EZTAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- EV-ML-250 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EVEXITC Contactless Exit Button
- EV-EBG Emergency Break Glass
- EVFOOT Steel Foot-Pull





EZTAG3PROCF Silver EZTAG3PROBCF Black Proximity Keypad and Contactless Exit Button Door Entry Kit with Foot-Pull





#### EZTAG3PROEXT Silver EZTAG3PROBEXT Black

Proximity Keypad External Door Entry Kit

- Complete entry system in one box comprising of:
- EZ-TAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- EV-ML-500XT IP67 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EVEXITMIP55 IP55 Exit Button
- EVEBGEXT2 IP67 Green Emergency Call Point

#### EZTAG3PROF Silver EZTAG3PROBF Black

Proximity Keypad and Door Entry Kit with Foot-Pull

- Complete entry system in one box comprising of:
- EZTAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- EV-ML-250 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EV-EXIT Exit Button
- EV-EBG Emergency Break Glass
- EVFOOT Steel Foot-Pull

#### EZTAG3PROMF Silver EZTAG3PROMBF Black

Proximity Keypad and Mushroom Exit Button Door Entry Kit with Foot-Pull

- Complete entry system in one box comprising of:
- EZTAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- EV-ML-250 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EVEXITM Exit Button
- EV-EBG Emergency Break Glass
- EVFOOT Steel Foot-Pull

UDTASMBSS Assistance Alarm Surface Mount Box EV-EXIT Push to Exit Release Button

- Exit button
- Normally open contacts
- Clear wording
- Stainless steel fascia (Surface mount box part code: UDTASMBSS)
- 87.5 x 87.5 x 22mm
- 170g



Assistance Alarm Surface Mount Box

- Large mushroom exit button
- Normally open & closed contacts
- Clear wording
- Stainless steel fascia (Surface mount box part code: UDTASMBSS)
- 87.5 x 87.5 x 35mm
- 173g



UDTASMBSS Assistance Alarm Surface Mount Box

Contactless Exit Button

- Contactless Exit Button
- Normally Open & Closed Contacts
- Worded 'Exit" & 'No Touch"
- DC12V Input

EVEXITC

- 12-28V, 3A Rated Contact
- Stainless steel fascia (Surface mount box part code:
- 86mm x 86mm x 29mm
- 0.25kg



#### EVEXITMIP55 Push to Exit Mushroom Release Button IP55

- Large mushroom exit button
- IP55 Ingress protection
- Normally open & closed contacts
- Clear wording
- Robust housing (Includes surface mount box)
- 85m x 80mm x 85mm
- 200g

108

UDTASMBSS EVEXITM Push to Exit Mushroom Release Button

# aperta 🖍 | access control accessories

# ACCESS CONTROL ACCESSORIES | aperta 🖍



# EVTR

#### Trades Button

- Stainless Steel Trades Entrance Button
- IP66 Ingress Protected Push Button
   Normally Open & Closed Contacts (Timer Supplied Separately)
- Clear Wording
- Single Gang Fascia Including Surface Mount Box and Security Screws
- 88 x 88 x 43mm (inc. Surface box)
- 315g



#### EV-EBG

#### Emergency Break Glass

- Surface mounted
- Emergency break glass to release door

**EV-EBG-KEY** Pack of 5 keys for EV-EBG & EV-EBG-EXT **EV-EBG-CVR** Pack of 5 plastic covers for EV-EBG



#### EVTRT

#### Trades Button with Timer

- Stainless Steel Trades Entrance Button with DIN Timer
- IP66 Ingress Protected Push Button
- DIN Timer (Sangamo part: 71111)
- Normally Open & Closed Contacts
- Clear Wording
- Single Gang Fascia Including Surface Mount Box and Security Screws



#### EVEBGEXT2

Callpoint DPDT IP67 Green

- Surface Mounted
- Green Emergency Call Point to Release Door
- IP67 Ingress Protected Weather Resistant
- Normally Open & Normally Closed
- 3 x 20mm Knockouts

#### EVEBGEXT2KEY Callpoint DPDT IP67 Green Keys



#### EVFOOT Foot Operated Door Pull

- Foot Operated Door Opening Plate
- Brushed Stainless Steel
- Includes Operation Sticker
- Dimensions; 125 x 75 mm



#### **BAT7** 12V - 7.0ah SLA Battery

 Back up battery for EVBPSBB, MAG2P, MAG2, MAG4P and MAG4



# ENTERD

#### Electronic Lock

- Holding force 295kg/650lbs
- 160ma 12vdc input
- For use with Yale type rim locks
- Surface mounting version available
- Fail Secure
- Dimensions 28.5 x 31 x 160mm
- Requires EVBPSBB power supply



#### ENTERD-YLR

#### Surface Electronic Lock

- Holding force 295kg/650lbs
- 160ma 12vdc input
- For use with Yale type surface locks
- Flush mounting version available
- Fail Secure
- Requires EVBPSBB power supply



EV-ML-250ZLB Electromagnetic Lock • Spare Z and L bracket for EV-ML-250



Requires EVBPSBB power supply

EV-ML-250



#### **EV-ML-500XT** Electromagnetic Lock

- IP67 rated weather resistant external lock
- Holding force 500kg/1200lbs max
- Z & L mounting bracket included
- Dual voltage 12 & 24 VDC
- Fail safe
  - Dimensions excl. bracket 220 x 42 x 62mm
  - Requires EVBPSBB power supply



#### EVBPSBB Boxed Power Supply

- 100-240vAC, 50/60Hz input
- 1.5A /12vDC fail safe/secure output
- 1A 12vDC output
- Backup battery facility (Requires Battery)
- Size: 129 x 73 x 50mm LWD

# DISABLED REFUGE

Beacon is a comprehensive range of disabled refuge and assistance alarm products that are specifically designed to aid people of impaired mobility to safely evacuate multi-story buildings in emergency situations.



- -

# beacon<sup>®</sup> | master stations





**BM2** 2 Line Master Station



#### **BM4** 4 Line Master Station

- Large Handset for Full Duplex Audio
- Simple System Interface
- Intergrates; Assist Call, Type A and B Outstations
- Backup Battery (BAT7 Required)
- Fully Compliant to BS5839-9:2021 & BS8300



BM2EX 2 Line Expansion Card for Master Station

nputs	
ines	2; in 1 of 2-line block
End of Line	10ΚΩ
Dutputs	
lumber of outputs	2; Fault & in-use
ype	Volt-free relay
Contact Rating	30V DC 1A
Power	
Operating Voltage	230VAC (±10%), 50/60Hz
Battery Type	12V 7Ah SLA (not included)
nternal Supply	5V, 16V, 27V DC
Invironment	
Dimensions	300mm x 350mm x 95mm
Veight	5Kg

- Large Handset for Full Duplex Audio
- Simple System Interface
- Intergrates; Assist Call, Type A and B Outstations
- Backup Battery (BAT7 Required)
- Fully Compliant to BS5839-9:2021 & BS8300

BMSF Flush Bezel for Master Station

BM2EX 2 Line Expansion Card for Master Station

Inputs	
Lines	4; in 2 of 2-line block
End of Line	10ΚΩ
Outputs	
Number of outputs	2; Fault & in-use
Туре	Volt-free relay
Contact Rating	30V DC 1A
Power	
Operating Voltage	230VAC (±10%), 50/60Hz
Battery Type	12V 7Ah SLA (not included)
Internal Supply	5V, 16V, 27V DC
Environment	
Dimensions	300mm x 350mm x 95mm
Weight	5Kg

- Large Handset for Full Duplex Audio
- Simple System Interface
- Intergrates; Assist Call, Type A and B Outstations
- Backup Battery (BAT7 Required)
- Fully Compliant to BS5839-9:2021 & BS8300

BMSF Flush	Bezel for Master Station
------------	--------------------------

Inputs	
Lines	8; in 4 of 2-line block
End of Line	10ΚΩ
Outputs	
Number of outputs	2; Fault & in-use
Туре	Volt-free relay
Contact Rating	30V DC 1A
Power	
Operating Voltage	230VAC (±10%), 50/60Hz
Battery Type	12V 7Ah SLA (not included)
Internal Supply	5V, 16V, 27V DC
Environment	
Dimensions	300mm x 350mm x 95mm
Weight	5Kg



**BM8** 8 Line Master Station

- 512 Line Capability, requires BMNETEX Expander Every 8 Lines
- 4.3" Full Colour Touchscreen
- Large Handset for Full Duplex Audio
- Simple System Interface
- Integrates; Assist Call, Type A and B Outstation
- Backup Battery Features (Battery not inc.)
- Fully Compliant to BS5839-9:2021 & BS8300

BMSF Flush Bezel for Master Station

Inputs	
Lines	8; in 4 of 2-line block
End of Line	10ΚΩ
Outputs	
Number of outputs	2; Fault & in-use
Туре	Volt-free relay
Contact Rating	30V DC 1A
Power	
Operating Voltage	230VAC (±10%), 50/60Hz
Battery Type	12V 7Ah SLA (not included)
Internal Supply	5V, 16V, 27V DC
Environment	
Dimensions	300mm x 350mm x 95mm
Weight	5Kg



BMNET Touchscreen Master Station

# beacon<sup>®</sup> | master stations





#### **BMNETEX** Touchscreen Master Station Expander



- Expands a BMNET Network by 8 Lines
- Simple System Interface
- Integrates; Assist Call, Type A and B Outstations
- Backup Battery Feature (BAT7 Required)
- Fully Compliant to BS5839-9:2021 & BS8300

2; in 1 of 2-line block

230VAC (±10%), 50/60Hz

12V 7Ah SLA (not included) 5V. 16V. 27V DC

300mm x 220mm x 95mm

2; Fault & in-use Volt-free relay

30V DC 1A

3Kg

- High Quality Duplex Audio and High-Volume Ringer
- Brushed Stainless Steel Housing in Steel
- Large Handset
- LED Call Status
- Fully Compliant to BS5839-9:2021



Outstation Type	А
Material	Stainless Steel
Colour	Silver
Environment	
Dimensions	300mm x 150mm x 105mm
Weight	1400g

**BTAS** Silver **BTAR** Red Fire Telephone Type A Outstation

- Compatible with Beacon Master Stations
- High Volume Sounder with Volume Control
- Flush or Surface Mount (2 Gang Mount Box Not inc.)
- Stainless Steel

Туре

Contact Rating Power

Battery Type

Environment

Weight

Fully Compliant to BS5839-9:2021

- High Quality Duplex Audio and High-Volume Ringer
- Robust IP66 Ingress Protected Housing
- Large Handset
- LED Call Status
- Fully Compliant to BS5839-9:2021



BTA66 Fire Telephone Type A Outstation IP66

Remote Alarm Panel for Master Station

Power	
Operating Voltage	230V AC
Environment	
Dimensions	86mm x 146mm x 27mm
Weight	600g

Outstation Type	А
Material	Stainless Steel
Colour	Red
Environment	
Ingress Protection	IP66
Dimensions	300mm x 150mm x 130mm
Weight	2800g

BRAP

# beacon | outstations





- High Quality Duplex Audio and High-Volume Ringer
- Brushed Stainless Steel
- Handsfree Call Operation with LED Call Status
- Flush or Surface Mount (2 Gang Mount Box Not inc.)
- Fully Compliant to BS5839-9:2021

- Includes 1x BAPCM 1x BAM 1x BACM
- High Volume Sounder and LED Indication
- Requires Master Station, Expander or BA4ZM
- Flush or Surface Mount (1 Gang Mount Boxes Not inc.)
- Fully Compliant to BS8300



втв				
Disabled	Refuge	Type	В	Outstation



Outstation Type	В
Material	Stainless Steel
Colour	Green
Environment	
Dimensions	146mm x 86mm x 22mm
Weight	400g

High Quality Duplex Audio and High-Volume

Robust IP66 Ingress Protected Housing

Fully Compliant to BS5839-9:2021

Handsfree Call Operation

LED Call Status

Ringer

Material	Stainless Steel & Acrylic
Environment	
Dimensions	86mm x 86mm x 22mm
Weight	600g

BAKIT Assist Call Kit

- Includes 3x BAPCM 2x BAM 1x BACM
- High Volume Sounder and LED Indication
- Requires Master Station, Expander or BA4ZM
- Flush or Surface Mount (1 Gang Mount Boxes Not inc.)
- Fully Compliant to BS8300



#### BTB66

Disabled Refuge Type B Outstation IP66

Outstation Type	В
Material	Stainless Steel
Colour	Green
Environment	
Ingress Protection	IP66
Dimensions	200mm x 200mm x 130mm
Weight	2800g

Material	Stainless Steel & Acrylic
Environment	
Dimensions	86mm x 86mm x 22mm
Weight	600g

#### BABEDKIT Assist Call Bedroom Kit

# beacon | ASSIST CALL

ASSIST CALL | beacon



#### **BA4ZM** Assist Call 4 Zone Module

- Connect 4 Assist Call Kits
- Brushed Stainless Steel Finish
- Requires BA4ZMPS (Power Supply)
- Flush or Surface Mount (2 Gang Mount Box Not inc.)
- Fully Compliant to BS8300



# BAM

#### Assist Call Alert Module

- High Volume Sounder and LED Indication
- Flush or Surface Mount (1 Gang Mount Box Not inc.)
- Fully Compliant to BS8300



#### BA4ZMPS

#### Assist Call 4 Zone Module PSU

- Brushed Stainless Steel Finish
- Flush or Surface Mount (2 Gang Mount Box Not inc.)

# C ((1)) C

# BACM

- Assist Call Cancel Module
- Visual LED Indication and Braille Cancel Button
- Brushed Stainless Steel Finish
- Flush or Surface Mount (1 Gang Mount Box Not inc.)
- Fully Compliant to BS8300



#### **BAPCM** Assist Call Pull Cord Module

- Red Pull Cord inc. 2x Pull Rings
- Brushed Stainless Steel Finish
- Flush or Surface Mount (1 Gang Mount Box Not inc.)
- Fully Compliant to BS8300



#### **BAIM** Assist Call Input Module

- Provides a Switch for 3rd Party Devices
- Brushed Stainless Steel Finish
- Flush or Surface Mount (1 Gang Mount Box Not inc.)
- Fully Compliant to BS8300

#### BACM66

#### Assist Call Cancel Module IP66

- IP66 Ingress Protected Alarm Cancel Plate
- Brushed Stainless Steel Fascia
- Surface Mount Box Included
- Fully Compliant to BS8300



#### BACALM66

#### Assist Call Module IP66

- IP66 Ingress Protected Alarm Call Plate
- Brushed Stainless Steel Fascia
- Surface Mount Box Included
- Fully Compliant to BS8300



#### BAMCALM56

#### Assist Call Mushroom Call Module IP56

- IP56 Ingress Protected Alarm Call Plate
- Polycarbonate Construction
- Surface Mount Box Included
- Not for use with a Cancel Plate
- Fully Compliant to BS8300







#### UDTAKIT

#### Assistance Alarm Kit

- Simple install, 3 part kit Indication Module, Pull cord module & Reset Module
- Complete with battery back-up function (Battery Included)
- Meets Part M building regulations and BS8300
- Antimicrobial properties
- Alarm to raise alert for assistance
- Compact design to suit many interiors
- Supplied with disabled persons sign
- All modules supplied with single gang back box
- System is expandable to include additional indication and pull cord modules if required

#### UDTALBM

#### Assistance Alarm Light and Buzzer Module

- For use with UDTA Kit
- Clear alarm LED alert
- 80db distinctive audible alert
- Antimicrobial properties
- Compete with surface back box

 Input Voltage
 12VDC

 Power Consumption
 0.9W max.

 Indicator
 LED illuminate in red when system triggered

 Buzzer
 85db when activated

 Dimensions
 Single Gang / (W) 87 × (L) 87 × (H) 41mm

#### UDTAPCM

#### Assistance Alarm Pull Cord Module

- For use with UDTA Kit
- Clear alarm LED alert
- Distinctive red 10ft pull cord
- Pull cord complete with anti-ligature mechanism
- 2 Pull handles supplied
- Antimicrobial properties
- Compete with surface back box

 Input Voltage
 12VDC

 Power Consumption
 0.3W max.

 Indicator
 LED illuminate in red when system triggered

 Pull Cord Length
 3 meters, with two triangular bangles

 Dimensions
 Single Gang / (W) 87 × (L) 87 × (H) 41mm

#### UDTAPLBM

#### Assistance Alarm Power Light Buzzer Module

- For use with UDTA Kit
- Clear alarm LED alert
- 80db distinctive audible alert
- 240vac Input for system power
- Complete with battery back-up function (Battery Included)
- Antimicrobial properties
- Compete with surface back box

Input Voltage	AC100 - 240V / 50Hz - 60Hz / 0.2A
Rated Output	DC12V / 500mA max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 $\times$ (L) 87 $\times$ (H) 41mm



#### Assistance Alarm Reset Module

- For use with UDTA Kit
- Clear alarm LED alert
- Distinctive audible alert
- Reset system function
- Antimicrobial properties
- Compete with surface back box

Input Voltage	12VDC
Power Consumption	0.9W max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 × (L) 87 × (H) 41mm





9

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#### UDTAKITSS

#### Assistance Alarm Alarm Kit

- Simple install, 3 part kit Indication Module, Pull cord module & Reset Module
- Complete in a stainless steel finish
- Complete with battery back-up function (Battery Included)
- Meets Part M building regulations and BS8300
- Alarm to raise alert for assistance
- Compact design to suit many interiors
- Disabled persons stainless steel door sign
- System is expandable to include additional indication and pull cord modules

#### UDTAPLBMSS

#### Assistance Alarm Power Light Buzzer Module

- For use with UDTAKITSS
- Clear alarm LED alert
- 80db distinctive audible alert
- 240vAC Input for system power
- Complete with battery back-up function (Battery Included)
- Stainless steel finish

Input Voltage	AC100 - 240V / 50Hz - 60Hz / 0.2A
Rated Output	DC12V / 500mA max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 $\times$ (L) 87 $\times$ (H) 41mm



#### UDTALBMSS

Assistance Alarm Light and Buzzer Module

- For use with UDTAKITSS
- Clear alarm LED alert
- 80db distinctive audible alert
- Stainless steel finish

 input Voltage
 12VUC

 Power Consumption
 0.9W max.

 Indicator
 LED illuminate in red when system triggered

 Buzzer
 85db when activated

 Dimensions
 Single Gang / (W) 87 × (L) 87 × (H) 41mm

# UDTASPC Assistance Alarm

Replacement Pull Cord

#### UDTAPCMSS

#### Assistance Alarm Pull Cord Module

- For use with UDTAKITSS
- Clear alarm LED alert
- Distinctive red 10ft pull cord
- Pull cord complete with anti-ligature mechanism
- 2 Pull handles supplied
- Stainless steel finish

 Input Voltage
 12VDC

 Power Consumption
 0.3W max.

 Indicator
 LED illuminate in red when system triggered

 Poll Cord Length
 3 meters, with two triangular bangles

 Dimensions
 Single Gang / (W) 87 × (L) 87 × (H) 41mm

#### UDTAREMSS

#### Assistance Alarm Reset Module

- For use with UDTAKITSS
- Clear alarm LED alert
- Distinctive audible alert
- Reset system function
- Stainless steel finish



#### UDTASMBSS

#### Assistance Alarm Surface Mount Box

For use with UDTAKITSS Modules







# FIRE PROTECTION

The ESP<sup>\*</sup> fire systems have been created to balance performance, reliability and aesthetics whilst being fully CPR compliant and certified to EN54 standards. The range includes everything required to complete high quality, durable, two wire, conventional and addressable fire alarm installations.

MAGDUO MAGfire



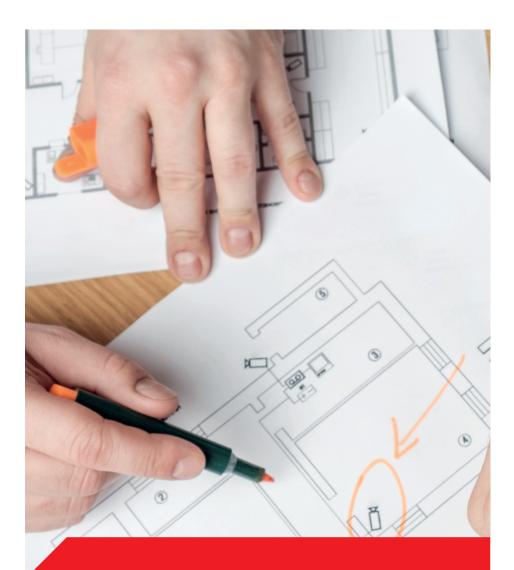




# FIRE SYSTEM COMMISSIONING

Alongside ESP's extensive range of fire protection systems, a new commissioning service has now been launched to ensure that an installed ESP® system operates correctly in accordance with the recommendations of BS5839-1.





# **FREE SYSTEM DESIGN**

ESP® can offer a team of dedicated design engineers who are fully trained & qualified in all of the relevant British Standards.

We are able to provide an in-depth solution to any challenge your building may provide, this is done by visiting sites and studying site drawings.

All of our Computer Aided Design (CAD) is carried out in-house, this enables us to amend our designs as the job progresses.



MAGDUO
MAGOUD2KIT
2 2COME TWO-WHEE CONVENTIONAL FIRE ALARM NT
MAGDUD2 2 zone Two-Wee fee panel
6 x MAGDUOSHDS Selectable optical smalle / heat debetters     with inbuilt sounders 8 barres included
1 x MAQ2005H255 Selectable sptical smoke / heat 64ectors     with Inbuilt sounde & stroke, base included
2 x MAG2UDCP Resettable call points
1 x MACDU0SHDRT Head removal tool
2 x 12V 3.2Ah Batteries Required

MAGDUO

ESP

#### MAGDU02BKIT

#### 2 Zone Two Wire Conventional Fire Alarm Kit

- MAGDU02B 2 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)
- 6 x MAGDUOSHDS Selectable optical smoke
   / heat detectors with inbuilt sounders & bases included
- 1 x MAGDUOSHDSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included
- 2 x MAGDUOCP Resettable call points
- 1 x MAGDUOSHDRT Head removal tool

#### MAGDUO2KIT

#### 2 Zone Two Wire Conventional Fire Alarm Kit

- MAGDUO2 2 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)
- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included
- 1 x MAGDUOSHDSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included
- 2 x MAGDUOCP Resettable call points
- 1 x MAGDUOSHDRT Head removal tool

#### MAGDUO4BKIT

#### 4 Zone Two Wire Conventional Fire Alarm Kit

- MAGDUO4B 4 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)
- 6 x MAGDUOSHDS Selectable optical smoke
   / heat detectors with inbuilt sounders & bases included
- 1 x MAGDUOSHDSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included
- 2 x MAGDUOCP Resettable call points
- 1 x MAGDUOSHDRT Head removal tool

#### MAGDUO4KIT

#### 4 Zone Two Wire Conventional Fire Alarm Kit

- MAGDUO4 4 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)
- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included
- 1 x MAGDUOSHDSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included
- 2 x MAGDUOCP Resettable call points
- 1 x MAGDUOSHDRT Head removal tool

#### MAGDU08BKIT

#### 8 Zone Two Wire Conventional Fire Alarm Kit

- MAGDU08B 8 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)
- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included
- 1 x MAGDUOSHDSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included
- 2 x MAGDUOCP Resettable call points
- 1 x MAGDUOSHDRT Head removal tool

#### MAGDU08KIT

#### 8 Zone Two Wire Conventional Fire Alarm Kit

- MAGDU08 8 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)
- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included
- 1 x MAGDUOSHDSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included
- 2 x MAGDUOCP Resettable call points
- 1 x MAGDUOSHDRT Head removal tool







re fault disabled test power

•••••



#### MAGDUO2 Grey MAGDUO2B Black 2 Zone Two Wire Fire Panel

- Two Wire fire alarm system
- Active end of line monitoring and head removal
- Up to 32 devices per zone (Dependent on Device Loading)
- 4 line x 20 character LCD display
- Ability to differentiate between smoke detector, heat detector or a manual call point alarms
- Alarm confirmation feature
- Event log storing up to 500 events
- 3 enhanced test modes
- Zone can be configured to day/night detection mode
- Delay programming options
- Certified to EN54 2/4 Standards
- Requires 2 x 12V 3.2Ah batteries (BAT32)
- Optional extended battery box with capacity for 2 x 12V 7.0Ah batteries

MAGDUOBBB

Battery Expansion Box for MAGDUO





Device Loading Units , 160 per Zone)

230VAC, +10%, -15%, 50/60Hz

Inputs
Max Detectors Per Z
Power

0-	
Standby Supply	2 x 12V 3.2Ah S.L.A Batter
Outputs	
Zone	Up to 2 (300mA)
Monitored Sounder Circuits	Up to 2 (250 mA)
Monitored Relay Circuits	Up to 2 (250 mA)
Auxiliary Output	24vDC (300mA)
Environment	
Working Tomporature	5°C to 40°C

# 333 x 333 x 99mm

MAGDUOPK (Pack of 2) Two Wire Fire Panel Spare Key

MAGDUOPCPS ESP





DUC

UK

Up to 32 devices per zone (Dependent on Device Loading)

Ability to differentiate between smoke detector, heat detector or a manual call point alarms

Zone can be configured to day/night detection mode

conventional devices on zones 5 to 8 with the optional

Optional extended battery box with capacity for 2 x 12V

• 4 or 8 zone panel can now be configured to accept

Requires 2 x 12V 3.2Ah batteries (BAT32)

Active end of line monitoring and head removal

RS485 connection to up to 8 repeater panels

ROHS

CPR

Power

fine fault disabled test

CE

4 line x 20 character LCD display

Event log storing up to 500 events

Alarm confirmation feature

Delay programming options

conventional zone card Certified to EN54 2/4 Standards

7.0Ah batteries

3 enhanced test modes

Two Wire fire alarm system

#### MAGDUOBBB Battery Expansion Box for MAGDUO



#### ESP

MAGDUOPCPS MAGDUO Software

MAGDUOPK (Pack of 2)

Two Wire Fire Panel Spare Key



MAGDUO4 Grey MAGDUO4B Black

4 Zone Two Wire Fire Panel

Device Loading Units , 160 per Zone)

# Environment 5°C to 40°C 2.28 Kg







Inputs

Power

Monitored

Environr

Working T

Weight

#### MAGDUO8 Grey MAGDUO8B Black 8 Zone Two Wire Fire Panel

- Two Wire fire alarm system
- Active end of line monitoring and head removal
- Up to 32 devices per zone (Dependent on Device Loading)
- 4 line x 20 character LCD display
- Ability to differentiate between smoke detector, heat detector or a manual call point alarms
- Alarm confirmation feature
- RS485 connection to up to 8 repeater panels
- Event log storing up to 500 events
- 3 enhanced test modes
- Zone can be configured to day/night detection mode
- Delay programming options
- 4 or 8 zone panel can now be configured to accept conventional devices on zones 5 to 8 with the optional conventional zone card
- Certified to EN54 2/4 Standards Requires 2 x 12V 3.2Ah batteries (BAT32)
- Optional extended battery box with capacity for 2 x 12V 7.0Ah batteries

MAGDUOBBB

Battery Expansion Box for MAGDUO



(CE)	UK

ctors Per Zone	Up to 32 Devices (Dependant on Device Loading Units , 160 per Zone
pply	230VAC, +10%, -15%, 50/60Hz
y Voltage	24vDC (Range 21-31vDC)
Supply	2 x 12V 3.2Ah S.L.A Battery
i	
	Up to 8 (300mA)
d Sounder Circuits	Up to 2 (250 mA)
d Relay Circuits	Up to 2 (250 mA)
Dutput	24vDC (300mA)
ment	
lemperature	5°C to 40°C
ns	333 x 333 x 99mm
	2.36 Kg

MAGDUOPK (Pack of 2)



Two Wire Fire Panel Spare Key



ROHS COMPLIANT



MAGDUOPCPS









#### MAGDUOREP Grey MAGDUOREPB Black Conventional Repeater Panel for MAGDUO

i.	Compatible with MAGDUO 4 or 8 zones control	
	panels only	

- Reports MAGDUO panel events to a remote location
- Capable of performing system controls (i.e. Silence Alarms, Reset, Sound Alarms & Silence Buzzer)
- Maximum of 8 repeater panels can be connected to a single control panel

Power	
Power	24vDC (Range 21-31vDC)
Consumption	
Quiescent (Back Light Off)	24vDC @ 16mA
Maximum (Back Light and Controls Enabled)	24vDC @ 50mA
Input	
Communication	RS-485
Max. Length Between Panels	500 Meters
Output	
Communication	RS-485
Max. Length Between Panels	500 Meters
Technical spec	
Max. Number per Panel	8
Environment	
Working Temperature	5°C to 50°C
Weight	0.65 Kg
Dimensions	250 x 140 x 85 mm



BPS-1 24V 1 Amp Boxed Power Supply BPS-2 24V 2 Amp Boxed Power Supply BPS-5 24V 5 Amp Boxed Power Supply Nb Boxed power supplies require 2 x 12V batteries



#### MAGDUOSHD

#### FlexiPoint Detector for Fire Detection

- 7 modes of fire detection including combined smoke/heat
- Built-in End of Line function
- Self-calibration every 6 hours
- Continuous dust contamination monitoring
- Device wiring base included



#### MAGDUOSR Red MAGDUOSW White Ceiling Sounder for MAGDUO

- Ceiling mount sounder
- Volume level adjustment
- Built-in End of Line function
- Device wiring base included

MAGDUOSSLP

Low profile design

Volume level adjustment

Built-in End of Line function

Device wiring base included



# MAGDUOSRSQ Red MAGDUOSWSQ White Wall Sounder for MAGDUO

- Wall mount white sounder
- Volume level adjustment
- Built-in End of Line function
- Device base included



#### MAGDUOSHDS

#### FlexiPoint Detector with Sounder for Fire Detection

- 7 modes of fire detection including combined smoke/heat
- Complete with 3 sounder modes
- Built-in End of Line function
- Self-calibration every 6 hours
- Device wiring base included
- Continuous dust contamination monitoring



#### MAGDUOSHDSS

FlexiPoint Detector with Sounder & Strobe for Fire Detection

- 7 modes of fire detection including combined smoke/heat
- Complete with 3 sounder modes and LED strobe
- Built-in End of Line function
- Self-calibration every 6 hours
- Device wiring base included
- Continuous dust contamination monitoring

#### 7 Modes Of Detection

Smoke 1 - Standard optical with high thermal enhancement Smoke 2 - Standard optical with normal thermal enhancement Smoke 3 - Low sensitivity optical with transient rejection Heat 1 - Rate of Rise 58° C, general use in normal, stable environments (Class A1) Heat 2 - Low fixed 58° C, Domestic kitchens etc (Class A1) Heat 3 - Hi Fixed 90° C, Commercial kitchens, boiler rooms

Combined - Smoke 2 / Heat 2



Sounder Strobe for MAGDUO - Low Profile

Complete with 3 sounder modes and LED strobe



#### MAGDUOSS Sounder Strobe for MAGDUO - Domed

- Complete with 3 sounder modes and LED strobe
- Volume level adjustment
- Built-in End of Line function
- Domed profile design
- Device wiring base included



#### MAGDUOSIP55 Strobe for MAGDUO

- IP55 Ingress protection
- LED strobe
- Built-in End of Line function
- Device base included



#### MAGDUOSRIP55 Sounder for MAGDUO

- IP55 Ingress protection
- Volume level adjustment
- Built-in End of Line function
- Device base included

# MAGOUO TWO WIRE CALL POINT

INSTALLATION EXAMPLE MAGDUO



#### MAGDUOCP MAGDUOCPIP65 IP Version Call Point for MAGDUO

- Resettable manual call point
- Built-in End of Line function
- Device base included

#### MAGDUOCPK Spare Call Point Key for MAGDUO



#### MAGDUOBBB Battery Expansion Box for MAGDUO

- Includes; conduit bushes, coupling and battery leads
- Batteries not included



# MAGDUOIOR

# Module for MAGDUO

- Configure as an input for reporting from other systems or devices
- Configure as an output to control external systems
- Built-in End of Line function



MAGDUOSHDDB Deep Base for MAGDUO Devices

 For use with; FlexiPoint devices, internal ceiling sounders & strobes



#### MAGDUOZC4 MAGDUO4 Zone Expansion Card

Expands a 4 zone MAGDUO4 to an 8 zone panel

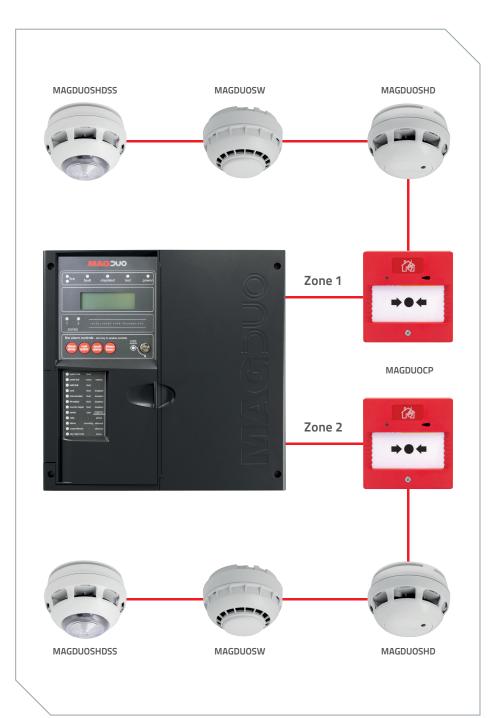
#### MAGDUOCC4 MAGDUO4 Zone Conventional Card

 Expands a 4 zone MAGDUO4 to include 4 zones for conventional detectors and call points



#### MAGDUOSHDRT MAGDUO Head Removal Tool

- Required to remove the chamber from the MAGDUO FlexiPoint detectors, sounders and strobes
- The head removal tool may be attached to an extendable pole





#### MAGPRO16 White MAGPRO16G Grey Addressable 16 Zone Fire Panel

- 16 Zones
- Maximum 250 devices per loop
- Memory Log: 10,000 events
- Networkable up to 32 Panels
- Class change function
- 4 x 40 character LCD display
- Free programming software (On completion of training - UK)
- Micro USB port for PC connection
- Loop & battery calculator software included
- Certified to EN54–2/4

16 zone addressable fire alarm panel supplied with 1 loop. Expandable to 2 loops using MAGPR016-L250. A maximum of 250 devices can be connected to each loop.

MAGPR016-L250

Single Loop Expander for 250 Devices



Mains Fail Consumption	213mA DC - 2 LOOP
Mains Supply	230V AC + 10%/ -15%
Max Loop Current	500mA DC
Backup	1x12V 18Ah
Outputs	
2 Sounders	24v DC @ 500mA
4 Programmable Relays	24v DC @ 15A
3 Monitored Outputs	24v DC @ 100mA
3 Monitored Inputs	Volt free contacts
Environment	
Working Temperature	-5°C TO +40°C
Storage	-10°C TO 60°C
Humidity	0 - 95%
Moight	1. DI/C (Mithout Potton)



320 x 220 x 80mm

MAGPRO-PROG Programming Tool For more info see page 145



EU CE EN54

# ROHS COMPLEMENT 2002/05/00

Innute

#### MAGPRO96 White MAGPRO96G Grey Addressable 96 Zone Fire Panel

96	7	0	n	0	~

- Maximum 250 devices per loop
- Memory Log: 10,000 events
- Networkable up to 32 Panels
- 320 x 240 pixel touch screen display
- Free programming software (On completion of training - UK)
- Micro USB port for PC connection
- Loop & battery calculator software included
- Certified to EN54–2/4

96 zone addressable fire alarm panel supplied with 1 loop. Expandable to 4 loops using additional MAGPR096-L250's. A maximum of 250 devices can be connected to each loop.



Single Loop Expander

for 250 Devices

MAGPR096GBB Battery Expansion Box for MAGPR096G

- Certified according to EN 54-4 Supports 2x 12V/18Ah

inputs	
Loops	1 expandable to 4
Devices Per Loop	250
Protocol	MAGPRO
Power	
Mains Fail Consumption	285mA DC - 1 LOOP 360mA DC - 2 LOOP 435mA DC - 3 LOOP 510mA DC - 4 LOOP
Mains Supply	230V AC + 10%/ -15%
Max Loop Current	500mA DC
Backup	1x12V 18Ah
Outputs	
1 Sounder	24v DC @ 300mA
4 Programmable Relays	24v DC @ 15A
2 Monitored Outputs	24v DC @ 300mA
1 Auxillary Output	24v DC @ 300mA
1 Fault Output	24v DC @ 300mA
Environment	
Working Temperature	-5°C TO +40°C
Storage	-10°C TO 60°C
Humidity	0 - 95%
Weight	6KG (Without Battery)
Dimensions	456 x 350 x 125mm



MAGPRO-PROG Programming Tool For more info see page 145

FIRE

Delay

Power ON

General Fault

System Fault

#### MAGPRO-SD1

#### Addressable Smoke Detector

- Sensitivity level selectable from the control panel High/Normal/Middle/Low
- Protected area 120m2
- Installation height up to 16m
- Day/Night mode
- Low profile design
- LED indication with 360° visibility
- Certified to EN54-7
- Base ordered separately see MAGPRO-DB, MAGPRO-DBS and MAGPRO-DBS

#### MAGPRO-HD1

#### Addressable Heat Detector

- Can work as a fixed temperature or rate of rise detector
- Class A1R, A2S, BS selectable from the control panel
- Day/Night mode
- Protected area up to 35m2
- Installation height up to 7.5m
- Low profile design
- Certified to EN54–5
- Base ordered separately see MAGPRO-DB, MAGPRO-DBS and MAGPRO-DBS

#### MAGPRO-HSD1

#### Addressable Combined Smoke & Heat Detector

- Sensitivity selectable from the control panel -High/ Normal/Middle/Low
- Class A1R temperature sensor (according to EN54-5)

- MAGPRO-DBS and MAGPRO-DBSS





MAGPRO-DBS

Sounder Base





MAGPRO-DB Detector Base

MAGPRO-DBSS Sounder Strobe Base







- Low profile design
- LED indication with 360° visibility
- Certified to EN54–5/7
- Base ordered separately see MAGPRO-DB,

• Only compatible with MAGPRO16 Ver2.8 and higher 110mA Input RS485 Max Length Between Panels RS485 Max Length Between Panels Technical spec Each panel in network will require a MAGPRO-NIC Ring 1000m distance from MAGPRO-REP to MAGPRO Panel Connection to MAGRO Panel Environment

Power

#### Ring type network

MAGPRO-REP

Wall-mount design

Compatible with MAGPR096

Requires 24VDC External Power Supply

Max consumption of 0.11A (110mA)

Maximum of 32 panels in the network

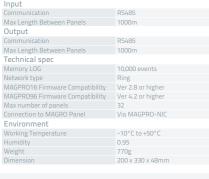
Addressable Repeater Panel

10,000 event log within the repeater

Dimensions 200 x 330 x 48mm

#### MAGPRO-NIC NETWORK INTERFACE CARD

- Networks between MAGPR016/96 & REP Panels
- MAGPR016 Firmware REV 2.8 or higher Required
- MAGPR096 Firmware REV 4.2 or higher Required
- RS-485 Communication protocol







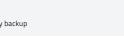
- Programming from the panel
- 1000m transmission distance between modules

From a MAGPRO Panel AUX / GND

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MAGfire



ASSESSED.

ROHS EU CE

\*Recommend a Boxed Power Supply with battery backup

### **MAGfire** | addressable fire system devices

### addressable fire system devices | MAGfire\*



### MAGPRO-WS ADDRESSABLE SOUNDER

- Piezo sounder
- Adjustable sound level 92dB/100 dB
- 32 sound types selectable from the panel
- Loop synchronization & powered
- Certified to EN54-3
- Base MAGPRO-DB ordered separately



### MAGPRO-WSS SOUNDER STROBE

- Piezo sounder
- Adjustable sound level 92dB/100 dB
- 32 sound types selectable from the panel
- Loop synchronization & powered
- Certified to EN54-3
- Base MAGPRO-DB ordered separately



### MAGPRO-CPIP67 IP67 RATED MANUAL CALL POINT

- Resettable call point
- Certified to EN54-11-A
- Built in isolator
- IP67 Rated



MAGPRO-CP MANUAL CALL POINT

- Resettable call point
- Certified to EN54-11-A
- Built in isolator
- IP40 Rated
- Optional protective plastic cover MAGPRO-CPC



### MAGPRO-WSS23 SOUNDER STROBE

- Certified to EN54-23
- Piezo sounder
- Adjustable sound level 92dB/100 dB
- 32 sound types selectable from the panel
- Loop synchronization & powered
- Base MAGPRO-DB ordered separately



### MAGPRO-WSBIP65

Addressable Fire Alarm Sounder IP65 Base

- Waterproof deep base for MAGPRO addressable sounders
- Only for use with models; MAGPRO-WS, WSS and WSS23
- Robust IP65 Waterproof base suitable for wall mounting in aggressive outdoor environments
- Includes 2x IP65 cable glands, O-ring & gasket for secure installation



MAGPRO-CPC Plastic Cover for MAGPRO-CP (Pack of 5)



### MAGPRO-PROG PROGRAMMING TOOL

For reading/writing addresses to Callpoints, detectors, sounders and modules.

- Built in MAGPRO-DB standard base
- Mains or battery powered (4 x 1.5V not included)
- Programming cable included



### MAGPRO-IM

### LOOP ISOLATOR MODULE

- Protection against short circuit
- Auto reset after short circuit
- 4 x cable entry points
- A maximum of 30 devices between two isolators
- Certified to EN54-17

### BAT18

### 12V - 17.0AH SLA BATTERY

12V 17ah SLA back up battery





### MAGPRO-MINI

### 1 INPUT MODULE

- Single volt free contact
- Compact size 58mm x 25mm x 12mm
- Example applications Integration of third party control devices
- Compliant to EN54-18

### 24V BOXED POWER SUPPLIES

- BPS-1 24V 1 Amp Boxed Power Supply
- BPS-2 24V 2 Amp Boxed Power Supply
- BPS-5 24V 5 Amp Boxed Power Supply

Nb Boxed power supplies require 2 x 12V batteries (not supplied)





### ZRL2

### LED INDICATOR PLATE

- Flash rate permanent
- Current 28 mA Max
- Operating Voltage Range 5-28V DC

### DOOR HOLDERS

DR916-24 24V DC Door Holder DR916-240 240V AC Door Holder DR916-FMB Floor Mounting Bracket DR916-KP Spare Keeper Plate



### **MAG**fire<sup>®</sup> | addressable modules and accessories

### CPR

### MAGPRO-R MAINS RELAY OUTPUT MODULE WITH ISOLATOR

- Suitable for control of 240VAC voltage circuits up to 5A
- Loop powered
- Built in isolator
- Compliant to EN54-18
- Example application AC 240V door magnet override



### MAGPRO-4i00 4 INPUT MODULE WITH ISOLATOR

- 4 Monitored Inputs
- Loop powered
- Built in isolator
- Certified to EN54-18
- Example applications Input from external equipment, extinguishing/sprinkler panel



### MAGPRO-10Si CONVENTIONAL SOUNDER MODULE WITH ISOLATOR

- Integrate conventional sounders into an addressable system
- Loop powered
- Built in isolator
- Requires 24V PSU
- Compliant to EN54-18



### MAGPRO-0i40 4 OUTPUT MODULE WITH ISOLATOR

- 4 Relay outputs
- Loop powered
- Built in isolator
- Certified to EN5-18
- Example applications Shutdown of ventilation equipment and door override



### MAGPRO-2i20 2 INPUT 2 OUTPUT MODULE WITH ISOLATOR

- 2 Monitored Inputs Example application - Link to monitoring
- 2 Outputs
- station signalling Loop powered devices
- Built in isolator
- Certified to EN54-18



### MAGPRO-CZM CONVENTIONAL ZONE MODULE WITH ISOLATOR

- Integrate conventional detectors into an addressable system
- Max number of detectors in one zone 32
- Loop powered
- Built in isolator
- Certified to EN54-18
- Example applications Integrate conventional equipment i.e. beam detectors

### CONVENTIONAL FIRE SYSTEM KITS MAG

- MAG2P 2 zone fire panel
- 6 x PSD-2 Optical smoke detectors complete with bases
- 2 x SCP-2R Resettable call points
- 2 x BA-2R Banshee sounders
- 1 x BAT7 12v 7.0ah SLA battery



### FLK2P 2 Zone Conventional Fire Alarm Kit



- MAG4P 4 zone fire panel
- 5 x PSD-2 Optical smoke detectors complete with bases
- 1 x FHD-2 Fixed temperature heat detector complete with base
- 2 x SCP-2R Resettable call points
- 2 x BA-2R Banshee sounders
- 1 x BAT7 12v 7.0ah SLA battery



FLK4PH 4 Zone Conventional Fire Alarm Kit







### MAG2P

### 2 Zone Fire Panel

- 2 programmable zones
- Active end of line monitoring and head removal
- 30 fire detectors per zone
- Unlimited number of call points per zone
- Integral sound alarm button
- 'Class change' facility
- Enable/disable security key
- One man walk test facility
- Volt free fire change over relay
- Volt free fault change over relay
- Individual sounder circuit fault ID
- Individual zone/sounder isolate
- CE certified to EN54 P2/4
- Requires only 1x12v battery
- MAG2P ABS casing



150

MAG2 2 Zone Fire Panel - Metal Casing

	$\frown$	$\frown$	$\frown$
CPR	( EN54 )	$(\mathbf{c}\mathbf{\epsilon})$	EU
	$\bigcirc$	$\bigcirc$	C

Inpu	its						
MaxI	Det	tect	tors	s Per	Zone		
					~		

Input

Power

Mains Supply

Outputs

Environment

Working Tempe

Weight

6 - 110 mA (Fire condition)

### Mains Fail Consumption

30

	230 VAC ± 10%
ý.	1 x 7ah 12V S.L.A. Battery
ility	0.7 amps
	24V (max 300mA fused)
	24V (max 300mA fused)
ay	Volt free 500mA @ 24V (max load)
ut	24VDC (300mA fused)
t	
erature	0 to 40°C
erature	-20 to 60°C
	0 - 95%
AG2P	340 x 290 x 100mm
AG2	200 x 290 x 80mm

MAG2P - 2.1Kg MAG2 - 2.7Kg

ROHS

MAGBAR2/4 Spare Barrel & key for use with MAG 2 & 4

	mulviuuai
	Individual
•	CE certifie
	Requires o
	MAG4P - /



### 4 Zone Fire Panel - Metal Casing

Inputs

MAGBAR2/4 Spare Barrel & key for use with MAG 2 & 4



MAG4P

4 Zone Fire Panel

	MAG 4
	Macfire
	MAGfire



### 4 programmable zones

- Active end of line monitoring and head removal
- 30 fire detectors per zone
- Unlimited number of call points per zone
- Integral sound alarm button
- 'Class change' facility
- Enable/disable security key
- One man walk test facility
- Volt free fire change over relay
- Volt free fault change over relay
- Individual sounder circuit fault ID
- zone/sounder isolate
- ed to EN54 P2/4

Max Detectors per Zone	30
Thresholds for Zone Conditions	0 - 2 mA (Fault condition) 2 - 6 mA (Normal condition) 6 - 110 mA (Fire condition) 110 mA - Short (Fault condition)
Power	
Mains Fail Consumption	50mA
Mains Supply	230 VAC ± 10%
Standby Supply	1 x 7ah 12V S.L.A. Battery
Power Availability	0.7 amps
Outputs	
Sounder 1	24V (max 300mA fused)
Sounder 2	24V (max 300mA fused)
Fault/Fire Relay	Volt free 500mA @ 24V (max load)
Auxiliary Output	24VDC (300mA fused)
Environment	
Working Temperature	0 to 40°C
Storage Temperature	-20 to 60°C
Humidity	0 - 95%
Dimensions MAG4P	340 x 290 x 100mm
Dimensions MAG4	320 x 220 x 80mm
Weight	MAG4P - 2.5Kg MAG4 - 3.5Kg



- only 1x12v battery
- ABS casing
  - MAG4



On Board Sounder Circuits (4)

Environment

Working Temperature

- One man walk test facility
- Volt free fire/fault change over relay
- Individual sounder circuit fault ID
- Individual zone/sounder isolate
- Alarm delay options
- CE certified to EN54 P2/4
- Requires 1 x 12V battery
- ABS casing

### FIRE ZONE / SOUNDER OUTPUT MATRIX

Number of zone cards fitted	2	3	4	2	3	1	2	1
Number of sounder cards fitted	0	0	0	1	1	2	2	3
Number of zones	8	12	16	8	12	4	8	4
Number of sounder outputs	4	4	4	8	8	12	12	16

NB The MAG816 features 4 sounder circuits. Space is provided Sounder cards carry 4 sounder circuits, Zone cards carry 4 fire zones. The MAG816 is supplied as standard with 8 fire zones and 4 sounder circuits.

0 to 40°C

0 to 93%

456 x 350 x 125mm

300mA @ 24V fuse resettable (PTC)

150mA @ 24V fuse resettable (PTC)

Volt free 500mA @ 24V (max load)



### CSD2 Combined Optical Smoke & Fixed Heat Detector

Туре	Conventional
Approval	EN54-7, EN54-5
Class	A1R
Operating Voltage	9 - 30VDC
Standby Current @ 24v	< 60µA
Alarm Current @ 24v	49mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Simulated Smoke/ Heat

### FHD2 Fixed Temperature Heat Detector

Туре	Conventional
Approval	EN54-5
Class	A2S
Operating Voltage	9 - 30VDC
Standby Current @ 24v	< 60µA
Alarm Current @ 24v	49mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Heat Source

These MAGfire detectors have been developed to provide a perfect compliment to the MAGfire MAG panels. All detectors are supplied with a diode base. Fully compliant with CPR and approved to EN54 standards.

conventional fire system devices MAGfire\*



### PSD2 Optical Smoke Detector

Туре	Conventional
Approval	EN54-7
Class	N/A
Operating Voltage	9 - 30VDC
Standby Current @ 24v	< 60µA
Alarm Current @ 24v	49mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Simulated Smoke



### RHD2 Rate of Rise Heat Detector

ype	Conventional
pproval	EN54-5
lass	A1R
perating Voltage	9 - 30VDC
tandby Current @ 24v	< 60µA
larm Current @ 24v	49mA
Vire Gauge	0.4mm - 2.0mm TWIN
perating Temperature	-10°C to 60°C
est Facility	Heat Source

### **MAGfire** | conventional fire system devices

### CONVENTIONAL FIRE SYSTEM DEVICES | MAGfire



### **CSD212** Combined Optical Smoke & Fixed Heat Detector

Туре	Conventional
Approval	EN54-7, EN54-5
Class	A1R
Operating Voltage	9 - 30VDC
Standby Current @ 12v	< 50µA
Alarm Current @ 12v	29mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Simulated Smoke/ Heat



FHD212 Fixed Temperature Heat Detector

Туре	Conventional
Approval	EN54-5
Class	A2S
Operating Voltage	9 - 30VDC
Standby Current @ 12v	< 50µA
Alarm Current @ 12v	29mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Heat Source

The new range of MAGfire detectors have been developed to provide a perfect compliment to 12V hardwire intruder alarm systems. All detectors are supplied with a relay base. Fully compliant with CPR and approved to EN54 standards.



### **PSD212** Optical Smoke Detector

Type	Conventional
Approval	EN54-7
Class	N/A
Operating Voltage	9 - 30VDC
Standby Current @ 12v	< 50µA
Alarm Current @ 12v	29mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Simulated Smoke



RHD212 Rate of Rise Heat Detector

/pe	Conventional
pproval	EN54-5
ass	A1R
perating Voltage	9 - 30VDC
andby Current @ 12v	< 50µA
arm Current @ 12v	29mA
lire Gauge	0.4mm - 2.0mm TWIN
perating Temperature	-10°C to 60°C
est Facility	Heat Source

- Up to 50m range
- Expandable to 120m with the BD1LRK
- Integral laser alignment
- Auto Align automatic beam alignment
- 24v DC 35mA max current draw
- EN 54-12 approved



**BD1** 50m Beam Detector expandable up to 120m

Kit for extending BD1 range up to 120m



BD1LRK BD1 Reflective Long Range Kit

### **MAGfire**<sup>®</sup> | conventional fire system devices

### CONVENTIONAL FIRE SYSTEM DEVICES | MAGfire





**SCP2R** Resettable Call Point

- Surface or flush mounting
- Complete with surface back box
- Spare cover available SCP2R-CVR

SCP2R-CVR Plastic Cover for SCP2R (Pack of 5)



**ZRL2** LED Indicator Plate

- Flash rate permanent
- Current 28 mA Max
- Operating Voltage Range 5-28V DC



**BA-2W** White Banshee Sounder

- Sound Output @ 1m 89 110 dBA
- Current 3-39 mA
- IP Rating IP45



**SCP2RIP67** IP67 Rated Manual Call Point

- Resettable call point
- Certified to EN54-11-A
- IP67 Rated



**SCP2RK** Reset Key

Spare Keys for MAGPRO-CP,MAGPRO-CPIP67, SCP2R & SCP2RIP67 (Pack of 5)



**BA-2R** Red Banshee Sounder

- Sound Output @ 1m 89 110 dBA
- Current 3-39 mA
- IP Rating IP45



**CB-1R** Banshee Sounder and Strobe

- Sound Output 89-110 dBA
- Flash rate 60/minute
- Current 40 mA plus sounder
- IP Rating IP45

### MAGfire | conventional fire system devices



### **CB-1RIP66** Waterproof Sounder and Strobe

- Sound Output 89-110 dBA
- Flash rate 60/minute
- Current 40 mA plus sounder
- IP Rating IP66



### **FS1L** LED strobe

- Flash rate 60/minute
- 12V & 24V (80mA & 30mA)
- IP Rating IP65

### CONVENTIONAL FIRE SYSTEM DEVICES MAGfire



### MAGSWS White Surface Sounder

- Sound Output @ 1m 86 96 dBA
- Current 6mA @ 24VDC
- IP Rating IP21



### **MAGSRS** Red Surface Sounder

- Sound Output @ 1m 86 96 dBA
- Current 6mA @ 24VDC
- IP Rating IP21



### MAGBSW White Bedhead Sounder

- Sound Output @ 1m 86 96 dBA
- Current 6mA @ 24VDC
- IP Rating IP21



### MAGBSR

Red Bedhead Sounder

- Sound Output @ 1m 86 96 dBA
- Current 6mA @ 24VDC
- IP Rating IP21



### **MAGSSTRWS** White Surface Sounder with Strobe

- Sound Output @ 1m 86 96 dBA
- Flash Rate 40/Minute
- Current 14mA @ 24VDC
- IP Rating IP21



### MAGSSTRRS Red Surface Sounder with Strobe

- Sound Output @ 1m 86 96 dBA
- Flash Rate 40/Minute
- Current 14mA @ 24VDC
- IP Rating IP21

### **MAG**fire<sup>®</sup> | Fire system accessories



### **IFB** Internal Fire Bell

- Sound Output 95 dBA
- Current 11 mA
- 6" diameter
- IP Rating IP21C



### **WFB-1** Weatherproof Fire Bell

- Sound Output 95 dBA
- Current 25 mA
- 8" diameter
- IP Rating IP55



**SD-DB** Detector Deep Base

- Allows for mounting in surface cable entry application or on a rough, uneven surface
   Conduction of the surfac
- Can be used as an adaptor plate for addressable sounder base
- entry MAGPRO-DB, a MAGPRO-DBS, Irface MAGPRO-DBSS, PSD2, n CSD2, PSD212, CSD212



### **DBS-1** Detector Base Sounder

- Sound Output @ 1m 93 dBA
- Current 18 mA



EN54-4 POWER SUPPLIES BPS2EN EN54-4 2A PSU BPS5EN EN54-4 5A PSU



### BA-DB

Base for sounder BA-2R, BA-2W and CB-1R to make IP Rated

BASE FOR SOUNDER BA-2R, BA-2W AND CB-1R TO MAKE IP RATED







### **BAT32** 12V – 3.2AH SLA BATTERY

12V 3.2ah SLA back up battery

BAT7 12V - 7.0AH SLA BATTERY

- up battory for EVBDSBB
- Back up battery for EVBPSBB, MAG2P, MAG2, MAG4P and MAG4
- 12V 17.0AH SLA BATTERY
  12V 17ah SLA back up battery

BAT18



### MAGLB FIRE SAFETY LOG BOOK

- Ensure system records are maintained in accordance with BS5839-1
- Contains test procedures, frequencies of service & maintenance requirements
- Clear data tables for evidence of system services, tests and inspections
- A4



### DOOR HOLDERS

DR916-24	24V DC Door Holder
DR916-240	240V AC Door Holder

DR916-KP Spare Keeper Plate For use with DR916-24 and DR916-240



### MAGR

### 8 ZONE RELAY MODULE MAG816

- Expander module providing 8 relay switches for zone activation
- Separate zone (max. 8) activation in fire condition
- N.O & N.C options



DR916-FMB FLOOR MOUNTING BRACKET For use with DR916-24 and DR916-240



### MAGAUXISORP AUXILIARY ISOLATION SWITCH (RED)

- Suitable for mains switching up to 8 amp
- Secure key switch enables safety for maintenance and offers protection against tamper
- External trigger option
- Programmable internal buzzer for activation
- Clear operation LED indication
- Surface or recess mount



### MAGISORP FIRE ISOLATION SWITCH (RED)

Complies with BS5839 Part1

MAGISOPFUSE

- Isolates the mains voltage supply to the fire system
- Enables safety for maintenance and offers protection against tamper
- Both the live and neutral supply is switched

FIRE ISOLATION SWITCH SPARE FUSES

Spare fuses for MAGISORP - Fire Isolator Switch



### MAGAUXISOWP AUXILIARY ISOLATION SWITCH (WHITE)

- Suitable for mains switching up to 8 amp
- Secure key switch enables safety for maintenance and offers protection against tamper
- External trigger option
- Programmable internal buzzer for activation
- Clear operation LED indication
- Surface or recess mount



### MAGISOWP FIRE ISOLATION SWITCH (WHITE)

- Complies with BS5839 Part1
- Isolates the mains voltage supply to the fire system
- Enables safety for maintenance and offers protection against tamper
- Both the live and neutral supply is switched



### MAGISORPK FIRE/AUXILIARY ISOLATION SWITCH SPARE KEY

Spare key for MAGISORP & MAGAUXISORP



MAGEOL ZONE MODULE

End of line zone module (Pack of 5)

For conventional panels



SOUNDER MODULE • End of line sounder module (Pack of 5) • For conventional panels



**SV** 

### EMERGENCY LIGHTING

The new emergency lighting collection provides contractors and installers with a comprehensive, contemporary product range that has been independently tested to comply with the latest industry standards and regulations. The range now also includes the new Self-Test range.







3W LED Maintained Emergency Sign

### Self Test Emergency Light 5500K Colour Temperature

- Viewing Distance 25m
- SMD 2835 LED lamp
- Steel housing White Finish
- Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd battery
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Dimensions 390 x 190 x 60mm
- Weight 1.3Kg









### EMSTLED3WMEXBOXU 3W LED Maintained Emergency Sign UP

**EMSTLED3WMBULK** 

Mounting Height 2.5m 3.0m

**EMSTLED3WMEXBOX** 

EMSTLED3WMEXBOXD 3W LED Maintained Emergency Sign DOWN

EMSTLED3WMEXBOXL 3W LED Maintained Emergency Sign LEFT

**EMSTLED3WMEXBOXR** 3W LED Maintained Emergency Sign RIGHT

- 5500K Colour Temperature 影 Maintained & Non-Maintained Operation SMD 2835 LED Lamp Polycarbonate Housing Ceiling or Wall Mounted =
  - Charge and Discharge Protection

Self Test Emergency Light

- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards BS EN 62034 Standards
- Mains Light Output 121 Lumens
- Emergency light Output -119 Lumens
- Dimensions 345 x 110 x 60mm





EMBULKLGD Emergency Bulkhead Legend

EMBULK2FLUSH Bulkhead Flush Kit EMBATS 6V1500SEP 3 6V 1500mAH Battery

		LIVIDAT	3.00 13003LR 3.00 130	onian battery
	+→			
Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
3.1	7.4	6.5	5.6	2.4
3.3	8.3	7.3	6.3	2.6
3.4	9.0	8.0	6.9	2.7

Illuminance values based on a maintenance factor of 0.85

3W LED IP65 Maintained Emergency Bulkhead

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

- Self Test Emergency Light
- Interchangeable Open & Corridor Lens
- 5500K Colour Temperature
- High Power 3W LED
- Maintained & Non-Maintained Operation
- Polycarbonate Housing
- Ceiling or Wall Mounted flush kit available
- Charge and Discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1800mAh Ni-Cd Battery
- IP44 Ingress Protection Rating
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Emergency Light Output -147 Lumens (Open lens)
- Emergency Light Output -138 Lumens (Corridor lens)
- Weight- 0.4Kg



### EMST3WMSDL

### LED 3W Emergency Open and Corridor Lens Downlight

		<b>←→</b>			
Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	Open 2.4, Corridor 0.9	Open 7.9, Corridor 5.8	Open 7.9, Corridor 7.9	Open 7.9, Corridor 10.0	Open 2.4, Corridor 4.6
2.5m	Open 2.5, Corridor 0.5	Open 6.7, Corridor 2.4	Open 7.0, Corridor 7.1	Open 7.4, Corridor 11.9	Open 2.6, Corridor 5.4
3.0m	Open 1.0, Corridor 0.5	Open 6.8, Corridor 2.4	Open 6.9, Corridor 8.1	Open 6.9, Corridor 13.7	Open 2.8, Corridor 6.1

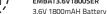
Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



- 5500K Colour Temperature
- High Power 3W LED
- Aluminium Bezel
- Recessed Mounting
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration 3.6V 1800mAh Ni-Cd Battery
- IP20 Rating
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Emergency Light Output -138 Lumens
- Weight- 0.4Kg



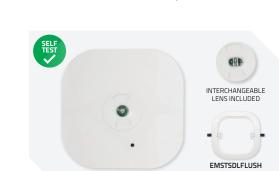


### EMST3WNMDLK LED 3W Emergency Open Lens Downlight

		+			711111111
Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	2.9	7.2	7.1	7.2	2.8
2.5m	3.1	7.7	7.6	7.7	2.9
3.0m	3.1	8.1	8.0	8.0	3.0

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



SELF TEST DOWNLIGHTERS

### **duceri** | self test twinspots





- Self Test Emergency Light
- 5500k Colour Temperature
- 2 x 15 SMD 2835 LED Lamps
- Polycarbonate Housing & Heads
- Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 9.6V 2200mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Emergency Light Output 535 Lumens
- Dimensions 305 x 306 x 70mm
- Weight 1.85Kg



- 5500K colour temperature
- 2 x 3W 6 SMD 2835 LED Lamps
- Polycarbonate Housing & Heads
- Wall mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 3500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output 380 Lumens
- IP65 Ingress Protection
- Dimensions 301mm x 280mm x 90mm
- Weight 1.65kg





EMNMIP65SPOT

### **EMST9WNMSPOT**

LED IP65 Non Maintained Emergency Twin Spot



- 5500K Colour Temperature
- 2 x 15 SMD 2835 LED Lamp
- Polycarbonate housing & heads
- Ceiling or wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 9.6V 2200mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output 535 Lumens
- Dimensions 305 x 280 x 85mm
- Weight 1.85Kg

EMBAT9.6V2200 9.6V 2200mAH Battery



- 2 x 3W 6 SMD 2835 LED Lamps
- Polycarbonate Housing & Heads
- Wall mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 3500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output 380 Lumens
- IP65 Ingress Protection
- Dimensions 301mm x 280mm x 90mm
- Weight 1.65kg





LED IP65 Non Maintained Emergency Twin Spot







- 5500K colour temperature
- 2 x 2W 3 SMD 2835 LED Lamps
- Polycarbonate Housing & Heads
- Wall mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1800mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output 272 Lumens
- IP20 Ingress Protection
- Dimensions 273mm x 260mm x 60mm
- Weight 1.35kg

- 5500K colour temperature
- 2 x 6 SMD 2835 LED Lamps
- Polycarbonate housing & heads
- Ceiling or wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 3000mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output 309 Lumens
- Dimensions 305 x 280 x 85mm
- Weight 1.85Kg





EMNMIP40SPOT

### EMNMIP20SPOT

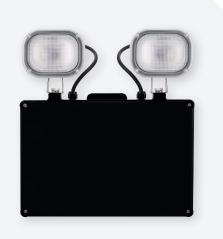
LED IP20 Non Maintained Emergency Twin Spot



- 5500K colour temperature
- 2 x 2W 3 SMD 2835 LED Lamps
- Polycarbonate Housing & Heads
- Wall mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1800mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output 272 Lumens
- IP20 Ingress Protection
- Dimensions 273mm x 260mm x 60mm
- Weight 1.35kg

- 5500K colour temperature
- 2 x 6 SMD 2835 LED Lamps
- Polycarbonate housing & heads
- Ceiling or wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 3000mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output 309 Lumens
- Dimensions 305 x 280 x 85mm
- Weight 1.85Kg





LED IP40 Non Maintained Emergency Twin Spot

### EMNMIP20BSPOT LED IP20 Non Maintained Emergency Twin Spot - Black

EMNMIP40BSPOT LED IP40 Non Maintained Emergency Twin Spot







3W LED IP65 Maintained Emergency Bulkhead

- Hinged Lid to Assist Installation
- 5500K Colour Temperature
- Maintained & Non-Maintained Operation
- SMD 2835 LED Lamp
- Polycarbonate Housing
- Ceiling or Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- Legend Included
- 3.6V 900mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Mains Light Output 151 Lumens
- Emergency Light Output -107 Lumens
- Dimensions 225 x 105 x 50mm
- Weight 0.5Kg



EMBAT3.6V900SER 3.6V 900mAH Battery

		<b>□</b> ⊷	<b>□</b> +→		
Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	2.2	6.0	6.0	6.0	2.1
2.5m	2.3	6.3	6.0	5.6	2.4
3.0m	2.2	6.4	6.3	6.2	2.5

Illuminance values based on a maintenance factor of 0.85

EMLED3WMHBULK2

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



30 SMD 2835 LED Lamp
Maintained & Non-Maintained Operation
Polycarbonate Housing

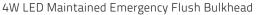
5500K colour temperature

- Recessed mounting
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd batteries
  BS EN 60598-2-22 Standards
- BS EN 60598-2-22 Standards
  Mains light output 131 Lumens
- Emergency light output 105 Lumens
- IP20 Ingress Protection
- Dimensions; 389 x 126 x 80mm
- Cut out dimensions: 340 x 90mm

EMBAT3.6V1500 3.6V 1500mAH Battery

Weight - 0.8Kg





					,
Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	2.4	6.3	6.3	6.3	2.4
2.5m	2.5	6.7	6.7	6.7	2.5
3.0m	2.5	6.9	6.9	6.9	2.4

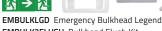
Illuminance values based on a maintenance factor of 0.85

EMDLEDWMFLUSH

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

- 5500K Colour TemperatureSMD 2835 LED Lamp
  - Maintained & Non-Maintained Operation
  - Polycarbonate housing
  - Ceiling or wall mounted
  - Charge and discharge protection
  - Green LED Indicator
  - 3 Hours Emergency Duration
  - Legend Included
  - 3.6V 1200mAh Ni-Cd Battery
  - BS EN 60598-2-22 Standards
  - Mains light output 120 Lumens
  - Emergency light output 100 Lumens
  - Dimensions 345 x 110 x 60mm





EMBULK2FLUSH Bulkhead Flush Kit EMBAT3.6V1200SER 3.6V 1200mAH Battery

		<b>←→</b>			
Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	3	7	6	5.5	2
2.5m	3	8	7	6	2.5
3.0m	3.2	8.8	7.8	6.8	2.6

Illuminance values based on a maintenance factor of 0.8

3W LED IP65 Maintained Emergency Bulkhead

EMDLED3WMBULK2

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

- 5500K Colour Temperature
- Maintained & Non Maintained Operation
- SMD 2835 LED Lamp
- Polycarbonate Housing
- Ceiling or Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1800mAH Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Mains Light Output 208 Lumen
- Emergency light Output -190 Lumen
- IP65 Ingress Protection
- Dimensions 350 x 110 x 60mm



EMBULKLGD Emergency Bulkhead Legend EMBULK2FLUSH Bulkhead Flush Kit EMBAT3.6V1800SER 3.6V 1800mAH Battery

- More

### EMDLED5WMBULK

5W LED IP65 Maintained Emergency Bulkhead

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	3.1	8.1	7.3	6.4	2.6
2.5m	3.2	8.6	7.8	7.0	2.7
3.0m	3.3	8.9	8.2	7.5	2.8

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

### duceri CIRCULAR BULKHEADS

### CIRCULAR BULKHEADS





### 5500k Colour Temperature

- 84 SMD 2835 LED Lamp
- Maintained & Non-Maintained Operation
- Polycarbonate Housing White finish
- Wall or Ceiling Mounted
- 1207 Lumen mains output
- 285 Lumen emergency output
- Charge and Discharge Protection
- Green LED indicator
- 3 Hours Emergency Duration
- 6V 1800mAh Ni-Cd Battery
- IP65 Rating
- BS EN 60598-2-22
- Dimensions 330 x 330 x 110mm

EMBAT6V1800 6V 1800mAH Battery

5500K Colour Temperature

Maintained & Non-Maintained Operation

 Microwave Duration Setting; 6 Seconds to 30 Minutes Microwave Sensitivity Setting; 1-10 Meters

Microwave LUX Setting; 0-30 Lux

84 SMD 2835 LED Lamp

Microwave 160° Sensor

Polycarbonate Housing

 Wall or Ceiling Mounted 1207 Lumen mains output

Green LED indicator

BS EN 60598-2-22

285 Lumen emergency output Charge and Discharge Protection

3 Hours Emergency Duration

Dimensions - 330 x 330 x 110mm

6V 1800mAh Ni-Cd Battery

White finish

IP65 Rating

Weight-2.4Kg

Weight-2.3Kg

### EM14WMCBULK

LED 14W Emergency Circular Bulkhead

		<b>←</b> ↓	<b>□</b> •→		
Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	5.7	13.9	13.9	13.9	5.7
2.5m	6.2	15.3	15.3	15.3	6.2
3.0m	6.7	16.3	16.4	16.4	6.7

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



### EM14WMCBULKMW

LED 14W Emergency Circular Bulkhead W/ Microwave Sensor

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	5.7	13.9	13.9	13.9	5.7
2.5m	6.2	15.3	15.3	15.3	6.2
3.0m	6.7	16.3	16.4	16.4	6.7

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

Wall or Ceiling Mounted

White finish

1207 Lumen mains output

5500K Colour Temperature

84 SMD 2835 LED Lamp

Polycarbonate Housing

- Green LED indicator
- IP65 Rating
- BS EN 60598-1
- Dimensions 330 x 330 x 110mm
- Weight 2.06Kg



EM14WMAINSCBULK LED 14W Mains Only Circular Bulkhead

- 5500K Colour Temperature
- 84 SMD 2835 LED Lamp
- Microwave 160° Sensor
- Microwave LUX Setting; 0-30 Lux
- Microwave Duration Setting; 6 Seconds to 30 Minutes
- Microwave Sensitivity Setting; 1-10 Meters
- Polycarbonate Housing
- White finish
- Wall or Ceiling Mounted
- 1207 Lumen mains output
- IP65 Rating
- BS EN 60598-1
- Dimensions 330 x 330 x 110mm
- Weight-2.16Kg



EM14WMAINSCBULKMW LED 14W Mains Only Circular Bulkhead W/ Microwave Sensor







### 5500K Colour Temperature

- Viewing distance 25m
- SMT 2835 LED Lamp
- Steel housing
- Wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Dimensions 390 x 190 x 60mm
- Weight 1.3Kg

**EMDLED3WMEXBOX** 3W LED Maintained Emergency Sign





**EMDLED3WMEXBOXD** 

3W LED Maintained

Emergency Sign DOWN

**EMDLED3WMEXBOXU** 3W LED Maintained Emergency Sign UP





EMDLED3WMEXBOXL 3W LED Maintained Emergency Sign LEFT

**EMDLED3WMEXBOXR** 3W LED Maintained Emergency Sign RIGHT

EMBAT3.6V1500

3.6V 1500mAH Battery

- 5500K colour temperature
- Viewing distance 25m
- SMD 2835 LED Lamp
- Steel housing
- Wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Dimensions 390 x 190 x 60mm
- Weight 1.3Kg

### **EMLED3WMEXBOXCH**

3W LED Maintained Emergency Chrome Sign



**EMLED3WMEXBOXCHU** 

Chrome Sign UP





**EMLED3WMEXBOXCHD** Chrome Sign DOWN

**EMLED3WMEXBOXCHL** 3W LED Maintained Emergency 3W LED Maintained Emergency 3W LED Maintained Emergency 3W LED Maintained Emergency Chrome Sign LEFT

**EMLED3WMEXBOXCHR** Chrome Sign RIGHT

EMBAT3.6V1500

3.6V 1500mAH Battery



- Viewing distance 25m
- SMD 2835 LED Lamp
- Steel housing
- Wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Dimensions 390 x 190 x 60mm
- Weight 1.3Kg





3W LED Maintained Emergency Brass Sign





**EMLED3WMEXBOXBRU** 3W LED Maintained Emergency Brass Sign UP

**EMLED3WMEXBOXBRD** 3W LED Maintained Emergency Brass Sign DOWN

EMLED3WMEXBOXBRL 3W LED Maintained

Emergency Brass Sign LEFT

**EMLED3WMEXBOXBRR** 3W LED Maintained Emergency Brass Sign RIGHT

5500K colour temperature Viewing distance - 25m

- SMD 2835 LED Lamp
- Steel housing
- Wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Dimensions 390 x 190 x 60mm
- Weight 1.3Kg



### **EMLED3WMEXBOXBK** 3W LED Maintained Emergency Black Sign











**EMLED3WMEXBOXBKU** Black Sign UP

**EMLED3WMEXBOXBKD** Black Sign DOWN

**EMLED3WMEXBOXBKL** 3W LED Maintained Emergency 3W LED Maintained Emergency 3W LED Maintained Emergency 3W LED Maintained Emergency Black Sign LEFT

**EMLED3WMEXBOXBKR** Black Sign RIGHT









### EMD2WMEXHSIGN LED 2W Hanging Exit Sign Legend





EMD2WMEXHSIGND

LED 2W Maintained

Hanging Exit Sign

Legend Down

EMD2WMEXHSIGNU LED 2W Maintained Hanging Exit Sign Legend Up











EMD2WMEXSIGNU LED 2W Maintained Exit Sign Legend UP

178

EMD2WMEXSIGND LED 2W Maintained Exit Sign Legend DOWN

EMD2WMEXSIGNL LED 2W Maintained Exit Sign Legend LEFT

5500K Colour Temperature

- 16 SMD 2835 LED Lamp Polycarbonate Frame, Acrylic Legend
- Ceiling Mounted
- 60 Lumen mains output
- 44 Lumen emergency output
- 24m Viewing Distance
- Charge and Discharge Protection
- 3 Hours Emergency Duration
- 3.6V 900mAh Ni-Cd Battery
- IP20 Rating
- BS EN 60598-2-22
- Legend Dimensions 190x 300mm
- Legend adjustable up to 650mm
- Weight-1.2Kg

EMWMBEXHSIGN Hanging Sign Wall Bracket





EMD2WMEXHSIGNR LED 2W Maintained Hanging Exit Sign Legend Right

- Hanging Exit Sign
  - 5500K Colour Temperature
  - Viewing distance 24m
  - SMD 3528 Lamp

EMD2WMEXHSIGNL

LED 2W Maintained

Legend Left

- Polycarbonate frame with legend
- Ceiling or wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 900mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Legend Dimensions 190x 300mm
- Weight 0.8Kg

EMBAT3.6V900



EMWMBEXHSIGN 3.6V 900mAH Battery Hanging Sign Wall Bracket



EMD2WMEXSIGNR LED 2W Maintained Exit Sign Legend RIGHT



**EMD3WMSLEXBOXUDLR** 

3W LED Maintained Emergency Sign Complete with All Legends

- 6500K Colour Temperature
- 3W 20 SMD 3014 LED + 5 SMD 2835 LED
- Polycarbonate Frame, PVC legends
- Wall Mounted
- 45 Lumen Mains Output
- 34 Lumen Emergency Output
- 29m Viewing Distance
- Charge and Discharge Protection
- 3 Hours Emergency Duration
- 3.6V 800mAh Ni-Cd Battery
- IP20 Ingress Protection
- BS EN 60598-2-22
- Legend Dimensions 320 x 185 x 26mm
- Weight-0.6Kg



### EMLED5WMBULKEX

LED 5W Maintained Exit Sign Complete with All Legends

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179

EMBAT3.6V900 3.6V 900mAH Battery

- 5500K Colour Temperature
- SMD 2835 LED Lamp
- 28m Viewing Distance
- Polycarbonate Housing
- Ceiling Mounted
- Charge and Discharge Protection
- 3 Hours Emergency Duration
- Double Sided
- Legends Included
- 3.6V 1800mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Dimensions 345 x 110 x 190 mm

EMD2WMEXHSIGNUDLR

5500K Colour Temperature

3W 16 SMD 2835 LED Lamp

3 Hours Emergency Duration

Charge and Discharge Protection

Viewing Distance - 24m

Ceiling Mounted

Green LED Indicator

3.6V 900mAh Ni-Cd

BS EN 60598-2-22

Weight - 1.5kg

LED 3W Maintained Hanging Exit Sign

Legend Up, Down, Left and Right

Polycarbonate Frame, Double Sided PVC Legend

Dimensions - 305mm x 225mm x 160mm

Legend Dimensions - 190mm x 300mm

Weight - 1Kg



### EMD2WMEXSIGNUDLR

LED 3W Maintained Exit Sign Legend Up, Down, Left and Right

- 5500K Colour Temperature
- Viewing Distance 24m
- 3W 16 SMD 2835 LED Lamp
- Polycarbonate Frame, Double Sided PVC Legend
- Ceiling or Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 900mAh Ni-Cd
- BS EN 60598-2-22
- Dimensions 305mm x 225mm x 160mm
- Legend Dimensions 190mm x 300mm
- Weight 0.8kg







- 5500K Colour Temperature
- High Power 5W LED
- Aluminium bezel
- Recessed Mounted
- Emergency light output 214 Lumen output

48MM

**CUTOUT** 

Wall

24

2.6

48MM

CUTOUT

• Charge and Discharge Protection

6.3

6.5

6.9

5500K Colour Temperature

Emergency light output - 263 Lumen output

Charge and Discharge Protection

EMBAT4.8V3500SER

3 Hours Emergency Duration

4.8V 3500mAh Ni-Cd Battery

High Power 5W LED

Aluminium bezel

Recessed Mounted

Green LED indicator

BS EN 60598-2-22

IP20 Rating

Weight- 0.9Kg

- Green LED indicator
- 3 Hours Emergency Duration
- 4.8V 3500mAh Ni-Cd Battery
- IP20 Rating
- BS EN 60598-2-22
- Weight- 0.9Kg
- EMD5WNMCDLK EMBAT4.8V3500SER LED 5W Emergency Corridor Lens Downlight 4.8V 3500mAH Battery \_\_ Axial/ Axial/ Transverse/ Mounting Transverse/ Transverse/ Height Transverse

 Wall	Axial	Axial	
3.6	8.4	7.4	
4.2	9.5	8.0	
4.7	10.7	8.8	

4.7 Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



### EMD5WNMDLK

2.0m

2.5m

3.0m

LED 5W Emergency Open Lens Downlight

	leigency oper	4.8V 3500mAH Battery	/		
		<b>→</b>	<b>─</b> +→		
Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	3.2	7.3	7.2	7.2	3.2
2.5m	3.7	8.4	8.4	8.4	3.7
3.0m	4.2	9.4	9.4	9.4	4.1

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

- 5500K Colour Temperature
- High Power 3W LED
- Aluminium bezel
- Recessed Mounted
- Charge and Discharge Protection
- Green LED indicator
- 3 Hours Emergency Duration
- Emergency light output 105 Lumen output
- 3.6V 1800mAh Ni-Cd Battery
- IP20 Rating
- BS EN 60598-2-22

2.5m

3.0m

Weight- 0.4Kg



1000 (100 8) 35MM CUTOUT EMBAT3.6V1800SER 3.6V 1800mAH Battery

1.8



~	5.6V 1800IIIAH Battery					
Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall	
2.0m	1.5	7.6	8.4	9.1	4.1	
2.5m	16	43	75	10.6	4.8	

4.2

8.2

Illuminance values based on a maintenance factor of 0.85

5.3

**END3WNMDLK** 

12.2

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

- 5500K Colour Temperature
- High Power 3W LED
- Aluminium bezel
- Recessed mounting
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- Emergency light output 138 Lumens
- 3.6V 1800mAh Ni-Cd Battery
- IP20 Rating
- BS EN 60598-2-22
- Weight- 0.4Kg



EMBAT3.6V1800SER CUTOUT / 3.6V 1800mAH Battery - - 1

						5 11 11 11 12	
LED	ЗW	Emerge	ency	Open	Lens	Downlig	ht
						********	

Includes silver & Black bezel options

		<b>→</b>			
Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	2.9	7.2	7.1	7.2	2.8
2.5m	3.1	7.7	7.6	7.7	2.9
3.0m	3.1	8.1	8.0	8.0	3.0

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)





### EMTSLCD

Emergency Light Test Switch with Digital Display



Emergency Light Test Switch

- Assists the testing of emergency lighting in accordance with BS5266
- Key activated with 4 pre-programmed test intervals;10 minutes, 30 minutes, 60 minutes & 180 minutes
- Clear LED digital display indication for duration test
- Optional audio buzzer alert for completion of duration test
- Compact design manufactured from antimicrobial material urea
- Operating Voltage: 220-240vac; 4A LED, 10A Incandescent, 6A Fluorescent

## 4 PRE-PROGRAMMED TEST INTERVALS:

86 x 86 x 33mm

- Assists the testing of emergency lighting in accordance with BS5266
- Key activated with 4 pre-programmed test intervals; 10 minutes, 30 minutes, 60 minutes & 180 minutes
- Clear LED indication for duration test
- Optional audio buzzer alert for completion of duration test
- Compact design manufactured from antimicrobial material urea
- 220-240vac Operation; 4A LED, 10A Incandescent, 6A Fluorescent

### 4 PRE-PROGRAMMED TEST INTERVALS:



er Supply	220~240vAC, 50/60Hz
ramming	10, 30, 60, 180 minutes
ay	LED
nting	Optional Flush or Surface
ent Rating	16A
hing Capacity	4 amp LED, 10 amp Incandes cent, 6 amp Fluroescent
nsions	86 x 86 x 33mm



### EMBAT3.6V900

### 3.6V 900mAH Battery

 Replacement battery for Duceri Emergency Lighting; EMD2WMEXHSIGN, EMD2WMEXSIGN



### EMBAT3.6V1200SER 3.6V 1200mAH Batterv

 Replacement battery for Duceri Emergency Lighting; EMDLED3WMBULK2



### EMBAT3.6V1500 3.6V 1500mAH Batterv

 Replacement battery for Duceri Emergency Lighting; EMLED5WMFLUSH, EMLEDWMFLUSH, EMDLED3WMEXBOX



### EMBAT3.6V1500SER

### 3.6V 1500mAH Battery

 Replacement battery for Duceri Emergency Lighting; EMLED3WMBULK2



### EMBAT3.6V1800SER

### 3.6V 1800mAH Battery

 Replacement battery for Duceri Emergency Lighting; EMLED3WMBULK, EMLED5WMBULK, EM3WNMDLK, EM3WNMCDLK, EMD3WNMDLK



duceri

### EMBAT3.6V3000 3.6V 3000mAH Batterv

 Replacement battery for Duceri Emergency Lighting; EMNMIP40SPOT, EMNMIP40BSPOT



### EMBAT4.8V600 4.8V 600mAH Battery

 Replacement battery for Duceri Emergency Lighting; EM2WMEXSIGN



### EMBAT3.6V900SER

### 3.6V 900mAH Battery

 Replacement battery for Duceri Emergency Lighting; EMLED3WMHBULK



### EMBAT4.8V3500SER

### 4.8V 3500mAH Battery

 Replacement battery for Duceri Emergency Lighting; EM5WNMCDLK, EM5WNMDLK



### EMBAT6V1800

### 6V 1800mAH Battery

 Replacement battery for Duceri Emergency Lighting; EM14WMCBULK, EM14WMCBULKMW

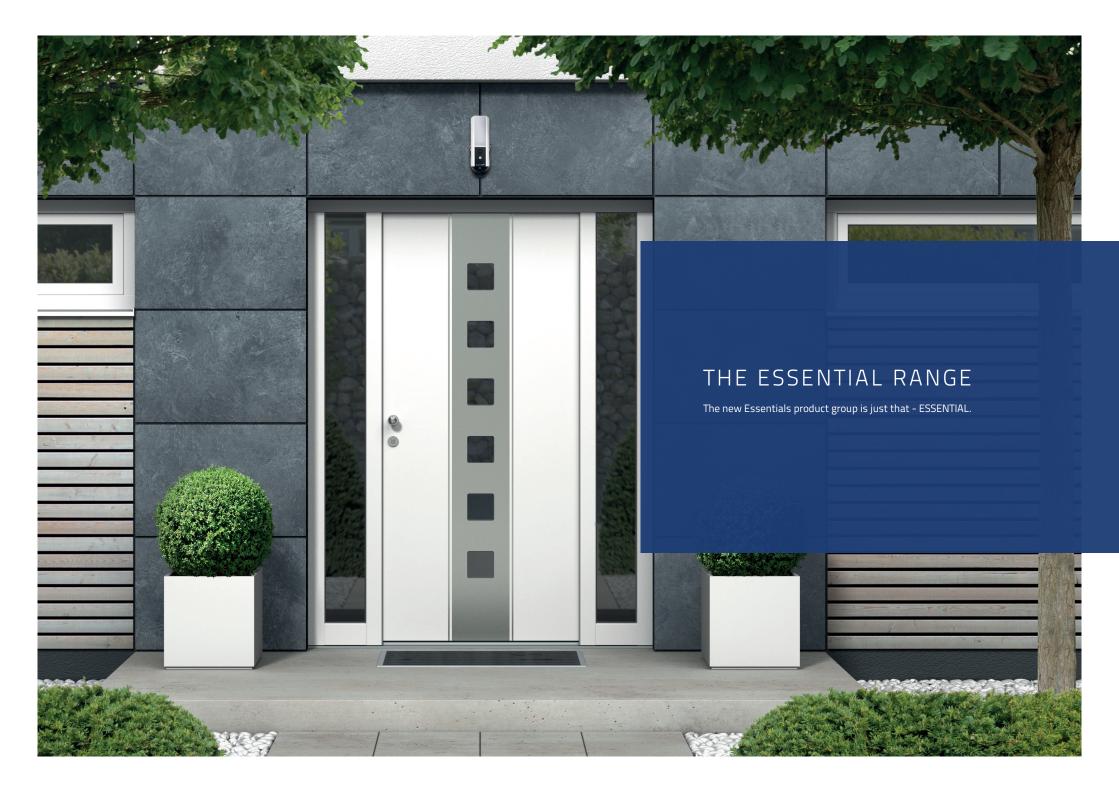


### EMBAT9.6V2200 9.6V 2200mAH Batterv

### Replacement battery for Duceri Emergency Lighting;

 Replacement battery for Duceri Emergency Lighting; EM9WNMSPOT2, EMD9WNMSPOT2

EMTS



### **GuardCam**<sup>\*</sup> EXTERNAL AREA PROTECTION SYSTEM

### EXTERNAL AREA PROTECTION SYSTEM



GUARDCAMBLK2K Black GUARDCAM2K White WI-FI Security Camera with Twin Spots



GUARDCAMDECOBLK Black GUARDCAMDECO Silver Dim Combined WI-FI Security Camera LED Light System

- Full 2K (4MP) Live View & Recording
- No Subscription or Additional Fees Required
- 116° Wide Angle Camera View
- 5000K Dual LED Lamps (25w)
- 2600 Lumen Output
- Motion or Human Activated Video Record
- Clear Two–Way Audio
- Remotely Activate or Dim LED Lamp
- IP65 Rated Ingress Protection
- Operates on 2.4GHz, 5 GHz Wi-Fi & Ethernet Network Connection
- Operating Temperature: -20 ~ +50°C

upply Voltage	110 ~ 240VAC
D Output	Up to 2600 Lumens
R Detection	270°
umber of PIRs	2
R Detection Range	10< metres
ewing Angle	156°
emory	128GB Max (8GB Supplied)
Rating	IP65
onstruction	Aluminium & Polycarbonate
mensions (mm)	320mm x 170mm x 220mm

- Wi-Fi Security Light for Remote Viewing
- Full 1080p HD Live View & Recording
- Notifications via APP
- Wide Angle Camera View
- Clear Two–Way Audio
- 3000K LED Lamp
- 800 Lumen Output
- Remotely Dim or Turn On/Off The LED Lamp
- Motion Activated Video Record
- Manual Alarm Feature
- IP55 Rated

PIR PIR

- Robust Metal Housing
- 8GB Memory Storage Provided (Up to 200 events)
- No subscription or additional fees required
- Requires 2.4GHZ Wi-Fi or LAN network connection

ply Voltage	80-260VAC
Output	800 Lumens
Detection Angle	100°
Detection Range	10< metres
nera Angle	120°
nera White Balance	Automatic
ro SD Card Format	FAT Maximum 64GB (Class10)
ating	IP55
Fi	2.4GHZ (IEEE 802.11 b/g/n)
ising	Metal
ensions (mm)	Body, 70(W) x 180(H) x 65(D) mm, Bracket:95(W)x110(H) x110(D)mm
ght	1KG

- Wi-Fi Security light for remote viewing & recording
- High Definition digital camera
- Receive smartphone push notifications for motion activations
- 16 SMD High quality LED security lamp
- 5000k colour light with 1500 lumen output
- Time & Lux adjustment for LED security lamp
- Active PIR with 180° x 10 meter coverage
- 16GB Micro SD card for recording video clips
- Up to 400 video clips stored onto supplied 16GB storage (Expandable up to 128GB)
- IP55 Rated robust housing for external applications
- Requires 2.4GHZ Wi-Fi

Supply Voltage	100-240VAC
Current Drain (activated)	0.4amp
Current Drain (quiescent)	0.005amp
LED Output	1500 Lumens
PIR Detection Angle	180 deg
PIR Detection Range	10 metres
Camera Exposure Control	Automatic
Camera White Balance	Automatic
Camera Sharpness	Automatic
SD Card Format	FAT/FAT32 Maximum 128GB
Image Format	MP4
IP Rating	IP55
Dimensions (mm)	290 x 160 x 140mm
Weight	1.206KG

- Detect the intruder, floodlight the area and initiate HD recording
- High Definition Camera
- 1500 Lumen LED lamp output
- Deliver a pre-recorded audible warning
- Capture up to 200 twenty second video clips with 8GB card supplied
- Maximum card capacity is 32GB

GuardCam LED is a complete all-in-one PIR floodlight, Camera, speaker and DVR system. Simply connect to mains power, fix to wall, set the time and date and switch on !

Supply Voltage	220-240VAC
Current Drain (activated)	0.4amp
Current Drain (quiescent)	0.005amp
LED Output	1500 Lumens
PIR Detection Angle	160 deg
PIR Detection Range	12 metres
Camera Exposure Control	Automatic
Camera White Balance	Automatic
Camera Sharpness	Automatic
SD Card Format	FAT/FAT32 Maximum 32GE
Image Format	AVI
IP Rating	IP44
Dimensions (mm)	180 x 190 x 315mm
Weight	1.206KG



GUARDCAMLEDWIFI Combined WI-FI Security Camera LED Light System



GUARD-CAM-LED Combined Security LED Floodlight

### NightHawk LOW ENERGY LED SECURITY LIGHT

### NIGHTHAWK Low Energy LED Security Light



NH150 Low Energy LED Flood Light

- LED floodlight 1500 lumen output
- 40,000 hours LED life
- Low energy 16.5w max. power consumption
- 160 degree PIR detector
- Wide spread illumination up to 120°
- Adjustable on time of 5 secs to 5 mins
- Adjustable lux dusk to dark
- Adjustable floodlight and PIR direction Horizontal and vertical axis
- Additional switching capability 50W LED 500W halogen
- Ideal for use with up to four NH150LED floodlights
- Weather proof, suitable for external use

ver Source	220 - 240VAC/50Hz
ver Consumption	16.5w (operational)
ection Method	Passive Infrared Sensor
ector Range	10M x 160 degrees
nt Output	1500 Lumens
mination Angle	120 degrees
Dur	5000K cool white
e Adjustment	5 seconds to 5 minutes
ximum Additional Load	LED 50W - Halogen 500W
Rating	IP55

- LED floodlight 1500 lumen output
- Wide spread illumination up to 120°
- Low energy 16w maximum power consumption
- Adjustable floodlight direction Horizontal and vertical axis
- Ideal for use with the NightHawk security light with the capability to switch up to 4 extra NH150 units
- Weather proof, suitable for external use

Power Source	220 - 240VAC/50Hz
Power Consumption	16w (operational)
Light Output	1500 Lumens
Illumination Angle	120 degrees
LED Light Output Colour	5600K cool white
Time Adjustment	5 seconds to 5 minutes
Maximum Additional Load	LED 50W - Halogen 500W
IP Rating	IP55

- 10W LED Flood Light in White or Black
- 4000K Colour Temperature
- 800 Lumen Output
- Built-in PIR: 110° Detection Angle, 8m Range with Pre-set 150 Seconds Activation Period
- Auto Lux Control
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Manual Override Function
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 110mm H x 99 W x 27 D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	10w
Detection Method	Passive Infrared Sensor
Detection Range	8M x 110 degrees
Light Output	800 Lumen
Colour	4000K
Time Adjustment	Pre-set 150 Seconds
IP Rating	IP65



LOW ENERGY LED SECURITY LIGHT NightHawk

Black NH10BS White NH10WS LED Security Light with Sensor 10W

- 20W LED Flood Light in White or Black
- 4000K Colour Temperature
- 1600 Lumen Output
- Built-in PIR: 110° Detection Angle, 8m Range with Pre-set 150 Seconds Activation Period
- Auto Lux Control
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Manual Override Function
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 117mm H x 101mm W x 24 D (Ex. Bracket)
- Includes Fixing Accessories

Power Source 220 - 240VAC/50Hz Power Consumption 20w
Power Consumption 20w
Detection Method Passive Infrared Sensor
Detection Range 8M x 110 degrees
Light Output 1600 Lumen
Colour 4000K
Time Adjustment Pre-set 150 Seconds
IP Rating IP65



Black NH20BS White NH20WS LED Security Light with Sensor 20W

### NightHawk LOW ENERGY LED SECURITY LIGHT

# Ad 24 <

**NH30WS** White **NH30BS** Black LED Security Light with Sensor 30W



NH50WSWhiteNH50BSBlackLED Security Light with Sensor 50W

30W LED	Flood	Light	in White	or Black
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- 4000K Colour Temperature
- 2400 Lumen Output
- Built-in PIR: 110° Detection Angle, 8m Range with Pre-set 150 Seconds Activation Period
- Auto Lux Control
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Manual Override Function
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 143mm H x 123mm W x 24mm D (Ex. Bracket)
- Includes Fixing Accessories

er Source	220 - 240VAC/50Hz
er Consumption	30w
ction Method	Passive Infrared Sensor
ction Range	8M x 110 degrees
t Output	2400 Lumen
ur	4000K
Adjustment	Pre-set 150 Seconds
ating	IP65

- 50W LED Flood Light in White or Black
- 4000K Colour Temperature
- 4000 Lumen Output
- Built-in PIR: 110° Detection Angle, 8m Range with Pre-set 150 Seconds Activation Period
- Auto Lux Control
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Manual Override Function
- Robust Construction
- Textured Diffuser
- Adjustable Bracket

Light

- Dimensions: 216mm H x 186mm W x 24mm D (Ex. Bracket)
- Includes Fixing Accessories

r Source	220 - 240VAC/50Hz
r Consumption	50w
tion Method	Passive Infrared Sensor
tion Range	8M x 110 degrees
Output	4000 Lumen
r	4000K
Adjustment	Pre-set 150 Seconds
ting	IP65

- 10W LED Flood Light in White or Black
- 4000K Colour Temperature
- 800 Lumen Output
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 110mm H x 99 W x 27 D (Ex. Bracket)
- Includes Fixing Accessories



Power Source	220 - 240VAC/50Hz
Power Consumption	10w
Light Output	800 Lumen
Colour	4000K
IP Rating	IP65

Black NH10B White NH10W LED Security Light 10W

- 20W LED Flood Light in White or Black
- 4000K Colour Temperature
- 1600 Lumen Output
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 117mm H x 101mm W x 24 D (Ex. Bracket)

Power Source 220 - 240VAC/50Hz

4000K

IP65

Power Consumption 20w Light Output 1600 Lumen

IP Rating

Includes Fixing Accessories



Black	NH20B	White	NH20W	
	LED	Security	Light 20W	

### NightHawk LOW ENERGY LED SECURITY LIGHT

### LOW ENERGY LED SECURITY LIGHT

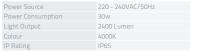


- 30W LED Flood Light in White or Black
- 4000K Colour Temperature
- 2400 Lumen Output
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 143mm H x 123mm W x 24mm D (Ex. Bracket)
- Includes Fixing Accessories

- 50W LED Flood Light in White or Black
- 4000K Colour Temperature
- 4000 Lumen Output
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 216mm H x 186mm W x 24mm D (Ex. Bracket)
- Includes Fixing Accessories



NH3OW LED Security Light 30W



Power Source	220 - 240VAC/50Hz
Power Consumption	50w
Light Output	4000 Lumen
Colour	4000K
IP Rating	IP65

Black NH50B White NH50W LED Security Light 50W

- 30W LED Flood Light in Black or White
   4000K Colour Temperature
   2400 Lumen Output
  - 1 Meter Power Cord
  - IP65 Ingress Protection for Exterior Use
  - Robust Construction
  - Textured Diffuser
  - Adjustable Bracket
  - Dimensions: 143mm H x 123mm W x 24mm D (Ex. Bracket)
  - Includes Fixing Accessories

- A4 Document Box
- Wall Mountable
- Coated Finish
- Lockable door, 2 keys supplied
- Suitable for fire & emergency lighting system documents
- Suitable for CCTV documents
- Dimensions: 310 x 250 x 80 mm
- Weight: 2 KG



FIRE SAFETY LOG BOOK MAGLB

### **DOCBOX** A4 Document Box

NH30B LED Security Light 30W

ower Source	220 - 240VAC/50Hz
ower Consumption	30w
ight Output	2400 Lumen
olour	4000K
Rating	IP65

### **Essentials** | HDMI EXTENDER

### HDMI EXTENDER **Essentials**



### HDMIXWF15D WIRELESS HDMI SENDER KIT HD 1080P 15M



### HDMIXWF50D

WIRELESS HDMI SENDER DONGLE KIT HD 1080P 50M • Extends HDMI signal up to 15 meters wire free in open field range

TX/RX: DC5V/1A TX:<2.5W RX: <2W

0~40°C

Extends HDMI signal up to 50 meters wire free

Connect a DVR or NVR HDMI output to a

Supports up to 1080p Full High Definition

Multiple applications for HDMI devices

in open field range

Supports IR pass through

5GHz operation frequency

monitor

Resolution

Working Temperature

TX/RX 78x38x13 mm

TX:DC5V/1A RX: DC5V/2A TX:<3W RX: <5W

480p@60Hz, 480i@60Hz, 576p@50Hz, 576i@50Hz, 720p@50/60Hz,

TX:1

TX: 78x38x13mm

RX-94x78x20mn

480p@60Hz, 576p@50Hz,

- Connect a DVR or NVR HDMI output to a monitor
- Supports up to 1080p Full High Definition Resolution
- Multiple applications for HDMI devices
- 5GHz operation frequency

HDMI Compliance

Extends HDMI signal	up	to	50	meters	wire	free
in open field range						

- Connect a DVR or NVR HDMI output to a monitor
- Supports up to 1080p Full High Definition Resolution
- Multiple applications for HDMI devices
- Supports IR pass through
- 5GHz operation frequency

Power Source	TX/RX: DC5V/2A
Power Consumption	TX:<7W RX: <5W
HDMI Compliance	1.3
HDCP Compliance	1.2
Resolution	480p@60Hz,720p@50/60Hz, 1080p@50/60Hz
Audio	Stereo
IR Frequency	20-60KHz
HDMI Input	TX:1
HDMI Output	RX:1
Transmission	5GHz
Distance (Open Field )	50 Meters
Working Temperature	0~50°C
Dimensions	TX/RX: 94x78x20mm



HDMIXWF50 WIRELESS HDMI SENDER KIT HD 1080P 50M

- Extends HDMI signal up to 50 meters wire free in open field range
- Connect a DVR or NVR HDMI output to a monitor
- Includes KVM function for mouse control connection to enable access to DVR or NVR menu
- Supports up to 1080p Full High Definition Resolution
- Multiple applications for HDMI devices
- 5GHz operation frequency

Power Source	TX/RX: DC5V/2A
Power Consumption	TX:<7W RX: <5W
HDMI Compliance	1.3
HDCP Compliance	1.2
Resolution	480p@60Hz,720p@50/60H 1080p@50/60Hz
Audio	Stereo
HDMI Input	TX:1
HDMI Output	RX:1 TX:1
Transmission	5GHz
Distance (Open Field )	50 Meters
Working Temperature	0~50°C
Dimensions	TX/RX: 150x78x23mm



### HDMIXWF50KVM

WIRELESS HDMI SENDER KIT HD 1080P 50M with KVM

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### HDMIXWF100 WIRELESS HDMI SENDER KIT HD 1080P 100M



### HDMIX120KVM HDMI SENDER KIT HD 1080P 120M with KVM



PLA Powerline Adapter

- Extends HDMI signal up to 100 meters wire free in open field range
- Connect a DVR or NVR HDMI output to a monitor
- Supports up to 1080p Full High Definition Resolution
- Multiple applications for HDMI devices
- Supports IR pass through
- 5GHz operation frequency

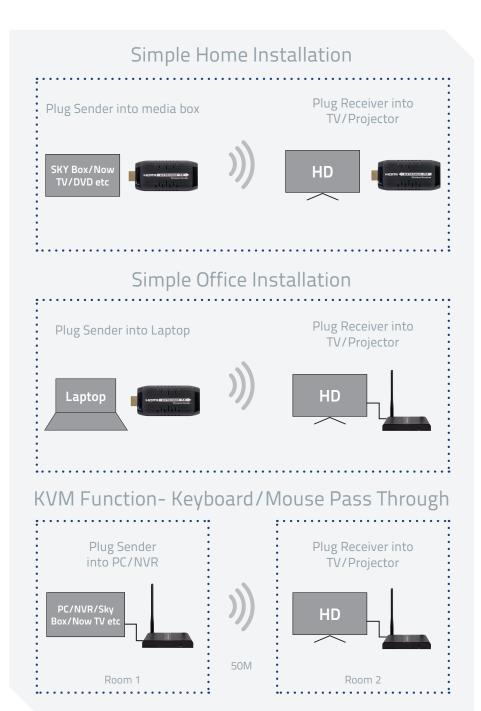
Power Source	TX/RX: DC5V/2A
Power Consumption	TX:<7W RX: <5W
HDMI Compliance	1.3
HDCP Compliance	1.2
Resolution	480p@60Hz,720p@50/60Hz, 1080p@50/60Hz
Audio	Stereo
IR Frequency	20-60KHz
HDMI Input	TX:1
HDMI Output	RX:1 TX:1
Transmission	5GHz
Distance (Open Field )	100 Meters
Working Temperature	0~50°C
Dimensions	TX/RX: 130x78x23mm

- Extends HDMI signal up to 120 meters via
- network cable Connect a DVR or NVR HDMI output to a monitor
- Includes KVM function for mouse control connection
- to enable access to DVR or NVR menu Supports up to 1080p Full High Definition Resolution
- CAT5 (80 meters), CAT5e (100meters), CAT6 (120
- meters) recommended Multiple applications for HDMI devices (Audio Supported)

TX/RX: DC5V/1A
TX:<3.5W RX: <3.5W
1.3
1.2
480p@60Hz,720p@50/60Hz, 1080p@50/60Hz
PCM
TX:1
RX:1
RJ45
<70 Mbps
120 Meters
0~50°C
TX/RX: 140x89x25mm

- 1 Port per unit
- 100Mbps
- Plug and Play installation

220 - 240VAC/50Hz
4.6W (Maximum)
128-bit AES Encryption
1*10/100Mbps Ethernet Port
Up to 300 meters/1000 feet over existing electrical wiring
PWR, PLC, ETH
CE, FCC, RoHS





### TIME SWITCHES & HEATING CONTROLS

Sangamo offer a wide range of time switches and heating controls for domestic, commercial and industrial use. Our reputation for quality and reliability is unrivalled.

SANGAMO





For certain properties a simple programmer to activate the heating or hot water is all that is required. A Choice+ Programmer allows the occupant to specify when a call for heat is made in order to match their lifestyle and ensuring energy efficiency.

There is an option of 1 to 3 channel programmers in order to suit the system application; from single channel control suitable for combi boilers, to double control for independent heating and hot water, and finally a 3-channel option for when 2 heating zones are required.

In addition, each Choice+ Programmer has a selectable Service Interval function, which assists with compliance to the Gas Safety Regulations requiring landlords to carry out annual gas safety checks on appliances in rented properties.

- 24 Hour, 5/2 Day and 7 Day Programmable
- 2 or 3 ON/OFF Periods
- 1, 2 or 3 Hour Boost
- Holiday Mode
- Pre-Programmed Schedule Ready for Use
- Summer/Winter Time Change
- Backlit Display
- Suitable for pumped systems
- With/without Service Interval Function
- 2A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Battery Type	Lithium Cell CR1225
Enclosure Protection	IP30
Materials	ABS
Wiring	Fixed wiring only
Service Interval Function	Programmable
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Selection	On, Off, Auto, All Day
Heating System	Pumped
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



### CHPPR2 WHITE CHPPR2S SILVER

2 Channel Programmer with Digital Display and

Service Interval Function



CHPPR2B BLACK



CHPPR1 WHITE CHPPR1S SILVER

CHPPR1B BLACK

1 Channel Programmer with Digital Display and Service Interval Function



	24 Hour, 5/2 Day	and / Day	Programmab
_		and a star	

2 or 3 ON/OFF Periods 1, 2 or 3 Hour Boost

E ( 2 D

- Holiday Mode
- Pre-Programmed Schedule Ready for Use
- Summer/Winter Time Change
- Backlit Display
- Suitable for pumped Systems
- With/without Service Interval Function
- 2A Switch Rating 240vAC

ower Supply	230V AC, 50Hz
perating Temperature	0°C to 40°C
otal Switch Rating	230V AC, 2(1)A
lattery Type	Lithium Cell CR1225
nclosure Protection	IP30
laterials	ABS
Viring	Fixed wiring only
ervice Interval Function	Programmable
lock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
rogram Selection	On, Off, Auto, All Day
leating System	Gravity
limensions	140mm x 88.6mm x 32.1mm
omplies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

- 24 Hour, 5/2 Day and 7 Day Programmable
- 2 or 3 ON/OFF Periods
- 1.2 or 3 Hour Boost
- Holiday Mode
- Pre-Programmed Schedule Ready for Use
- Summer/Winter Time Change
- Backlit Display
- Suitable for pumped systems
- With/without Service Interval Function
- 2A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Battery Type	Lithium Cell CR1225
Enclosure Protection	IP30
Materials	ABS
Wiring	Fixed wiring only
Service Interval Function	Programmable
Clock	12 hour am/pm, 1 minute resolution accuracy +/- 1.5 sec/day
Program Selection	On, Off, Auto, All Day
Heating System	Pumped
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directi 2006/95/EC



CHPPR3 WHITE CHPPR3S SILVER CHPPR3B BLACK

3 Channel Programmer with Digital Display and Service Interval Function





### CHOICE PROGRAMMERS

Programmers are a key component of heating control systems. Since many homes are unoccupied for parts of the day, there is little point in heating them if no one is there to benefit. A programmer allows the occupant to specify when the heating comes on to match their lifestyle and their heating requirements.

For many people in the UK, this simply means firing up the heating in the winter months for a couple of hours in the morning, so the house is warm when they wake up, and then firing the heating up again in the evening so the house is warm when they get home until they go to bed.

- 24 hour, 5/2 day and 7 day selectable
- 2 or 3 ON/OFF periods selectable
- 1, 2 or 3 hour boost
- Advance to next programmed event
- Automatic Summer/Winter time change
- Standard wall plate simple plug in and replace
- Pumped or gravity system selectable

Power Supply         230V AC, 50Hz           Operating Temperature         0°C to 40°C           Total Switch Rating         230V AC, 2(1)A (per channel)           Contact Type         1B, Micro-Disconnection           Battery Type         Lithium Cell CR2032		
Total Switch Rating         230V AC, 2(1)A (per channel)           Contact Type         1B, Micro-Disconnection           Battery Type         Lithium Cell CR2032		Power Supply
Contact Type 1B , Micro-Disconnection Battery Type Lithium Cell CR2032		Operating Temperature
Battery Type Lithium Cell CR2032	per channel)	Total Switch Rating
	onnection	Contact Type
	2032	Battery Type
Enclosure Protection IP30		Enclosure Protection
Plastics Thermoplastic, flame retardant	lame retardant	Plastics
Insulation Class Double		Insulation Class
Wiring Fixed wiring only	y.	Wiring
Backplate Industry standard	rd	Backplate
Dimensions 140mm x 87mm x 37mm	1 x 37mm	Dimensions
Clock 12 hour am/pm, 1 minute resolutio accuracy +/- 1.5 sec/day		Clock
Program Resolution 10mins		Program Resolution
Program Selection Auto, On all day, On constant, off	On constant, off	Program Selection
Heating System Pumped or Gravity	rity	Heating System
Complies with EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC		Complies with



2 channel programmer. Designed for separate control of heating and stored hot water. This programmer can also be used with gravity systems.

### CHOICE PR2n

2 Channel Programmer

Also available: CHOICE PR2SI (as above with Service Interval feature)





1 channel programmer. Ideal for use with combi boilers with only one heating zone. This programmer has volt free contacts.

### CHOICE PR1n

1 Channel Programmer



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Also available: CHOICE PR1SI (as above with Service Interval feature)

- 24 hour, 5/2 day and 7 day selectable
- 2 or 3 ON/OFF periods selectable
- 1, 2 or 3 hour boost
- Advance to next programmed event
- Automatic Summer/Winter time change
- Standard wall plate simple plug in and replace
- Pumped

230V AC, 50Hz
0°C to 40°C
230V AC, 2(1)A
1B , Micro-Disconnection (Voltage Free)
Lithium Cell CR2032
IP30
Thermoplastic, flame retardant
Double
Fixed wiring only
Industry standard
140mm x 87mm x 37mm
12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
10mins
Auto, On all day, On constant, off
Pumped
EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

	24	hour,	5/2	day	and	7	day	sel	ecta	b
--	----	-------	-----	-----	-----	---	-----	-----	------	---

- 2 or 3 ON/OFF periods selectable
- 1, 2 or 3 hour boost
- Advance to next programmed event
- Automatic Summer/Winter time change
- Standard wall plate simple plug in and replace
- Pumped system
- Comply with Part L of the Building Regulations

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Contact Type	1B , Micro-Disconnection
Battery Type	Lithium Cell CR2032
Enclosure Protection	IP30
Plastics	Thermoplastic, flame retardant
Insulation Class	Double
Wiring	Fixed wiring only
Backplate	Industry standard
Dimensions	140mm x 87mm x 37mm
Clock	12 hour am/pm, 1 minute resolution accuracy +/- 1.5 sec/day
Program Resolution	10mins
Program Selection	Auto, On all day, On constant, off
Heating System	Pumped
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



3 channel programmer offers 1 hot water channel and 2 separate heating zones, dependant on the homes plumbing but normally split upstairs & downstairs. This programmer meets the requirements of the building regulations for homes over 150m<sup>2</sup>.

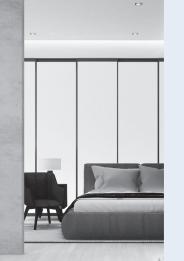
### CHOICE PR3n 3 Channel Programmer

Also available: CHOICE PR3SI (as above with Service Interval feature)



### SANGAMO CHOICE PLUS THERMOSTATS

### CHOICE PLUS THERMOSTATS SANGAMO



### **CHOICE PLUS THERMOSTATS**

A Choice+ room thermostat regulates and maintains a desirable temperature throughout the home by calling for heat as the temperature varies throughout the day.

Choice+ thermostats include TPI feature to ensure a maintained temperature by analysis of the heating and cooling periods. Choice+ programmable thermostats include Optimum Start and Delayed Stop for additional efficiency, heating and cooling for the time programmed.

These features combine to offer the best in heating comfort and energy efficiency when compared to traditional On/Off thermostats.

For installation convenience Choice+ wireless thermostats are available if a hardwired connection is not available in the intended location.

Large Temperature Adjustment Dial

Electronic Sensor for Accurate and Responsive

• Call for Heat Indication LED

Performance

- Large Temperature Adjustment Dial
- Tamper Resistance Cover with Security Torx Screw
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- 5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- 10A Switch Rating 240vAC

230V AC, 50Hz
-5°C to 50°C
10A
0.5°C and 1°C
5°C to 30°C
Yes
Yes
Electronic Sensor for Accurate and Responsive Performance
Yes; Tamper Resistance Cover with Security Torx Screw
86mm x 88mm x 38mm
EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



### CHPRSTATT WHITE CHPRSTATTS SILVER CHPRSTATTB BLACK

Tamperproof Electronic Room Thermostat





CHPRSTAT WHITE CHPRSTATS SILVER CHPRSTATB BLACK

Electronic Room Thermostat



<ul> <li>TPI (Time Proportional &amp; Integral) Control for Heating Efficiency</li> </ul>
5°C to 30°C Set Temperature Range
<ul> <li>0.5°C and 1°C Temperature Swing Adjustment</li> </ul>
10A Switch Rating 240vAC

230V AC, 50Hz
-5°C to 50°C
10A
0.5°C and 1°C
5°C to 30°C
Yes
Yes
Electronic Sensor for Accurate and Responsive Performance
86 mm x 88 mm x 38 mm
EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

- Electronic Sensor for Accurate and Responsive Performance
- Tamper Resistance Cover with Security Torx Screw
- -5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- 10A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	-5°C to 50°C
Current Rating	10A
Temperature Swing Adjustment	0.5°C and 1°C
Set Temperature Range	-5°C to 30°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Call for Heat Indication LED	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Tamper Resistant	Yes; Tamper Resistance Cover with Security Torx Screw
Tamper Resistant Dimensions	
	Security Torx Screw



### CHPRSTATF WHITE CHPRSTATFS SILVER CHPRSTATFB BLACK

Electronic Frost Thermostat

ErP Class 4 +2%

### **SANGAMO** CHOICE PLUS THERMOSTATS



### CHPRSTATD WHITE CHPRSTATDS SILVER CHPRSTATDB BLACK

Electronic Room Thermostat with Digital Display





CHPRSTATDRF WHITE CHPRSTATDRFS SILVER CHPRSTATDRFB BLACK

Wireless Electronic Room Thermostat with Digital Display



- Large Dial with Digital Display
- Electronic Sensor for Accurate and Responsive
   Performance
- TPI (Time Proportional &Integral) Control for Heating Efficiency
- Comfort/Economy or ON/OFF Modes
- Battery Powered with Low Indication Status (Batteries Supplied)
- 5°C to 30°C Set Temperature Range
- Frost Protection
- 3A Contact Rating (Volt Free)

Power Supply	2 x AA Batteries
Operating Temperature	0°C to 50°C
Current Rating	ЗА
Switching Differential	1°C
Set Temperature Range	5°C to 30°C
Temperature Frost Protection	5°C
Temperature Display Range	3°C to 51°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Dimensions	86mm x 88mm x 38mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive
	2006/95/EC

- Large Dial with Digital Display
- Wireless Communication Between Thermostat and Receiver
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Comfort/Economy or ON/OFF Modes
- Battery Powered with Low Indication Status (Batteries Supplied)
- 5°C to 30°C Set Temperature Range
- Frost Protection
- Transmission frequency: 433 Mhz (80m Open Field, 30m Indoor Transmission)
- 16A Receiver Contact Rating(Volt Free)

Power Supply	2 x AA Batteries (Transmitter) & 240VAC, 50hz (Receiver)
Operating Temperature	0°C to 50°C
Current Rating	16A
Switching Differential	1°C
Set Temperature Range	5°C to 30°C
lemperature Frost Protection	5°C
Femperature Display Range	3°C to 51°C
Frost Protection	Yes; 5°C
FPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Fransmission Distance	80m open, 30m indoors
Fransmission Frequency	433 Mhz
Dimensions	86 mm x 88 mm x 38 mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

- 24 or 7 Day Programmable
- 6 Time/Temperature Events per Day
- Permanent, Timed and Temporary Override Features
- Pre-Programmed Schedule Ready for Use
- Electronic Sensor for Accurate and Responsive
   Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Optimum Start/ Delay Start and Delayed Stop for Additional Efficiency
- Summer/Winter Time Change

Power Supply	4 x AAA Batteries
Operating Temperature	0°C to 50°C
Current Rating	ЗА
Switching Differential	+/-0.5°C or +/-1.0°C selectable
Set Temperature Range	5°C to 35°C
Temperature Accuracy	+/-1°C
Temperature Display Range	0°C to 50°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Optimum Start/ Delay Start and Optimum Stop for Additional Efficiency	Yes
Programming Schedule	24 Hour or 7 Days
Available Operations	Up to 6 per Day
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, En60730-2.9, EMC Directiv 2004/108/EC, LVD Directive 2006/95/

- Wireless Communication Between Thermostat and Receiver
- 24 or 7 Day Programmable
- 6 Time/Temperature Events per Day
- Permanent, Timed and Temporary Override Features
- Pre- Programmed Schedule Ready for Use
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Optimum Start/ Delay Start and
- Delayed Stop for Additional Efficiency
- Battery Powered with Low Indication Status (Batteries Supplied)

Power Supply	4 x AAA Batteries & 240VAC, 50hz (Receive
Operating Temperature	0°C to 50°C
Current Rating	16A
Switching Differential	+/-0.5°C or +/-1.0°C selectable
Set Temperature Range	5°C to 35°C
Temperature Accuracy	+/-1°C
Temperature Display Range	0°C to 50°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Optimum Start/ Delay Start and Optimum Stop for Additional Efficiency	Yes
Programming Schedule	24 Hour or 7 Days
Available Operations	Up to 6 per Day
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Transmission Distance	80m open, 30m indoors
Transmission Frequency	433 Mhz
Dimensions	88mm x 88mm x 39.4mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/E



### CHPRSTATDP WHITE CHPRSTATDPS SILVER CHPRSTATDPB BLACK

7 Day Programmable Room Thermostat





CHPRSTATDPRF WHITE CHPRSTATDPRFS SILVER CHPRSTATDPRFB BLACK

BACKLIT

Wireless Programmable Thermostat with Digital Display

### CHOICE THERMOSTATS SANGAMO



### **CHOICE THERMOSTATS**

A room thermostat is used to regulate and maintain a desirable temperature throughout the home. It works by switching the heating system on and off as the temperature varies throughout the day.

For example, if the temperature drops below a certain level, a sensor in the room thermostat can be made to trigger the switch for the boiler and pump which will heat the radiators and in turn, the rooms in the home. If the room rises above a certain temperature, the thermostat will then turn off the central heating system so that your house will cool down to its desired temperature once more.

- Dual diaphragm temperature sensing element
- Suitable for surface or pattress box mounting
- 10 to 30°C Set point range
- 2 Wire Installation
- Three terminal heating/cooling changeover
- Complete with tamperproof cover

Power Supply	230V AC, 50Hz
Operating Temperature	10°C to 30°C
Current Rating	10(3) A
Temperature Differential	Approx 4°C
Operating Temperature Range	0°C to 40°C
Dimensions	L83 x H83 x D37
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



### **CHOICE RSTAT1T** Tamperproof Mechanical Thermostat

ErP Class 1 +1%



CHOICE RSTAT1 Mechanical Thermostat



<ul> <li>Dual diaphragm temperature sensing elem</li> </ul>	ent
---	-----

- Suitable for surface or pattress box mounting
- 10 to 30°C Set point range

Operating Temperature 10°C to 30°C

Operating Temperature 0°C to 40°C

- 2 Wire Installation
- Three terminal heating/cooling changeover

- LCD showing room temperature
- Comfort/Economy or ON/OFF modes
- Frost protection
- Battery Powered (with battery low indication)
- 2 wire installation
- 5-30°C set point range

Power Supply	2 Alkaline batteries 1.5V (type AA)
Contact Rating	3A, 250V AC, (Volt free contact)
Power reserve	1 year
Temperature adjustment range	5-30°C
Temperature frost protection	5°C (Non adjustable)
Temperature display range, scale	3 to 51°C, 1°C
Operating Temperature	0 to 50°C
Storage Temperature	10-60°C
Switching Differential	+/-1°C
Protection Rating	IP21
Wire Size	0.5-1.5mm2
Dimensions	86mm x 86mm x 32mm
Complies with	EN60730-1, EN60730-2-9, EMC directive 2004/108/EC, LVD directive 2006/95/EC



**CHOICE RSTAT3** Digital Thermostat

> ErP Class 1 +1%

### SANGAMO CHOICE THERMOSTATS

### CHOICE THERMOSTATS SANGAMO



### CHOICE RSTAT3RF Wireless Digital Thermostat





### CHOICE RSTAT5RF

Wireless Digital Programmable Thermostat



- 30 meters range to the Receiver
- Comfort/Economy or On/Off modes
- Unique RF address to avoid interference
- Clear LCD display showing room temperature
- Large control dial
- Frost protection
- 5-30°C set point range

ansmitter	
ower Supply	2xAA 1.5V batteries
attery Lifespan	1 year
emperature Adjustment Range	5-30°C
emperature Display Range, Scale	3-51°C, 1°C
emperature Frost Protection	5°C (non adjustable)
witching Differential	+/-1°C
imensions	86 x 86 x 32mm
ansmission Frequency	433Mhz
ansmission Distance	80m open, 30m indoors
lounting Method	Wall/Surface
eceiver	
ower Supply	230Vac, 50Hz
ontact Rating	16A, 250Vac (Volt Free contact)
sulation class	2
exible Wire Size	1.5mm2
igid Wire Size	1.5mm2
imensions	86 x 86 x 55, when mounted
lounting	Wall using supplied backbox
ansmitter and Receiver	
perating Temperature	0-50°C
orage Temperature	10-60°C
rotection Rating	IP21

- 30 meters range to the Receiver
- Economy and Comfort Operation
- Unique RF address to avoid interference
- 24 hour or 7 day programmable
- 6 programmable events per day
- Button press back-lit operation
- Frost protection
- 5-35°C set point range

### Transmitter

Power Supply	4xAAA 1.5V Alkaline batteries
Battery lifespan	1 year
emperature display range	5-35°C (increment 0.1)
emperature control range	0- 50°C (increment 0.5)
Program time increment	10 minutes
emperature accuracy	+/- 1°C
witching Differential	+/-05°C or +0/-0.1°C selectable
Operating Temperature	0-50°C
lock Accuracy	<1sec / day
Protection Rating	IP30
Dimensions	110 x 104 x 21.5mm
ransmission Frequency	868Mhz
ransmission Distance	80m open, 30m indoors
Aounting	Wall or free standing using table stand
Receiver	
Power supply	230Vac, 50Hz
Contact rating	16A, 250Vac (Volt Free contact)
nsulation class	2
lexible Wire Size	0.5-1.5mm
Rigid Wire Size	0.5-2.5mm
Dimensions	88 x 88 x 39.4mm
Vall mounting	Industry standard
Complies with	EN60730-1, EN60730-2-7, EN60730-11

- Bi-Metallic temperature sensing element
- Suitable for surface or switch box mounting
- -5 to 25°C set point range
- Tamper resistant cover fitted with accelerator heater



### **CHOICE FSTAT1** Frost Thermostat

- Easy fixing to all hot water cylinders
- Suitable for use on uninsulated and foam lagged cylinders

Plastic coated spring wire (1800mm)

- Cylinder strap and hooks provided
- Pipe mounting attachment included



CHOICE CSTAT Cylinder Thermostat

### WI-FI THERMOSTATS

Sangamo's Wi-Fi Thermostat adds smart functionality to your home, ensuring comfortable heating at the right time.

Benefit from energy efficient programming and remote access via APP allowing constant monitoring and control at your fingertips.

The large LCD display and simplified APP has been designed to assist with straight forward installation and operation; suitable for electric, gas or oil systems.



CHOICE RSTATWIFIBLK





Set Temperature You can set the temperature from anywhere, even if you're

not at home.



### Analyse Usage

Track your energy usage from an easy-to-read report. This can highlight periods where heating is wasted, saving you energy.



### **Program Schedules**

Create heating schedules from anywhere, so that your heating is on at the times you want.

- Room thermostat controlled through APP
- Free 'SANGAMO CHOICE' APP with no subscription fees
- Monitor room temperature and thermostat activity
- 100-meter open field range from thermostat to receiver (868mHz)
- 7 day programmable, 6 programmable events per day
- Large LCD display
- 5-35°C set point range
- Frost protection
- Wi-Fi function requires 2.4GHZ network and thermostat to be powered with a mains supply or MicroUSB

nen	dl	

Power Supply	240vAC or microUSB and 4x AAA Alkaline batteries
emperature operating range	0-50°C
emperature control range	5-35°C
emperature accuracy	0.1°C
Protection Rating	IP21
ransmission Frequency	868mHz
ransmission Distance	100 Meter (Open Field)
Vi-Fi Frequency	2.412GHZ-2.484GHZ
lounting	Wall or Stand
imensions	124x88x21mm
leceiver	
ower Supply	240vAC
witch Rating	16A@250vAC
ransmission Frequency	868mHz
ransmission Distance	100 Meter (Open Field)
imensions	85x85x24mm



### CHOICE RSTATWIFI

Wi-Fi Thermostat



- Room thermostat controlled through APP
- Free 'SANGAMO CHOICE' APP with no subscription fees
- Monitor room temperature and thermostat activity
- 100-meter open field range from thermostat to receiver (868mHz)
- 7 day programmable, 6 programmable events per day
- Large LCD display
- 5-35°C set point range
- Frost protection
- Wi-Fi function requires 2.4GHZ network and thermostat to be powered with a mains supply or MicroUSB

### Thermostat

Inermostat	
Power Supply	240vAC or microUSB and 4x AAA Alkaline batteries
Temperature operating range	0-50°C
Temperature control range	5-35°C
Temperature accuracy	0.1°C
Protection Rating	IP21
Transmission Frequency	868mHz
Transmission Distance	100 Meter (Open Field)
Wi-Fi Frequency	2.412GHZ-2.484GHZ
Mounting	Wall or Stand
Dimensions	124x88x21mm
Receiver	
Power Supply	240vAC
Switch Rating	16A@250vAC
Transmission Frequency	868mHz
Transmission Distance	100 Meter (Open Field)
Dimensions	85x85x24mm



### CHOICE RSTATWIFIBLK

Wi-Fi Thermostat





- Clear Indication LEDs
- Single Gang Surface (Mount Box Included) or Flush Mounting
- Supplied with Replaceable BS1362 13A Fuse
- 13A Switch Rating 240vAC



**PSPBF** WHITE **PSPBFS** SILVER **PSPBFB** BLACK 2 Hour Electronic Boost Timer & Fused Spur



- 30 Mins, 1 Hour and 2 Hour Boost Function
- Clear Indication LEDs
- Single Gang Surface (Mount Box Included) or Flush Mounting
- 16A Switch Rating 240vAC



PSPB WHITE PSPBS SILVER PSPBB BLACK 2 Hour Electronic Boost Timer



### **POWERSAVER PLUS TIMERS**

The primary application for the POWERSAVER+ is to control immersion heaters. In a typical UK household nearly 20% of a home's energy cost is spent on heating hot water. Leaving an immersion heater on all the time can be a significant waste of energy that can drive this figure up to 25% or higher. The automatic control of a POWERSAVER+ can save on fuel expenditure and energy wastage when the user may forget.

Amongst a wide range of applications, the POWERSAVER+ models are also suitable for combi boilers, panel heaters, lighting including LED and towel rails.

The range includes a double pole switched fused option to incorporate an extra isolation feature which separates the live and neutral wires, adding additional safety for high loads.

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive 240VAC 2A LED Lighting 240VAC
Boost Durations	30 Minutes, 1 Hour or 2 hours
Fixing	Single Pattress – Surface and Flush Mounting
IEC Protection Class	Class II
Temperature Rating	T40
Material	ABS
Operating Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730

# **SANGAMO** POWERSAVER PLUS TIMERS



7 Day Time Switch with Boost

• 5:35.2	15 <sup>°°</sup> 35 œ	5:35 c2
• IS 36 02	SANGAMO	

**PSPSF24** WHITE**PSPSF24S** SILVER**PSPSF24B** BLACK24 Hour Fused Spur Time Switch with Boost



24 Hour, 5/2 Day & 7 Day Cycles

- 10 On/Off Programs per Day
- Permanent Memory Reserve
- 15 mins, 30 mins, 1 Hour, 2 Hour, 4 Hour and 6 Hour Boost Function
- Clear Indication Display
- Button Lock Feature
- Summer / Winter time Change
- Single Gang Surface (Mount Box Included) or Flush Mounting
- 16A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive 240VAC 2A LED Lighting 240VAC
Boost Durations	15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, or 6 Hours
Memory Reserve	Permanently Reserves Settings
Terminals	Suitable for max. 2.5 mm² flexible and 4.0 mm² fixed cabling
IEC Protection Class	Class II
Temperature Rating	T40
Display	LCD
Material	ABS
Operation Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730

- 24 Hour Programming10 On/Off Programs per Day
- Permanent Memory Reserve
- 15 mins, 30 mins, 1 Hour, 2 Hour, 4 Hour and 6 Hour Boost Function
- Clear Indication Display
- Button Lock Feature
- Summer / Winter time Change
- Single Gang Surface (Mount Box Included) or Flush Mounting
- Supplied with Replaceable BS1362 13A Fuse
- 13A Switch Rating 240vAC

er Supply	AC220-240 50/60 Hz
act Rating	13A Resistive (3kW) 750W Incandescent, Halogen lighting 500W Fluorescent lighting 200W LED lighting 100W Compact Fluorescent lighting
st Durations	15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, or 6 Hours
nory Reserve	Permanently Reserves Settings
iinals	Suitable for max. 2.5 mm² flexible and 4.0 mm² fixed cabling
Protection Class	Class II
perature Rating	T40
lay	LCD
erial	ABS
ration Temperature	-10°C to 40°C
ensions	86mm x 86mm x 35mm
plies with	BS EN60730

- 24 Hour, 5/2 Day & 7 Day Programming
- 10 On/Off Programs per Day
- Permanent Memory Reserve
- 15 mins, 30 mins, 1 Hour, 2 Hour, 4 Hour and 6 Hour Boost Function
- Clear Indication Display
- Button Lock Feature
- Summer / Winter time Change
- Single Gang Surface (Mount Box Included) or Flush Mounting
- Supplied with Replaceable BS1362 13A Fuse
- 13A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	13A Resistive (3kW) 750W Incandescent, Halogen lighting 500W Fluorescent lighting 200W LED lighting 100W Compact Fluorescent lighting
Boost Durations	15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, or 6 Hours
Memory Reserve	Permanently Reserves Settings
Terminals	Suitable for max. 2.5 mm² flexible and 4.0 mm² fixed cabling
IEC Protection Class	Class II
Temperature Rating	T40
Display	LCD
Material	ABS
Operation Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730



PSPSF247 WHITE PSPSF247S SILVER PSPSF247B BLACK

7 Day Fused Spur Time Switch with Boost



- Packs of 5
- BS1362 13A Fuse



#### **PSPFUSE** Powersaver Plus Spare Fuses



### **POWERSAVER CONTROLLERS**

The primary application for the Powersaver range is to control immersion heaters. In a typical UK household nearly 20% of a home's energy cost is spent on heating hot water. Leaving an immersion heater on all the time can be a significant waste of energy that can drive this figure up to 25% or higher.

Immersion heaters are often rated at 3kw which, if left on permanently, can cost around 13p per hour/ £1.56 per day/ £9 per week/ £450 per year, so it is best to have control of your heating patterns.

Fitting a Sangamo immersion heater controller can reduce these costs by up to 50%, even more if the property can take advantage of a dual tariff electricity and controlled by the Powersaver Dual Flexi.

The Powersaver Boost and Select models are also suitable for LED lighting and towel rails.

- 24 hour, 5/2 day & 7 day selectable
- 10 On/Off Programs per Day
- 30 min, 1 hour & 2 hour multi-press boost function
- Fits directly into a single gang surface box
- Button lock feature
- Summer/winter time change

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive AC240V 2A LED Lighting AC240V
Fixing	Surface and Flush Mounting
Resolution of Programs	10 Minutes
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP00
Shock Protection	Class II
Case Material	ABS
Action Type	1B
Temperature Rating	T35
Operation Temperature	-10°C to 40°C
Memory Reserve	Permanent reserve setting
Display	LCD
Dimensions	87mm x 87mm x 35mm
Complies with	BS EN60730



### PSS2

Powersaver Select





**PSB2** Powersaver Boost



-	30 mms,	i nour an	u z nour	boost per	lous
	Switches	appliance	e off auto	omatically	afte

Operation Temperature 0°C to 40°C

Complies with BS EN60730

- boost period
- Fits directly onto a single gang pattress box

- Suitable for single, dual and twin immersion elements
- Pre-set adjustable (ie minimise or cancel) programs for use with low rate tariffs (Economy 7, Economy 10 & Eco20:20)
- Direct upgrade to Horstmann E7 & E7Q and Sangamo Q7 controllers
- 24 hour electronic timer
- Automatic summer/winter time change
- Programmable boost function 2 hours max

Power Supply	230V +10% / -15%
Frequency	50/60Hz
Power Consumption	1.2W
Contact Rating	13A Resistive 230V Suitable for immersion heaters up to 3kW
Contact Type	Micro-disconnection on control. Disconnection to immersion heater(s via double pole rocker switch
Memory Reserve	3 years
Timing Accuracy	+/ - 0.5 sec per day at +23°C
Operation Temperature	0°C to 35°C
Shock Protection	Class 1
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP30
Dimensions	169mm wide, 114mm hight, 60mm deep (excluding rocker switch & buttons)
Complies with	BS EN60730



**PSDF2** Powersaver Dual Flexi 2

> BACKLIT DISPLAY



# **ROUND PATTERN TIME SWITCHES**

Sangamo have manufactured the renowned RPTS from our Port Glasgow factory since 1951, having sold over 11 million switches and counting. These 20A switches are famous for their high capacity, quality and reliability.

We often hear from customers who have had switches installed for over 5 decades and often on their second use, having outlived the equipment they were being utilised for.

### **S250 STANDARD RANGE**

The original RPTS model for those that need simple on & off switching of up to 20A. The dial is 24 hour but contains a Day Omit device which skips the ON operation on selected days of the week. These switches come with either 2 or 3 sets of ON & OFF arms. To set the switch you simply loosen the centre screw, move the arms around the dial to match up with the switching times and re-tighten.

### 3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.

S254.2	Standard 3 Pin Time Switch, 2 On/Offs
S255.2	Standard 4 Pin Time Switch, 2 On/Offs

Power Supply	230V AC, 50/60Hz
Programming	24 hour programme with ON/OFF operations
Current Rating	20A resistive. More Switching Capacity info on request
Display	24 hour dial
Mounting	Surface
Day Omission	Selectable
Temp Override Facility	Selectable
Cable Size	6.0mm2
Timing Accuracy	5 mins/year
Power Consumption	0.6W at 230V
Temperature Range	0°C to 50°C
Live Parts Protection	Enclosure Protection
Type of Protection	IP20
Shock Protection	Class 1 (Product must be earthed)
Dial Calibration	15 min divisions
Setting Accuracy	+/- 3 minutes
Period Between unlike Operations	15 minutes minimum
Period Between like Operations	105 minutes minimum
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projec- tion 82mm, (Total height 146.5mm)
Complies with	BS EN60730





### **S250 STANDARD RANGE**

- **S254.3** Standard 3 Pin Time Switch, 3 On/Offs
- **S255.3** Standard 4 Pin Time Switch, 3 On/Offs
- Programming: 24 hour with on/off operations
- Current Rating: 20A
- Battery Reserve: None
- Day Omit Dial: Yes (Omits the 'ON' operation)
- Temporary override (manual button)



### **ROUND PATTERN TIME SWITCHES**

Sangamo have manufactured the renowned RPTS from our Port Glasgow factory since 1951, having sold over 11 million switches and counting. These 20A switches are famous for their high capacity, quality and reliability.

We often hear from customers who have had switches installed for over 5 decades and often on their second use, having outlived the equipment they were being utilised for.

### **Q550 STANDARD RANGE**

The 'red dial' time switch. Sangamo RPTS with red print on the dial contain a 100 hour battery reserve. These switches offer a wider range of variations and options than the S250 Range.

### 3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect. ROUND PATTERN TIME SWITCHES **SANGAMO** 



#### Temporary override (manual button)

- Programming: 24 hour with on/off operations
- Current Rating: 20A
- Battery Reserve: 100 hours
- Day omit dial

5 YEAR CULARANTEE 3600W LED

Power Supply	230V AC, 50/60Hz
Programming	24 hour programme with ON/OFF operations
Display	24 Hour dial
Mounting	Surface
Current Rating	20A resistive. More Switching Capacity info on request
Reserve	100 hrs (providing battery has been charged for 300 hrs)
Day Omission	Selectable
Temp Override Facility	Selectable
Cable Size	6.0mm2
Timing Accuracy	5 mins/year
Temperature Range	0°C to 50°C
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP20
Shock Protection	Class 1 (Product must be earthed)
Dial Calibration	15 min divisions
Setting Accuracy	+/- 3 minutes
Period Between unlike Operations	15 minutes minimum
Period Between like Operations	105 minutes minimum
Day Omit Skips On Operation	Q554, Q555, Q559, Q563, Q586
Day Omit Skips Off Operation	Q557
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)
Complies with	BS EN60730

### **Q550 STANDARD RANGE**

Q554.2	Standard 3 Pin Time Switch, 2 on/offs
Q554.3	Standard 3 Pin Time Switch, 3 on/offs
Q555.2	Standard 4 Pin Time Switch, 2 on/offs
Q555.3	Standard 4 Pin Time Switch, 3 on/offs
Q555.2110V	110v Standard 4 Pin Time Switch, 2 on/offs
Q557.2	Standard 4 Pin Time Switch, 2 on/offs, omit off operation
Q557.3	Standard 4 Pin Time Switch, 3 on/offs, omit off operation
Q559.2	Standard 4 Pin Time Switch, 2 on/offs, early off on 1 day/week
Q563.2	Standard 4 Pin Time Switch, 2 on/off Changeover Operations
Q563.3	Standard 4 Pin Time Switch, 3 on/off Changeover Operations
Q586.2	Standard 4 Pin Time Switch, 2 on/off Changeover Operations, early on 1 day/week





# **ROUND PATTERN TIME SWITCHES**

Sangamo have manufactured the renowned RPTS from our Port Glasgow factory since 1951, having sold over 11 million switches and counting. These 20A switches are famous for their high capacity, quality and reliability.

We often hear from customers who have had switches installed for over 5 decades and often on their second use, having outlived the equipment they were being utilised for.

# E850 STANDARD RANGE

Digital RPTS' combine the high capacity and reliability of the electro-mechanical models but provide full 7 day programming, allowing for more complex fixed time program schedules.

The unit is easy & intuitive to program by painting in and wiping out segments on the dial face.

# 3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.

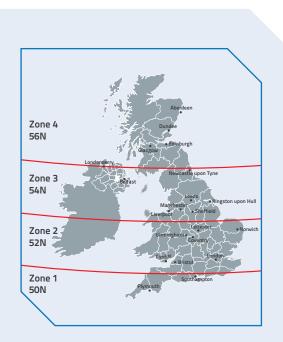


# **E850 STANDARD RANGE**

E854 Digital 3 Pin Time Switch, 96 Operations		E855	Digital 4 Pin Time Switch, 96 Operations		
Power Supply		230V AC, 50/60Hz		rogramming: 7 day programme	
Programming		96 Operations	<ul> <li>Up to 48 on and 48 off (96 operations p</li> <li>Each day, can be programmed independent.</li> </ul>		
Display				ach day can be programmed independently oliday mode	
Mounting		Surface		uto BST/GMT changeover	
Current Rating	g	20A resistive. More Switching Capacity info on request	<ul> <li>Cu</li> </ul>	urrent Rating: 20A	
Reserve		20 days (Rechargeable Battery)		attery Reserve: 20 days	
Temp Override	e Facility	2hr Override On. Advance to Off.	■  €	emporary override (manual button)	
Cable Size		6.0mm2			
Timing Accura	сy	5 mins/year			
Holiday Mode		Suspends programs for 14 days, or indefinitely			
BST/GMT Cha	ngeover	Automatic			
Temperature A	Range	35°C			
Live Parts Pro	tection	Enclosure Protection			
Dirt and Moist	ture Protection	IP20			
Shock Protecti		Class 11 (functional and supplementary insulation)			
Period Between	n ON/OFF Operations	15 mins	(5	400W	
				(400W)	

ight (wall mounted) 136mm, width 105.7n ojection 82mm, (Total height 146.5mm)





### **Q550 ASTRO/SUNTRACKER**

Astro/Suntracker switches automatically adjust themselves to follow Sunrise/Sunset times throughout the year. This makes them ideal for controlling external and internal lighting loads up to 20A or 3,600W of LED lighting with no need for a sensor.

As these switches track the motion of the sun & not the time it should be set to GMT & left all year, so there's no need to worry about summer & winter clock changes, the switch does it all itself. The month dial controls the brass sunset/sunrise arms automatically to keep the lights switching at the right time each day.

Sunset & Sunrise times vary through the length of the British Isles by as much as 40 minutes at certain times of year. Our RPTS Astro models come in 4 zone variations to make the switching times more accurate. Additionally, users can alter the longitude setting away from the 0° longitude line to focus the accuracy in further, if required.

2 on/off models have a second set of fixed time operating arms, allowing you to set your lighting to go off for a set period overnight while still benefiting from the sunset and sunrise programming.

All models also contain a 100 hour battery reserve.

### **3-PIN OR 4-PIN**

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.





# Q550 ASTRO/SUNTRACKER

- Programming: 24 hour with on/off operations
- Current Rating: 20A
- Battery Reserve: 100 hours

Sear VEAR GUARANTEE

Power Supply	230V AC, 50/60Hz
Programming	24 hour programme with ON/OFF operations
Display	Solar dial
Mounting	Surface
Current Rating	20A resistive. More Switching Capacity info on request
Reserve	100 hrs (providing battery has been charged for 300 hrs)
Temp Override Facility	Selectable
Cable Size	6.0mm2
Timing Accuracy	5 mins/year
Temperature Range	0°C to 50°C
Live Parts Protection	Enclosure Protection
Type of Protection	IP20
Shock Protection	Class 1 (Product must be earthed)
Dial Calibration	15 min divisions
Setting Accuracy	+/- 3 minutes
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)
Complies with	BS EN60730

 Q550.13.11
 Astro Zone 1, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation

 Q550.13.12
 Astro Zone 2, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation

 Q550.13.13
 Astro Zone 3, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation

 Q550.13.14
 Astro Zone 4, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation

 Q550.13.14
 Astro Zone 4, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation

 Q551.13.11
 Astro Zone 1, 3 Pin Time Switch, 1 On/Off & optional early off

 Q551.13.12
 Astro Zone 2, 3 Pin Time Switch, 1 On/Off & optional early off

 Q551.13.13
 Astro Zone 3, 3 Pin Time Switch, 1 On/Off & optional early off

 Q551.13.14
 Astro Zone 4, 3 Pin Time Switch, 1 On/Off & optional early off

 Q551.14.11
 Astro Zone 1, 3 Pin Time Switch, 2 On/Offs

 Q551.14.12
 Astro Zone 2, 3 Pin Time Switch, 2 On/Offs

 Q551.14.13
 Astro Zone 3, 3 Pin Time Switch, 2 On/Offs

 Q551.14.14
 Astro Zone 4, 3 Pin Time Switch, 2 On/Offs

 Q553.13.11
 Astro Zone 1, 4 Pin Time Switch, 1 On/Off & optional early off

 Q553.13.12
 Astro Zone 2, 4 Pin Time Switch, 1 On/Off & optional early off

 Q553.13.13
 Astro Zone 3, 4 Pin Time Switch, 1 On/Off & optional early off

 Q553.13.14
 Astro Zone 4, 4 Pin Time Switch, 1 On/Off & optional early off

 Q553.13.14
 Astro Zone 4, 4 Pin Time Switch, 1 On/Off & optional early off

53.14.11	Astro Zone 1, 4 Pin Time Switch, 2 On/Offs
53.14.12	Astro Zone 2, 4 Pin Time Switch, 2 On/Offs
53.14.13	Astro Zone 3, 4 Pin Time Switch, 2 On/Offs
53.14.14	Astro Zone 4, 4 Pin Time Switch, 2 On/Offs

# BLUETOOTH DIN RAIL TIME SWITCHES SANGAMO



### **BLUETOOTH DIN RAIL TIME SWITCHES**

Bluetooth is a wireless communication protocol that allows programming of the switch using the free APP available on Android and IOS smart phones and tablets. This works the same way as contactless bank cards, oyster travel cards and mobile payment systems. The program is setup on the APP and transfers to the switch when the smart device is held in close proximity.

- Daily and Weekly programming
- Astro (sunrise, sunset) program
- Switching capacity 16A per channel
- Zero-crossing, LED up to 600W
- Programmable via App (iOS and Android)
- 10 years battery reserve

Power Supply	230V AC, 50/60Hz
Programming	100 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@O.6pf Filament lamp 3,000W Halogen lamp 3,000W Fluorescent lamp uncompensated 2,600W Fluorescent lamp series compensated 2,600 Fluorescent lamp series compensated 1,300 Compact Fluorescent lamp 600W LED 230V AC 600W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF, Extra On/ Off, Permanent On/Off
Offset Astro Switching Time	+/- 90 min.
Memory Locations	100
Minimum Interval	1 min
Program Security	unlimited
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm



#### SC2813PR04

Astro Bluetooth 2 Module 1 Channel, 7 day Timer, 100 Operations





#### SC2811PRO4

Standard Bluetooth 2 Module 1 Channel, 7 day Timer, 100 Operations Also available: **SC2821PRO4** (as above with 2 channels



- Daily and Weekly programming
- Switching capacity 16A per channel
- Zero-crossing, LED up to 600W
- Programmable via App (iOS and Android)
- 10 years battery reserve

wer Supply	230V AC, 50/60Hz
ogramming	100 Operations
splay	LCD
ounting	DIN
rrent Rating	16A
itching Capacity	10A Inductive@0.6pf Filament lamp 3,000W Halogen lamp 3,000W Fluorescent lamp series compensated 2,600W Fluorescent lamp series compensated 2,600W Fluorescent lamp series compensated 1,300W Compact Fluorescent lamp 600W LED 230V AC 600W
serve	10 years
itching Functions	ON/OFF, Pulse, Cycle, Random, Extra On/ Off, Permanent On/Off
emory Locations	100
nimum Interval	1 min
ogram Security	unlimited
mperature Range	-30°C to +55°C
closure	Self-extinguishing thermonlastic

Type of Protection IP20 to DIN EN 60529

Dimensions 90 x 36 x 63 mm

D 11		147 11		
Daily	and	Weekly	program	iming

- Astro (sunrise, sunset) program
- Switching capacity 16A per channel
- Zero-crossing, LED up to 600W
- Programmable via App (iOS and Android)
- 10 years battery reserve

Power Supply	230V AC, 50/60Hz
Programming	100 Operations
Display	
Mounting	DIN
Current Rating	16A
Switching Capacity	104 Inductive@0.6pf Flament lamp 3,000W Halogen lamp 3,000W Fluorescent lamp uncompensated 2,600W Fluorescent lamp series compensated 2,600W Fluorescent lamp seriel compensated 1,300V Compact Fluorescent lamp 600W LED 230V AC 600W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF
Offset Astro Switching Time	+/- 90 min.
Memory Locations	100
Minimum Interval	1 min
Program Security	unlimited
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm



#### SC2823PR04

Astro Bluetooth 2 Module 2 Channel, 7 day Timer, 100 Operations





### NFC DIN RAIL TIME SWITCHES

NFC (Near Field Communication) is a wireless communication protocol that allows you to program the switch using the free Sangamo Connect app on an Android NFC Smart phone.

This works the same way as contactless bank cards, oyster travel cards and mobile payment systems.

You set the program up on the app and hold the phone next to the switch to read, write or transfer programming times.

BIO3 N SANGAMO 72113NFI	
23.03.18	
07A 2:41 35	
κ-         Α         ->           23702         μ16(10)A 250V-         230V-           23702         230V-         230V-	
	Γ

#### 72113NFC

Standard NFC 2 Module 1 Channel, 7 day Timer, 56 Operations Also available: **72213NFC** (as above with 2 channels)



Vo	lt-free	16A	chan	geover	contac

56 memory locations

Powe

- Standard programming
- Works with Android NFC phones for programming
- Battery Reserve: 10 years

er Supply	230V AC, 50/60Hz
ramming	56 Operations
lay	LCD
nting	DIN
ent Rating	16A
ching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Huorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 1,000W Fluorescent lamp parallel compensated 550W Compact Fluorescent lamp 200W LED 230V AC 200W
rve	10 years
ching Functions	ON/OFF, Pulse, Extra On/Off, Permanent On/Off
nory Locations	56
mum Interval	1 min
ram Security	unlimited (E2-PROM)
perature Range	-30°C to +55°C
osure	Self-extinguishing thermoplastic
of Protection	IP20 to DIN EN 60529
ensions	90 x 36 x 63 mm

• \	/olt-free	16A chan	geover	contact
-----	-----------	----------	--------	---------

- 4 memory locations
- Basic Astro programming
- Works with Android NFC phones for programming
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	4 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2.000W Halogen lamp 2.000W Fluorescent lamp series compensated 1,000W Fluorescent lamp series compensated 500W Compact Fluorescent lamp 200W LED 230V AC 200W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF
Offset Astro Switching Time	+/- 90 min.
Memory Locations	4
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm



#### 72102NFC

Astro NFC 1 Module 1 Channel, 24 hr Timer, 4 Operations



- Volt-free 16A changeover contact
- 56 memory locations
- Astro programming
- Works with Android NFC phones for programming
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	56 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp series compensated 1,000W Fluorescent lamp series compensated 1,000 Fluorescent lamp seriel compensated 550V Compact Fluorescent lamp 200W LED 230V AC 200W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF, Extra On Off, Permanent On/Off
Offset Astro Switching Time	+/- 90 min.
Memory Locations	56
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm



#### 72103NFC

Astro NFC 2 Module 1 Channel, 7 day Timer, 56 Operations Also available: **72203NFC** (as above with 2 channels)





### **DIN RAIL TIME SWITCHES**

All Sangamo's DIN Rail mountable time switches are designed for 35mm 'Top Hat" rail. Switches come in 1, 2 or 4 modules, each module is 17.5mm wide, which fits the required width in the DIN enclosure.

Using the 25195 USB Hub and Easy Vue software or 25196 USB Hub with bluetooth and connect app programs can be transferred to a 25193 data key and then to one or multiple switches. 1 module switches do not require a Data Key as the fascia can be removed and slotted into the Hub directly.

#### **Pulse Programming**

Short term switching at fixed times. Ideal for school bells, sirens, churches, etc. A burst from 1 second up to 59m 59s can be programmed into the unit. This feature appears on all standard switches.

- Volt-free 16A changeover contact
- 46 memory locations
- Module timer
- Standard programming
- Works with key programming & EasyVUE connect (Key & hub are optional extras)
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	46 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	6A Inductive@0.6pf Filament lamp 1,000 W Halogen lamp 1,000 W Fluorescent lamp with electronic lamp ballast 500 W Fluorescent lamp conventional lamp ballast 4,00 W Compact Fluorescent lamp 300 W LED 230 V AC 300 W
Reserve	10 years
Switching Functions	ON; OFF; Pulse, Permanent On/Off
Pulse Length	00:01 up to 59:59 mm:ss
Memory Locations	48
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 36 x 63 mm



72112 Standard 2 Module, 1 Channel, 7 Day, 46 Operations Also available: 72212 (as above with 2 channels)





71111 Standard 1 Module 1 Channel, 7 Day, 46 Operations



1.0	Volt-free	16A	changeover c	ontac
	voic nee	10/1	changeover e	onicac

- 46 memory locations
- Standard programming
- Works with key programming & EasyVUE connect (Key & hub are optional extras)
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	46 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	6A Inductive@0.6pf Filament lamp 1,000W Halogen lamp 1,000W Fluorescent lamp w/ electronic lamp ballast 500W Fluorescent lamp w/ convent. lamp ballast 100W Compact Fluorescent LA 50W LED 230V AC 50W
Reserve	10 years
Switching Functions	ON; OFF; Pulse, Permanent On/Off
Pulse Length	00:01 up to 59:59 mm:ss
Memory Locations	48
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 36 x 63 mm

11.11.5	4 - 0		
voit-tree	16A	changeover	contac

- 300 memory locations
- Standard programming
- Works with key programming & EasyVUE connect (Key & hub are optional extras)
- Battery Reserve: 6 years
   Extra functions special weekly programs,
- Extra functions special weekly program channel key assignment

ower Supply	230V AC, 50/60Hz
rogramming	300 Operations
isplay	LCD
lounting	DIN
urrent Rating	16A
witching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000VA Fluorescent lamp series compensated 1,000V/ More Switching Capacity info available upon request
eserve	6 years
witching Functions	ON; OFF; Pulse; Cycle, Extra On/Off, Permanent On/Off
ulse length - Pulse Inction (switching time)	00:01 up to 59.59 mm:ss
ulse Length - Timer nan. switching)	0:00:01 up to 9:59:59 h:mm:ss
lemory Locations	300
1inimum Interval	1 min
emperature Range	-30°C to +55°C
nclosure	Self-extinguishing thermoplastic
ype of Protection	IP20 to DIN EN 60529
lass of Protection	2 when installed according to regulations
imensions	90 x 36 x 63 mm



25162 Standard 2 Module 1 Channel, Yearly Timer, 300 Operations



#### SANGAMO DIN RAIL TIME SWITCHES



#### 26404

Standard 4 Module 4 Channel, 7 Day Timer, 300 Operations





11002 Standard 1 Module 24 hr Timer



- Volt-free 16A changeover contact
  - 300 memory locations
  - Module timer: Multiple applications from one switch
  - Standard programming
  - Works with key programming & EasyVUE connect (Key & hub are optional extras)
  - Battery Reserve: 10 years
  - Extra functions Channel key assignment, accepts external inputs

Power Supply	230V AC, 50/60Hz
Programming	300 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.5pf Filament lamp 2.000W Halogen lamp 2.000W Fluorescent lamp peries compensated 1,000VA Roversexent lamp series compensated 1,000VA More Switching Capacity info available upon request
Reserve	10 years
Switching Functions	ON; OFF; Pulse; Cycle, Permanent On/Off
Pulse length - Pulse function (switching time)	00:01 up to 59.59 mm:ss
Pulse Length - Timer (man. switching)	0:00:01 up to 9:59:59 h:mm:ss
Memory Locations	300
Minimum Interval	1 min
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 72 x 63 mm

Simple programming with 15 min captive

Manual override switch 'Permanent OFF/

segments

Simple to read switching

100 hour battery reserve

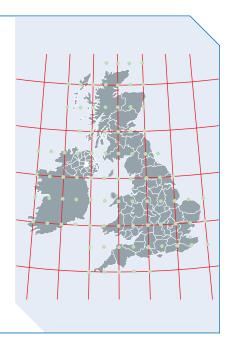
Automatic/Permanent ON"

ANGAMO

These switches automatically adjust their sunset & sunrise times based on where you are. This can be set one of two ways;

**LOCATION** selecting the nearest city to you

**POSITION** by inputting your co-ordinates; Setting the nearest whole longitude & latitude.



### ASTRO/SUNTRACKER

Astro 1 Module 1 Channel, 7 Day, 60 71101 Operations

Programming

Mounting DIN

Offset Astro Switching Time +/-90mins

- Astro 2 Module 1 Channel, 7 Day, 60 72101
  - Operations
  - 72201 Astro 2 Module 2 Channel, 7 Day, 60 Operations
- - Volt-free 16A changeover contact
  - 60 memory locations
  - Astro timer Simple programming
  - Works with key programming & EasyVUE
  - (Key & hub are optional extras)
  - Battery Reserve: 6 years
  - Key not required for 71101



400W

	230V AC, 50/60Hz
	Daily
	LCD
	DIN
	16A, 2.5amp Inductive @0.6pf
ty	Filament lamp Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 750W LED (230 V~) / CFL 200W
	100 hrs
	ON 055 Developed 0- (055

Switching Operation 96 per day Temperature Range -5°C to +50°C Type of Protection IP20 to DIN EN 60529





### PANEL TIME SWITCHES

The panel time switch range can also be surface or din rail mounted.

The analogue 16000 range are simple to use and are a cost effective timer. They are extremely easy to set, change and to view programmes. They are often used where multiple people are involved in setting and changing programs. For instance in church halls and similar applications. They are also fitted where the potential user is not comfortable using the latest digital technology, preferring the traditional pin type setting.

The 28000 range provides additional functionality in the same format to suit additional programming requirements.

#### **Pulse Programming**

Short term switching at fixed times. Ideal for school bells, sirens, churches, etc. A burst from 1 second up to 59m59s can be programmed into the unit. This feature appears on all standard switches.

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#### PA16621

Standard Panel 24 hr Timer (with battery) Also available: PA16622 (as above with no battery)

- Voltage free 16A changeover contact
- Suitable for Surface, Panel or Din rail mounting
- 100 hour battery reserve
- Programming by 15 min captive segments
- Manual override with automatic return to program
- Contact status display

ower Supply	230V AC, 50/60Hz
Programming	24 hour
)isplay	Analogue
lounting	Optional
urrent Rating	16A
witching Capacity	Resistive load 16A 250V Voltage free inductive load (cos = 0.6) 2.5A 250V Incandescent lamp 2000W 250V
leserve	100 hour
witching Operations	96 per day
emperature Range	-10°C to +50°C
itorage Temperature	-10°C to +50°C
onnection by cage erminals, section of onductors	0.5 to 4 mm2
nsulation class	2
Protection	IP20
)imensions	72 x 94.5 x 48.4 mm (Face 72 x 72mm)
omplies with	BS EN 60730

- Volt-free 16A changeover contact
- 300 memory locations
- Programmable via App (iOS, Android and Windows)
- Battery Reserve: 10 years
- Comes ready for panel or surface mounting
- Require accessory 95587 for DIN rail mounting

Power Supply	230V AC. 50/60Hz
Programming	Daily, Weekly, or Astro
Display	LCD Back-lit
Mounting	Optional
Current Rating	16A
Switching Capacity	16A / 250 V - at cos = 1 6A with inductive load cos = 0.6 Filament Lamp, Halogen Lamp 400W Fluorescent Lamp with electron. lamp ballast 100W LED (230V-)/CFL 50W
Reserve	10 years
Switching Functions	ON, OFF, Pulse, Cycle, Extra, Permanent, Astro
Pulse length - Pulse function (switching time)	00:01 up to 59.59 mm:ss
Pulse/Pulse Length Cycle	0:00:01 up to 9:59:59 h:mm:ss
Memory Locations	300
Minimum Interval	1 min
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Switchboard flush mounting	Retaining clip in 68 x 68mm cutout
Dimensions	72 x 72mm



#### SC4411PRO4

Astro Bluetooth 1 Channel 7 Day Digital Panel Timer Also available: SC4421PR04 (as above with 2 channels)

Bluetoot

- Voltage free 16A changeover contact
- Suitable for Surface, Panel or Din rail mounting
- 100 hour battery reserve
- Programming by 1 hour captive segments
- Manual override with automatic return to program
- Contact status display

Power Supply	230V AC, 50/60Hz
Programming	7 Day
Display	Analogue
Mounting	Optional
Current Rating	16A
Switching Capacity	Resistive load 16A 250V Voltage free inductive load (cos = 0.6) 3A 250 Incandescent lamp 1000W 250V Squirrel-cage motor 350W 250V
Reserve	100 hour
Switching Operations	24 per week
Temperature Range	-10°C to +50°C
Storage Temperature	-10°C to +50°C
Connection by cage terminals, section of conductors	0.5 to 4 mm2
Insulation class	2
Protection	IP20
Dimensions	72 x 94.5 x 48.4 mm (Face 72 x 72mm)
Complies with	BS EN 60730



#### PA16921 Standard Panel Mount 7 Day Timer with Battery Also available: PA16922 (as above with no battery)

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#### ACCESSORIES SANGAMO

#### SANGAMO ACCESSORIES



95587 Panel Converting Mounting Kit

For Products: 23871, 23872



143541 Module Enclosure

- 4-6 module
- IP40 protection
- 140 x 135 x 90mm Surface mounted
- Integral DIN-rail
- Compatible with 26404



#### 110469 FD930 Conduit Box Time Switch

- Will accept 3/4in or 20mm conduit
- Fixings supplied
- Robust steel construction with black enamelled finish
- Compatible with S250, Q550 & E850 ranges



#### 25193 Programming Data Key

- Data key for use with digital time switches that have key programming feature
- Used to load settings on single or multiple sites where the same product type is used
- Compatible with models ; 72101, 72201, 72112, 72212, 23871, 23872, 25162, 26404
- Not required for 71101, 71111



143602 Module Enclosure

- 1-2 module
- IP40 protection
- 55 x 135 x 80mm
- Surface mounted Integral DIN-rail
- Compatible with 1 or 2 module: 11002, 71111, 72112, 72212, 72113NFC, 72213NFC, 25162, 71101, 72201, 72102NFC, 72103NFC,



#### 143603 Module Enclosure

- 3-4 module
- IP40 protection
- 100 x 135 x 90mm
- Surface mounted
- Integral DIN-rail
- Suitable for 2 module product applications where Contactor will be used.



#### 25195 Programming Interface

- The Easy Vue Hub can be used to program your switch with a blank programming key via PC, using the Easy-Vue software
- Compatible with models ; 71101, 72101, 72201, 71111, 72112, 72212, 23871, 23872, 25162, 26404



### 25196 Programming Interface

- The Easy Vue Hub with Bluetooth can be used to program your switch with a blank programming key via PC, using the Easy-Vue software, or Android smartphone, using the Sangamo Connect app
- Compatible with models ; 71101, 72101, 72201, 71111, 72112, 72212, 23871, 23872, 25162, 26404



### ESP TRAINING DAYS

#### **Product Overview**

Our product overview training days are aimed at electrical contractors and wholesalers who would like to add fire and security equipment to their portfolio. From entry onto this 1 day course you will gain an understanding on all of our products and their benefits, we will also discuss how they can be implemented within different onsite applications.

#### Addressable Fire System Programming

Our Fire System Programming training days are aimed at competent contractors who already possess a good knowledge of BS5839 fire installation and commissioning requirements. From entry onto this course we will cover the basic programming requirements for our 2 Loop and 4 Loop fire systems, loop addressing, networking arrangements and Input/Output setups.

The above training days will be held at our purpose built showroom located in Redditch.



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