# RhinoCo Technology's leading brands

**VIP** VISION™

Professional IP Surveillance & Intercoms

**SECURVIEW**™ VICTORY SERIES

Professional HD Over Coax Surveillance

**Watchguard**™

Professional Alarms and Surveillance

**Rhino**® **RhinoTracks**
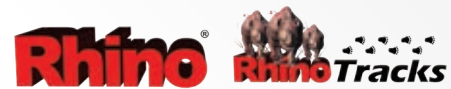
Vehicle Security & GPS Tracking

## ENSA™

LED Lighting & Energy Saving Devices

# Our people, our products:
## Dedicated to winning you more business

In today's world, security has never been more critical to our safety. RhinoCo Technology is dedicated to servicing the industry that brings peace of mind to communities in Australia and around the world. We believe in working with professional installers in building secure environments. Together, we share in the great responsibility of making the world a safer place for all.

RhinoCo Technology is an Australian-owned family business that has been an integral part of the electronic security industry since 1978. We believe that as an established electronic security wholesaler, we must be authentic in everything we do.

We strive to challenge the status quo, thinking of new ways to best deliver outstanding product selection and service. We aim to be more than your electronic security wholesaler, offering engineering design house expertise to help you win even the most difficult installation jobs.

Use our industry renowned electronic security brands and promotional materials to create an impact in your next install quotation. Take advantage of our knowledgeable salespeople, our product education and training opportunities, or arrange for a free demonstration on any product in our range to get the edge to keep you ahead of the competition.

Above all, we are committed to providing you with the solutions and support to make you more profitable. We are dedicated to your success and by becoming a RhinoCo customer, we promise to guide you and share our knowledge to help you achieve that success with our product implementation.

We greatly value your business and are eager to work to our mutual benefit. RhinoCo Technology is here to provide you with the winning solution every time.

Sincerely,

Frank Ferrara
Founder & Company Director

# Contents

For full terms & conditions of trading, please visit our website www.rhino.com.au/legal/terms

# CCTV
# SURVEILLANCE

## IP Surveillance Systems

## HDCVI Surveillance Systems

## Surveillance Essentials

# Why choose VIP Vision™ IP surveillance?

VIP Vision™ is the premier IP surveillance solution for enterprise and commercial applications. We believe that for CCTV to truly grant peace of mind, it must function seamlessly with your existing business operations. The VIP Vision range delivers powerful, scalable IP CCTV systems, with an emphasis on functionality, ease of use and ease of installation across the range.

The VIP Vision range offers professional, high definition video surveillance solutions for small projects through to large commercial, public sector and government level applications. Rest assured knowing you have usable video evidence when it matters most with VIP Vision IP surveillance.

## 1. One easy to use interface

VIP Vision delivers complication-free surveillance solutions with unparalleled ease of use across the entire IP CCTV range.

With a single, user-friendly graphical user interface used for each network video recorder, configuring a 256 channel system is no different to a 4 channel system. Customise and configure cameras & recording easily with VIP Vision IP surveillance.

## 2. Diverse IP camera selection

The VIP Vision IP camera range is built to fit a wide scope of applications. Ranging from 2.0 megapixels to 12.0 megapixels resolution, VIP Vision cameras come in:

- Wide variety of compact domes and bullets
- Vandal & weather resistant dome cameras
- Motorised varifocal lens cameras, fixed & auto iris;
- True WDR, true day/night and infrared cameras
- PTZ, fisheye, pinhole and other specialty cameras

## 3. Immediate Full HD packages

For instant deployment of high definition IP surveillance, you need look no further than VIP Vision IP CCTV kits.

They feature 2.0 megapixel bullet and dome IP cameras, pre-installed surveillance grade hard drives and all required cabling bundled in a retail ready package. VIP Vision IP CCTV kits are available in 4, 8 and 16 channel models.

Full HD
1080

**Ultra HD: 8MP (3840 x 2160)**

**Full HD: 2MP**

**HD: 1MP**

## 4. Ultra HD resolution & beyond

The truth is in the detail. The latest VIP Vision IP surveillance solutions offer up to 12.0 megapixels (4000 x 3000) of image resolution.

This is six times greater than 1080p Full HD resolution and nearly thirty times greater than that of traditional D1 analogue CCTV surveillance.

## 5. Scalable storage & backup

Each NVR across the range features a minimum of 2 SATA slots that can accommodate up to 6TB HDDs.

Larger systems scale to offer up to 96TB storage capacity. Export and backup of footage can be performed by USB device, over the network or via an internal DVD-RW burner, depending on the NVR model.

## 6. Intelligent record & search

Extend the recording time of your HDDs by customising each camera to record by alarm or motion detection.

Finding the footage you need has never been easier with smart search. Simply highlight an area of interest and press smart search to view all motion-detected footage in your highlighted area (available for standalone Linux NVRs & VIP Vision SmartPSS).
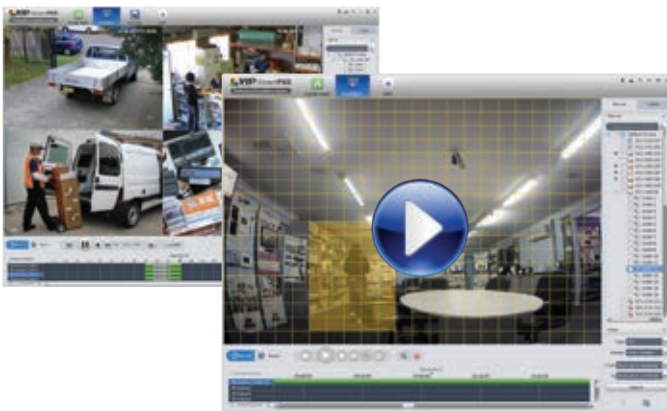
## 7. Rapid remote view setup

For complete peace of mind, VIP Vision enables you to take your surveillance system with you where ever you go.

Each NVR features comprehensive remote view capabilities, compatible with iOS (iPhone & iPad), Google Android and Windows Phone devices. You can also configure remote view in seconds via QR code (only available for iOS & Android).

Available on the **App Store**

ANDROID APP ON **Google play**

Available on **Windows Phone**

# Professional Series NVRs: Beyond Full High Definition

## 4 Channel Professional NVR with PoE (200Mbps)

Model: NVR4PRO2

- Max. 5.0 megapixel resolution support (2560 x 1920)
- 200Mbps maximum incoming bandwidth
- Built-in 4 port Power over Ethernet switch
- HDMI and VGA video output
- 2 x SATA up to 8TB capacity / 2 x USB / 1 x RJ45 (1000M)
- 4 channel alarm input / 2 channel relay output
- 1U size / 375 x 282 x 56mm / 2.00kg (no HDD)
- ONVIF 2.3 conformance

## 8 Channel Professional NVR with PoE (256Mbps)

Model: NVR8PRO4

- Max. 12.0 megapixel resolution support (4000 x 3000)
- 256Mbps maximum incoming bandwidth / 192Mbps recording rate
- Built-in 8 port Power over Ethernet switch
- 2 x HDMI (up to 3840 x 2160) and 1 x VGA video output
- 2 x SATA up to 12TB capacity / 2 x USB / 1 x RJ45 (1000M)
- 8 channel alarm input / 3 channel relay output
- 1U size / 375 x 327 x 53mm / 2.65kg (no HDD)
- ONVIF 2.4 conformance

**Supports 360° fisheye camera dewarping and Ultra HD video output**

## 16 Channel Professional NVR with PoE (320Mbps)

**NEW**

(a) Model: NVR16PRO6

- Max. 12.0 megapixel resolution support (4000 x 3000)
- 320Mbps maximum incoming bandwidth
- Built-in 16 port Power over Ethernet switch
- 2 x HDMI (up to 3840 x 2160) and 1 x VGA video output
- 4 x SATA up to 24TB capacity / 1 x eSATA / 3 x USB / 1 x RJ45 (1000M)
- 16 channel alarm input / 6 channel relay output
- 1.5U size / 440 x 405 x 76mm / 4.65kg (no HDD)
- ONVIF 2.4 conformance

**NEW**

(b) Model: NVR16PRO6NP (Non PoE variant)

- External Power over Ethernet switch required
- 2 x SATA up to 12TB capacity / 1 x eSATA / 2 x USB / 1 x RJ45 (1000M)
- 4 channel alarm input / 2 channel relay output
- 1U size / 375 x 282 x 56mm / 1.6kg (no HDD)

**Supports 360° fisheye camera dewarping and Ultra HD video output**

## 32 Channel Professional NVR with PoE (320Mbps)

Model: NVR32PRO16P2

**NEW**

- Max. 12.0 megapixel resolution support (4000 x 3000)
- 320Mbps incoming bandwidth
- Built-in 16 port Power over Ethernet switch
- 2 x HDMI (up to 3840 x 2160) and 1 x VGA video output
- Max. 16 simultaneous camera display split
- 4 x SATA up to 24TB capacity / 1 x eSATA / 3 x USB / 1 x RJ45 (1000M)
- 16 channel alarm input / 6 channel relay output
- 1.5U size / 440 x 413 x 75mm / 4.65kg (no HDD)
- ONVIF 2.4 conformance

Model: NVR32PRONP (Non PoE variant)

- External Power over Ethernet switch required
- 256Mbps maximum incoming bandwidth
- Includes an additional RJ45 port (2 x 1000M ports)

**Supports 360° fisheye camera dewarping and Ultra HD video output**

# Ultimate Series NVRs: Uncompromising performance
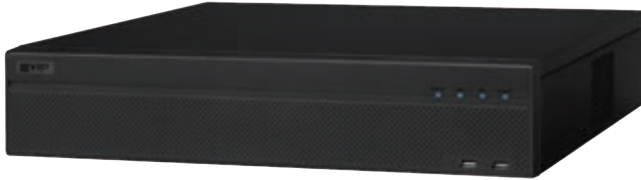
## 32 Channel Ultimate NVR (384Mbps)

Model: NVR32ULTNP

- Max. 12.0 megapixel resolution support (4000 x 3000)
- 384Mbps maximum incoming bandwidth / 256Mbps recording rate
- 2 x HDMI (up to 3840 x 2160) and 1 x VGA video output
- Multi-screen display split up to 36 cameras (1st) and 16 cameras (2nd)
- 8 x SATA up to 48TB capacity with RAID 0/1/5/6/10 support
- Supports global HDD hot-spare
- 1 x eSATA / 4 x USB / 1 x RS232 / 1 x RS485 inputs
- 2 x RJ45 (1000M) Ethernet ports
- 16 channel alarm input / 8 channel relay output
- Playback 128Mbps in RAID 5 / 64Mbps in single HDD mode
- 2U size / 482 x 455 x 91mm / 9.00kg (no HDD)
- ONVIF 2.4 conformance

Intel® Core™ processors for optimal performance
Supports RAID HDD optimisation/redundancy
Supports 360° fisheye camera dewarping and Ultra HD video output

## 64 Channel Ultimate NVR (384Mbps)

Model: NVR64ULTNP

- Max. 12.0 megapixel resolution support (4000 x 3000)
- 384Mbps maximum incoming bandwidth / 256Mbps recording rate
- 2 x HDMI (up to 3840 x 2160) and 1 x VGA video output
- Multi-screen display split up to 36 cameras (1st) and 16 cameras (2nd)
- 16 x SATA up to 96TB capacity with RAID 0/1/5/6/10/50/60 support
- 1 x eSATA / 4 x USB / 1 x RS232 / 1 x RS485 / 1 x Mini SAS inputs
- Supports global HDD hot-spare
- 4 x RJ45 (1000M) Ethernet / 2 x Gigabit optical fibre inputs
- 16 channel alarm input / 8 channel relay output
- Playback 128Mbps in RAID 5 / 64Mbps in single HDD mode
- 3U size / 532 x 485 x 134mm / 17.45kg (no HDD)
- ONVIF 2.4 conformance

Intel® Core™ processors for optimal performance
Supports RAID HDD optimisation/redundancy & HDD hot-swap
Auxiliary 7" LCD HD front display and power supply redundancy (optional)
Supports 360° fisheye camera dewarping and Ultra HD video output

## 128 Channel Ultimate NVR (384Mbps)

Model: NVR128ULTNP

- Max. 12.0 megapixel resolution support (4000 x 3000)
- 384Mbps maximum incoming bandwidth / 256Mbps recording rate
- 2 x HDMI (up to 3840 x 2160) and 1 x VGA video output
- Multi-screen display split up to 36 cameras (1st) and 16 cameras (2nd)
- 16 x SATA up to 96TB capacity with RAID 0/1/5/6/10/50/60 support
- 1 x eSATA / 4 x USB / 1 x RS232 / 1 x RS485 / 1 x Mini SAS inputs
- Supports global HDD hot-spare
- 4 x RJ45 (1000M) Ethernet / 2 x Gigabit optical fibre inputs
- 16 channel alarm input / 8 channel relay output
- Playback 128Mbps in RAID 5 / 64Mbps in single HDD mode
- 3U size / 532 x 485 x 134mm / 17.45kg (no HDD)
- ONVIF 2.4 conformance

Intel® Core™ processors for optimal performance
Supports RAID HDD optimisation/redundancy & HDD hot-swap
Auxiliary 7" LCD HD front display and power supply redundancy (optional)
Supports 360° fisheye camera dewarping and Ultra HD video output

# Integrate CCTV with existing corporate networks

Integrate entire surveillance systems into existing corporate networks with the VIP Vision Professional Surveillance Management Centre. It is ideal for central management of commercial or industrial sites with large-scale surveillance deployments. It enables controlled distribution of vast CCTV networks, with tools to comprehensively manage user credentials, system access and camera visibility.

**Basic System Map**

**Remote Clients**

**IPSAN**

**Control up to 2000 channels
From up to 500 network devices**
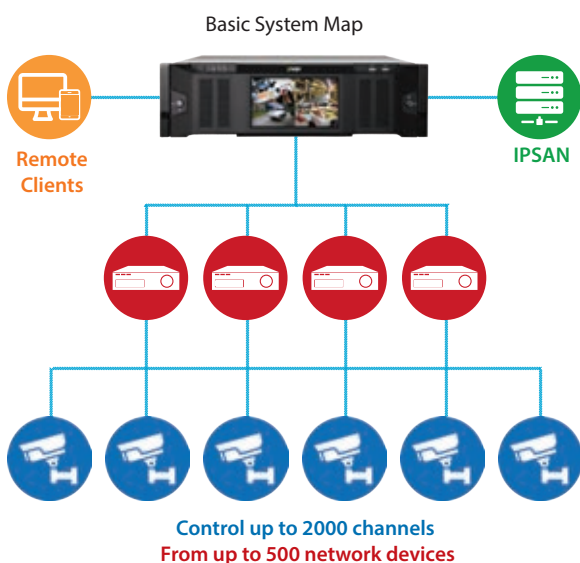
## Professional Surveillance Management Centre
Model: NVR-GSMC

- Intel® Core™ processor based system for optimum performance
- 8GB DDR3 RAM and motherboard designed for 24/7 operation
- Maximum support for 500 inputs, up to 2000 channels
- Management support for up to 10,000 accounts and 1000 online users
- High-performance (700M) stream media transfer and storage capability
- Features a new and intuitive, user friendly interface
- Supports ONVIF, GB/T28181 standard protocol gateway connection
- Support intelligent device connection such as IVS-B/PC
- eMap displays up to 200 channels on a single screen
- Support tier and cascade deployment, GIS map, local/IP-SAN storage
  *HDDs sold separately

| Specifications | |
|---|---|
| Main Processor | Intel Core Processor |
| Operating System | Embedded Linux |
| Hard Disk | One system disk and 15 disks local storage (max support 4TB HDD) |
| Raid mode | Single / RAID 0/1/5/6 |
| Ethernet Port | 4 x RJ45 Ethernet port (1000M) |
| Inputs | 4 x USB 2.0 port / 1 x RS232 |
| Power Supply | 100V~240V,47~63Hz, Hot-swappable |
| Power Consumption | 10W~200W (with HDD) |
| Dimensions | 526 x 485 x 135mm |

Operated easily via intuitive applications VIP Vision™ DSS and SmartPSS
Centrally control recording profiles, users accounts & access, storage & more
Redundant power supply optional, by special order

# VIP Vision™ SmartPSS: Intuitive and powerful CMS
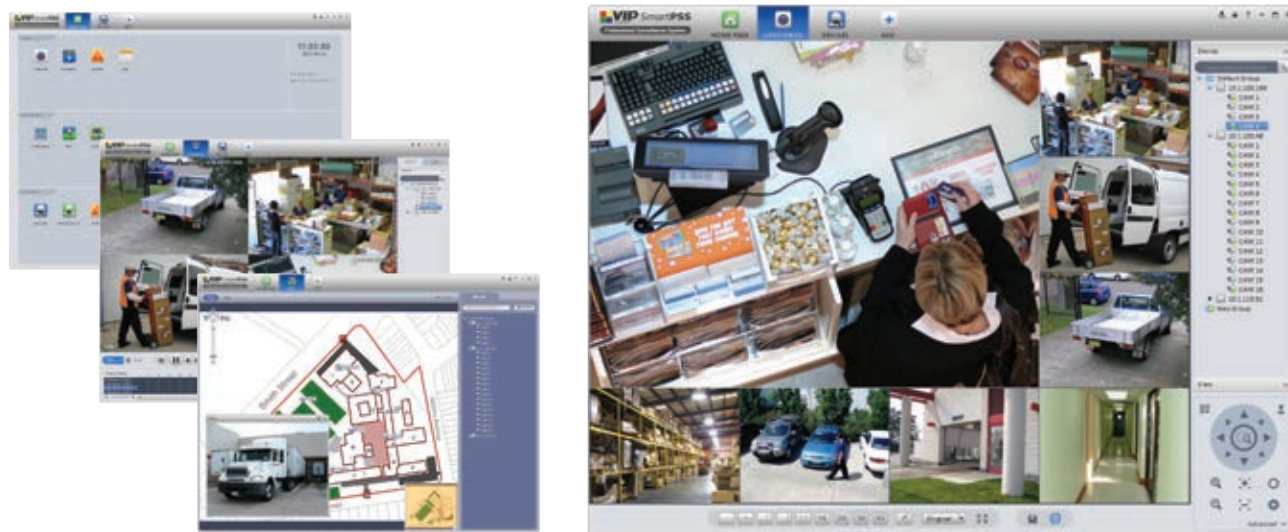


VIP Vision's Smart PSS (Professional Surveillance System) client for Windows and Macintosh OS X* operating systems delivers a simple an affordable alternative to network video recorder dependent IP CCTV surveillance. By downloading the light weight VIP Vision Smart PSS client, you can turn your PC or Mac into a professional high definition surveillance system.

Take advantage of the full range of VIP Vision IP surveillance cameras and integrate CCTV into your existing network infrastructure. Simply add as few as one VIP Vision IP camera to your network to get started building your own tailored HD surveillance solution.  The Smart PSS client will automatically search for your cameras, as well as existing IP CCTV systems that may already be on your network.  See in depth feature set below:

## Complete Control
- Have complete control of your CCTV surveillance on Windows or Mac OS X
- Ideal as a management tool, productivity tool for staff, remote view CMS and more.

## Powerful Features
- Remote connect to your CCTV via Smart PSS serial number - it only takes seconds!
- Intelligent playback search functions, eMap support, alarm email notifications and more.

## Intuitive Interface
- User friendly, fast & fluid tabbed interface
- Auto-find & manage 256 devices/2000 channels
- Swiftly interact with your CCTV with easy and responsive drag and drop controls

## Flexible Functions
- Comprehensive user account setup with permission controls and detailed system logs
- Group cameras, save layouts, customise camera tours/tasks, easily configure eMaps, etc.

## Download & try it now

VIP Vision™ Smart PSS is lightweight download that comes with the Smart PSS client software and PC-NVR application that facilitates the recording/ storage of footage up to 16 channels. Due to the unpredictable nature of PC hardware, RhinoCo Technology recommends SmartPSS be used primarily as a client software tool.

www.rhinoco.com.au/support/downloads



Available for Windows & OS X

* Software is currently in beta development for OS X systems.

# Ultimate Series IP Cameras: Ultra HD IP surveillance


(a)


(b)

## 12.0 Megapixel C/CS Mount Full Body Camera

Model: VSIP12MPFB

- 12.0MP maximum resolution (4000 x 3000)
- Streams 12.0MP/12fps, Ultra HD 8.0MP/25fps
- Lens not included, C/CS lens mount
- Supports smart triple stream technology
- 2 channel alarm input / 1 channel output
- Single channel audio input/output (built-in mic)
- Single channel BNC video output (1.0Vp-p/75Ω)
- Day/night (auto ICR) with digital WDR and 3D DNR
- Auto back focus, ultra defog & electronic image stabilisation
- Power via 12VDC, 24VAC or PoE (802.3af)
- MicroSD slot up to 128GB and 1 x RS485
- ONVIF compliant

Model: (a) VSLA4.1-9U (Recommended lens, sold separately)

- 1/1.8" 6.0MP lens / 4.1~9.0mm automatic iris (DC) / Aperture: F/1.6
- Horizontal field of view:  100~45° (wide ~ tele)


(a)


(b)

## 12.0 Megapixel Infrared Motorised Bullet

(a) Model: VSIP12MPFBIRM

- 12.0MP maximum resolution (4000 x 3000)
- Streams 12.0MP/12fps, Ultra HD 8.0MP/25fps
- Supports smart triple stream technology
- 4.1 ~ 16.4mm (106 ~ 32°) motorised varifocal lens / auto iris (DC)
- 2 channel alarm input / 1 channel output
- Single channel audio input/output; BNC video output (1.0Vp-p/75Ω)
- 50m infrared range, day/night (auto ICR)
- Power via 12VDC / 24VAC or PoE (802.3af) (24VAC optional)
- IP67 weather resistant housing
- MicroSD slot up to 128GB
- ONVIF compliant

(b) Model: VSIP4MPFBIRM (4.0MP, true WDR variant)

- Streams 4.0MP (2688 x 1520) at 20fps
- 2.7 ~ 12mm (100 ~ 33°) motorised lens / auto iris (DC)
- True WDR (120dB) for challenging lighting conditions



## 2.0 Megapixel Ultra Low-light Motorised Dome

Model: VSIP2MPFBIRL

- 2.0MP maximum resolution (1920 x 1080)
- Streams 1080p/50fps, D1/25fps
- Supports smart triple stream technology
- Superb colour performance in challenging lighting conditions
- Large 1/1.9" CMOS sensor with 0.005lux at F/1.65 min. illumination
- 4 ~ 8mm (90 ~ 58°) motorised varifocal lens / auto iris (DC)
- 2 channel alarm input / 1 channel output
- Single channel audio input/output; BNC video output (1.0Vp-p/75Ω)
- 50m infrared range, day/night (auto ICR), true WDR (120dB)
- Power via 12VDC, 24VAC or PoE (802.3af)
- IP66 weather resistant housing
- MicroSD slot up to 128GB
- ONVIF compliant

Incredible low light performance with 0.005lux colour minimum illumination
True wide dynamic range for challenging lighting conditions

## 12.0 Megapixel Infrared 360° Fisheye Dome

(a) Model:  VSIP12MPFEIR

- 12.0MP maximum resolution (4000 x 3000)
- Streams 12.0MP/15fps, 3.0MP/25fps
- 1.57mm (360° effective) fixed circular fisheye lens
- 185° horizontal/vertical/diagonal angle of view
- 2 channel alarm input / 1 channel output
- Single channel audio input/output
- 10m infrared range, day/night (auto ICR)
- Power via 12VDC or PoE (802.3af)
- IK10 vandal / IP66 weather resistant housing
- MicroSD slot up to 64GB
- ONVIF compliant

(b) Model: VSIP4MPFE (4.0MP, no infrared variant)

- Streams 4.0MP (2688 x 1520) at 15fps, 3.0MP/25fps
- 1.18mm (360° effective) fixed circular fisheye lens
- No infrared, day/night (electronic), IK10 only (no weather resistance)

Five fisheye dewarp modes including ePTZ, virtual panoramas & split view
One camera, every angle covered: enjoy fast installs with IP fisheye domes

(a)

(b)

## 12.0 Megapixel Infrared Motorised Dome

(a) Model:  VSIP12MPVDIRM

- 12.0MP maximum resolution (4000 x 3000)
- Streams 12.0MP/12fps, Ultra HD 8.0MP/25fps
- Supports smart triple stream technology
- 4.1 ~ 16.4mm (106 ~ 32°) motorised varifocal lens / auto iris (DC)
- Single channel alarm & audio input/output
- Single channel BNC video output (1.0Vp-p/75Ω)
- 50m infrared range, day/night (auto ICR)
- Power via 12VDC, 24VAC or PoE (802.3af)
- IK10 vandal / IP67 weather resistant housing
- MicroSD slot up to 128GB
- ONVIF compliant

(b) Model: VSIP4MPVDIRM (4.0MP, true WDR variant)

- Streams 4.0MP (2688 x 1520) at 20fps
- 2.7 ~ 12mm (100 ~ 33°) motorised lens / auto iris (DC)
- True WDR (120dB) for challenging lighting conditions

Triaxis camera module with IK10 polycarbonate/metal housing

(a)

(b)

## 2.0 Megapixel Ultra Low-light Motorised Dome

Model:  VSIP2MPVDIRL

- 2.0MP maximum resolution (1920 x 1080)
- Streams 1080p/50fps, D1/25fps
- Supports smart triple stream technology
- Superb colour performance in challenging lighting conditions
- Large 1/1.9" CMOS sensor with 0.005lux at F/1.65 min. illumination
- 4 ~ 8mm (90 ~ 58°) motorised varifocal lens / auto iris (DC)
- Single channel alarm & audio input/output
- Single channel BNC video output (1.0Vp-p/75Ω)
- 30m infrared range, day/night (auto ICR), true WDR (120dB)
- Power via 12VDC, 24VAC or PoE (802.3af)
- IK10 vandal / IP66 weather resistant housing
- MicroSD slot up to 128GB
- ONVIF compliant

Incredible low light performance with 0.005lux colour minimum illumination
True wide dynamic range for challenging lighting conditions
Triaxis camera module with IK10 polycarbonate/metal housing

# Professional Series IP Cameras: More value per pixel

## 3.0 Megapixel Infrared Motorised Bullet

Model: VSIP3MPFBIRM2.8-12

- 3.0MP maximum resolution (2304 x 1296)
- Streams 3.0MP/20fps, 1080p/25fps
- 2.8~12mm (92 ~ 28°) motorised varifocal lens / fixed iris
- 30m infrared range, day/night (auto ICR)
- Digital WDR with backlight and highlight compensation
- Power via 12VDC or PoE (802.3af)
- IP66 weather resistant housing
- MicroSD slot up to 128GB
- ONVIF compliant

Widescreen 16:9 aspect ratio recording at 3.0MP (2304 x 1296)
MicroSD card slot for recording at the edge up to 128GB

## 4.0 Megapixel WDR Infrared Fixed Mini Bullet

(a) Model: VSIP4MPFBMINIIR

- 4.0MP maximum resolution (2688 x 1520)
- Streams 4.0MP/20fps, 3.0MP/25fps
- Supports smart triple stream technology
- 3.6mm fixed lens / 84° angle of view
- 40m infrared range, day/night (auto ICR), true WDR (120dB)
- Power via 12VDC or PoE (802.3af)
- IP67 weather resistant housing
- ONVIF compliant

(b) Model: VSIP2MPFBMINIIRV2 (2.0MP, true WDR variant)

- 2.0MP maximum resolution (1920 x 1080)
- Streams 2.0MP/25fps, 3.6mm fixed lens / 93° angle of view
- True WDR (120dB) for challenging light conditions

(a)

*NEW*

(b)

## 1.3 Megapixel WDR Fixed Pinhole Bullet

(a) Model: VSIP1MPPH (barrel-shape, bracket mount variant)

- 1.3MP maximum resolution (1280 x 960)
- Streams 1.3MP/25fps
- 3.7mm fixed lens with 77° viewing angle
- Discreet pinhole profile: 12mm diameter / 5mm depth
- 2 channel alarm input / 1 channel output
- Single channel audio input/output
- Day/night (electronic) /3D DNR and true WDR (100dB)
- Power via 12VDC or PoE (802.3at)
- MicroSD slot up to 64GB
- 8m length USB camera-to-controller cable
- ONVIF compliant

(b) Model: VSIP1MPPHS (square-shape, flush mount variant)

- Also available in flush mount pinhole camera design

Compatible accessories included as standard

- 1 x Adhesive-fastened flush mount bracket for pinhole mounting
- 1 x Screw-on clamp to secure pinhole camera
- 1 x Mounting kit for control unit with wall-plugs & screws

(a)

(b)

# Powerful IP surveillance cameras for every application

## 3.0 Megapixel Infrared Motorised Dome

Model: VSIP3MPVDIRM2.8-12

- 3.0MP maximum resolution (2304 x 1296)
- Streams 3.0MP/20fps, 1080p/25fps
- 2.8~12mm (92 ~ 28°) motorised varifocal lens / fixed iris
- 30m infrared range, day/night (auto ICR)
- Digital WDR with backlight and highlight compensation
- Power via 12VDC or PoE (802.3af)
- IK10 vandal / IP66 weather resistant housing
- MicroSD slot up to 128GB
- ONVIF compliant

Widescreen 16:9 aspect ratio recording at 3.0MP (2304 x 1296)
MicroSD card slot for recording at the edge up to 128GB
Triaxis camera module with IK10 polycarbonate/metal housing

## 4.0 Megapixel WDR Infrared Fixed Mini Dome

(a) Model: VSIP4MPVDMINIIRC3.6 (3.6mm fixed lens)
VSIP4MPVDMINIIRC2.8 (2.8mm fixed lens)
VSIP4MPVDMINIIRC6 (6.0mm fixed lens)
VSIP4MPVDMINIIRCA3.6 (3.6mm lens, built-in mic/SD slot)
VSIP4MPVDMINIIRCA2.8 (2.8mm lens, built-in mic/SD slot)

- 4.0MP maximum resolution (2688 x 1520)
- Streams 4.0MP/20fps, 3.0MP/25fps
- Supports smart triple stream technology
- Fixed lens: 3.6mm (81°), 2.8mm (110°), 6.0mm (55°)
- 50m infrared range, day/night (auto ICR), true WDR (120dB)
- Power via 12VDC or PoE (802.3af)
- IP67 weather resistant, full metal housing
- ONVIF compliant

(b) Model: VSIP2MPVDMINIIRC3.6 (2.0MP, true WDR variant)

- 2.0MP maximum resolution (1920 x 1080)
- Streams 2.0MP/25fps, 3.6mm fixed lens / 91° angle of view
- True WDR (120dB) for challenging light conditions

Triaxis 'eyeball' design with durable full metal construction housing
4.0MP model also available with built-in microphone & microSD slot

*NEW*

*NEW*

(a)

(b)

## 4.0 Megapixel WDR Infrared Fixed Mini Dome

Model: VSIP4MPVDMINIIR

- 4.0MP maximum resolution (2688 x 1520)
- Streams 4.0MP/20fps, 3.0MP/25fps
- Supports smart triple stream technology
- 3.6mm fixed lens / 84° angle of view
- 30m infrared range, day/night (auto ICR)
- True WDR (120dB) for challenging light conditions
- Power via 12VDC or PoE (802.3af)
- IK10 vandal resistant / IP67 weather resistant housing
- ONVIF compliant

Triaxis camera module with IK10 polycarbonate/metal housing

# Multi-talented & multi-purpose: IP PTZ Series

## 2.0 Megapixel Ultra Low-light Laser Infrared PTZ Dome
Model: VSIP2MPPTZIRL

- 2.0MP / 1080p maximum resolution (1920x1080)
- Streams Full HD 2.0MP/25fps
- Supports smart triple stream technology
- 6.0 ~ 180mm (51 ~ 1.8°) 30x optical zoom motorised lens
- Superb colour performance in challenging lighting conditions
- Large 1/1.9" CMOS sensor with 0.005lux at F/1.65 min. illumination
- Precision, long-range laser infrared with auto/manual lens focusing
- 500m laser infrared range (2° ~ 60° angle adjustable)
- Day/night (auto ICR), 2D/3D DNR and true WDR (120dB)
- 7 channel alarm input / 2 channel output, single audio input/output
- Intelligent auto-tracking functions and infrared/lens heater/wiper
- Multiple IVS features including image stabilisation & object detection
- Full 360° pan; -10~90° tilt; and 180° auto-flip
- PTZ modes: 5 pattern, 8 tour, auto pan, auto scan
- Preset speed: 240°/s pan, 200°/s tilt
- IP67 weather resistant, microSD slot up to 64GB
- Power via 24VAC / Hi-PoE, ONVIF compliant

**Includes right angle wall mount bracket, adapter and 24VAC power supply**

## 2.0 Megapixel 40x Zoom Laser Infrared PTZ Dome
Model: VSIP2MPPTZIRZ

- 2.0MP / 1080p maximum resolution (1920x1080)
- Streams Full HD 2.0MP/25fps
- Supports smart triple stream technology
- Achieve unprecedented levels of detail with amazing 40x optical zoom
- 7.9 ~ 316mm (41.5 ~ 1.1°) 40x optical zoom motorised lens
- Precision, long-range laser infrared with auto/manual lens focusing
- 500m laser infrared range (2° ~ 60° angle adjustable)
- Day/night (auto ICR), 2D/3D DNR and true WDR (120dB)
- 7 channel alarm input / 2 channel output, single audio input/output
- Intelligent auto-tracking functions and infrared/lens heater/wiper
- Multiple IVS features including image stabilisation & object detection
- Full 360° pan; -10~90° tilt; and 180° auto-flip
- PTZ modes: 5 pattern, 8 tour, auto pan, auto scan
- Preset speed: 240°/s pan, 200°/s tilt
- IP67 weather resistant, microSD slot up to 64GB
- Power via 24VAC / Hi-PoE, ONVIF compliant

**Includes right angle wall mount bracket, adapter and 24VAC power supply**

## 2.0 Megapixel 20x Zoom Infrared PTZ Dome
Model: VSIP2MPPTZIR

- 2.0MP / 1080p maximum resolution (1920 x 1080)
- Streams Full HD 2.0MP/25fps
- Supports smart triple stream technology
- 4.7 ~ 94.0mm (54.1 ~ 3.2°) 20x optical zoom motorised lens
- 2 channel alarm input / 1 channel output
- Single channel audio input/output
- 100m infrared range, day/night (auto ICR), with 2D/3D DNR
- Multiple IVS features including face & object detection
- MicroSD slot up to 128GB
- Full 360° pan; -15~90° tilt; and 180° auto-flip
- PTZ modes: 5 pattern, 8 tour, auto pan, auto scan
- Preset speed: 400°/s pan, 300°/s tilt
- IP66 weather resistant, ONVIF compliant
- Power via 12VDC, 24VAC, PoE+ (802.3at)

**Includes right angle wall mount bracket, adapter and 24VAC power supply**
**Coming soon: 4.0 megapixel H.265 30x zoom infrared PTZ dome camera**

# Experience unparalleled levels of surveillance control

**NEW**

**NEW**

(a)

(b)

## 2.0 Megapixel 12x Zoom WDR Mini PTZ Dome

(a) Model: VSIP2MPPTZV2

- 2.0MP / 1080p maximum resolution (1920 x 1080)
- Streams Full HD 2.0MP/25fps
- 5.1 ~ 61.2mm (51.3 ~ 4.64°) 12x optical zoom motorised lens
- 2 channel alarm input, 1 channel output / 1 channel audio input/output
- Day/night (auto ICR) with true WDR (120dB)
- Power via 24VAC/1.5A or PoE (802.3at)
- Full 360° pan; -2~90° tilt; and 180° auto-flip
- PTZ modes: 5 pattern, 8 tour, auto pan, auto scan
- Preset speed: 300°/s pan, 200°/s tilt
- IK10 vandal / IP66 weather resistant
- MicroSD slot up to 64GB, ONVIF compliant

Now with true WDR (120dB) for performance in all lighting conditions

## 2.0 Megapixel 20x Zoom Recessed PTZ Dome

(b) Model: VSIP2MPPTZCV2

- 2.0MP / 1080p maximum resolution (1920 x 1080)
- Streams Full HD 2.0MP/25fps
- 4.7 ~ 94.0mm (56.1 ~ 3.1°) 20x optical zoom motorised lens
- Day/night (auto ICR) with digital WDR
- MicroSD slot up to 64GB, ONVIF compliant
- Power via 24VAC/1.5A or PoE (802.3at)
- Endless 360° pan; -2~90° tilt; and 180° auto-flip
- Recessed mount; IK10 only, no weather resistance

Speed PTZ dome camera with 500°/s preset pan/tilt speed

**NEW**

## 2.0 Megapixel 4x Zoom WDR Mini PTZ Dome

Model: VSIP2MPPTZMINI

- 2.0MP / 1080p maximum resolution (1920 x 1080)
- Streams Full HD 2.0MP/25fps
- 2.7 ~ 11mm (112.5 ~ 30°) 4x optical zoom motorised lens
- 355° panning with 0° ~ 90° tilt adjust; auto-flip 180°
- Day/night (auto ICR), 2D/3D DNR and true WDR
- Power via 12VDC or PoE (802.3af)
- IK10 vandal / IP66 weather resistant housing
- MicroSD slot up to 128GB
- ONVIF compliant

Highly versatile, compact PTZ dome with only Ø122mm camera footprint

## 2.0 Megapixel 20x Zoom Mobile PTZ Camera

Model: VSIP2MPPTZIRM

- 2.0MP / 1080p maximum resolution (1920 x 1080)
- Streams Full HD 2.0MP/25fps
- 5.5 ~ 110mm (51 ~ 2.6°) 20x optical zoom motorised lens
- Vibration resistant construction & chassis for mobile use
- 150m infrared range, day/night (auto ICR)
- 2D/3D digital noise reduction, digital WDR & BLC/HLC compensation
- Versatile power compatible for 8 ~ 36VDC vehicles
- Full 360° pan and wide -90~90° tilt
- PTZ modes: 4 pattern, 4 tour, auto scan
- Preset speed: 60°/s pan, 30°/s tilt
- 6000V anti-lightning surge protection
- IP66 weather resistant
- ONVIF compliant

Purpose built for integration in large vehicles such as earth moving equipment
Create a total mobile solution with MNVR-GPS and VSWAN4G

# VIP Vision™ IP CCTV kits: Ready to go when you are



## HD CCTV kits for every job size

VIP Vision professional IP surveillance kits come standard with Full HD 2.0MP, true WDR, infrared cameras and are available in 4, 8 and 16 channel models. They are the perfect CCTV solution for:

• Small to medium businesses looking to improve efficiency and security with CCTV.
• Rapid HD CCTV deployment in retail stores and shopfronts.
• Residential homes or apartments.

## Everything you need in one kit

The professional IP surveillance kit range from VIP Vision includes everything you need for a successful install. Aside from the NVR and cameras, VIP Vision kits include:

• Pre-installed Seagate surveillance hard drive.
• All required cabling with pre-terminated lengths of CAT5 for cameras, CAT5 patch leads and HDMI cable for display.
• USB Mouse, CCTV warning stickers & more.

## Remote view config in seconds

Each NVR bundled with VIP Vision IP surveillance kits features everything you need to deliver professional remote view capabilities to your client, including:

• Simply connect the NVR to the internet, change the default password, scan the QR code and your client's set up.
• QR code compatible with Apple® iOS™ and Google® Android™ smartphones/tablets.

# Need to customise a kit?

Although packaged with 2.0 megapixel cameras, professional IP surveillance kits can be modified to record up to 12.0 megapixel resolution (4000 x 3000). RhinoCo can allows you to mix and match cameras to your kit as you require.

This can be beneficial when jobs call for applications beyond the kits' scope, such as:
• Difficult to access installs that require motorised lens adjustments.
• Tele or wide lens applications not offered by packaged cameras.
• Installs where more resolution, superior infrared, microSD, etc. is required.

RhinoCo also recommends choosing additional storage as required. Please note, customisation of kits may incur additional charges and shipping costs. Contact your RhinoCo Technology sales representative for more information on kit customisation.

# VIP Vision™ IP Kits: Rapid Full HD CCTV deployment



**NEW**

## 4 Channel 2.0 Megapixel IP Surveillance Kit

Model: NVR4PROPACK2HD

- 2.0MP maximum resolution (1920 x 1080)
- Records 2.0MP/25fps across all channels
- Built-in 4 port Power over Ethernet switch
- HDMI and VGA video output
- Pre-installed 1TB surveillance hard drive

Included cameras

- 2 x 2.0MP, 3.6mm fixed lens (93°), IP67, WDR, 40m infrared mini bullets
- 2 x 2.0MP, 3.6mm fixed lens (91°), IP67, WDR, 50m infrared mini domes

Included accessories

- 2 x 10m, 1 x 20m, 1 x 30m pre-terminated CAT5 cables
- 1 x 1m HDMI cable, 1 x 1.5m CAT5 patch lead
- 1 x USB mouse, 1 x IR remote control (batteries incl.)
- 4 x High visibility CCTV warning stickers



**NEW**

## 8 Channel 2.0 Megapixel IP Surveillance Kit

Model: NVR8PROPACK4HD

- 2.0MP maximum resolution (1920 x 1080)
- Records 2.0MP/25fps across all channels
- Built-in 8 port Power over Ethernet switch
- HDMI and VGA video output
- Pre-installed 2TB surveillance hard drive

Included cameras

- 4 x 2.0MP, 3.6mm fixed lens (93°), IP67, WDR, 40m infrared mini bullets
- 4 x 2.0MP, 3.6mm fixed lens (91°), IP67, WDR, 50m infrared mini domes

Included accessories

- 4 x 10m, 2 x 20m, 2 x 30m pre-terminated CAT5 cables
- 1 x 1m HDMI cable, 1 x 1.5m CAT5 patch lead
- 1 x USB mouse, 1 x IR remote control (batteries incl.)
- 4 x High visibility CCTV warning stickers



**NEW**

## 16 Channel 2.0 Megapixel IP Surveillance Kit

Model: NVR16PROPACK5HD

- 2.0MP maximum resolution (1920 x 1080)
- Records 2.0MP/25fps across all channels
- Built-in 16 port Power over Ethernet switch
- HDMI and VGA video output
- Pre-installed 4TB surveillance hard drive

Included cameras

- 8 x 2.0MP, 3.6mm fixed lens (93°), IP67, WDR, 40m infrared mini bullets
- 8 x 2.0MP, 3.6mm fixed lens (91°), IP67, WDR, 50m infrared mini domes

Included accessories

- 8 x 10m, 4 x 20m, 4 x 30m pre-terminated CAT5 cables
- 1 x 1m HDMI cable, 1 x 1.5m CAT5 patch lead
- 1 x USB mouse, 1 x IR remote control (batteries incl.)
- 4 x High visibility CCTV warning stickers

# Punching above its weight: Watchguard™ IP surveillance



### Deliver Full HD CCTV anywhere

The light weight, compact size and easy installation interface of the Watchguard IP range means high definition surveillance is possible no matter what the space.

- Ideal for fast installs in retail, SMBs and more
- Perfect for point of sale and display stands
- Easy to store, transport, handle and install
- NVRs are small and light enough to mount on walls, in drawers and other unique areas
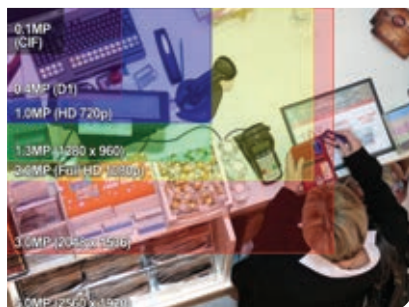


### Small size, big performance

Despite their small size, the NVRs in the Watchguard compact IP range punch above their weight, delivering powerful performance and features such as:

- Image quality up to 5.0 megapixel resolution
- USB and network footage backup options
- Built-in Power over Ethernet switches
- Small footprint and 55mm product height
- ONVIF 2.4 conformance



### Remote view config in seconds

Each NVR featured in the Watchguard compact IP range sports everything you need to deliver professional remote view capabilities to your client, including:

- Simply connect the NVR to the internet, change the default password, scan the QR code and your client's set up
- QR code compatible with Apple® iOS™ and Google® Android™ smartphones/tablets.

# Always ready with IP kits

For high definition surveillance that offers rapid installation at a competitive price point, choose Watchguard easy-install IP surveillance kits. With everything in the one box, they are the fastest way to offer an impressive 2.0 megapixel Full HD CCTV solution. Each kit comes with the following:

- Network video recorder with pre-installed HDD and built-in PoE.
- Vandal and weather resistant 2.0 megapixel cameras with infrared & WDR.
- All required CAT5 and HDMI cables with USB mouse and warning stickers.

Kits can be customised to include more storage and camera variations. Any customisation may incur additional charges and shipping costs. Contact your RhinoCo Technology sales representative for more information on kit customisation.

# Compact Series NVRs: Low cost, high value IP CCTV



(a)



(b)



(c)

## Compact Series Network Video Recorders

NVRxCOM Series: Available in 4, 8 and 16 channel systems

- Max. 5.0 megapixel resolution support (2560 x 1920)
- HDMI and VGA video output / 2 x USB
- ONVIF 2.4 conformance; H.264/MJPEG compression

(a) Model: NVR4COM (4 channel model)

- 80Mbps incoming network bandwidth & built-in 4 port PoE switch
- 1 x SATA slot for up to 4TB HDD capacity / 1 x RJ45 (100M)
- Mini 1U housing, 325 x 250 x 55mm / 1.25kg (no HDD)

(b) Model: NVR8COM (8 channel model)

- 80Mbps incoming network bandwidth & built-in 8 port PoE switch
- 1 x SATA slot for up to 4TB HDD capacity / 1 x RJ45 (100M)
- 2 x alarm input, 1 x output / 1 x RCA audio input, 1 x output
- Mini 1U housing, 325 x 250 x 55mm / 1.25kg (no HDD)

(c) Model: NVR16COM (16 channel model)

- 200Mbps incoming network bandwidth & built-in 16 port PoE switch
- 2 x SATA slot for up to 8TB HDD capacity / 1 x RS232 / 1 x RJ45 (1000M)
- 4 x alarm input, 2 x output / 1 x RCA audio input, 1 x output
- 1U housing, 375 x 327 x 53mm / 2.50kg (no HDD)



(a)



(b)



(c)

## Compact Series Full HD Network Surveillance Kits

NVRxCOMPACK Series: Available in 4, 8 and 16 channel packages

- 2.0MP resolution (1920 x 1080), records 2.0MP/25fps across all channels
- Built-in Power over Ethernet switches and pre-installed surveillance HDDs
- HDMI and VGA video output and has all required cables bundled
- Kits include high visibility CCTV surveillance warning stickers

(a) Model: NVR4COMPACK (4 channel model)

- 1 x NVR4COM compact NVR with pre-installed 1TB surveillance HDD
- 2 x 2.0MP, 3.6mm fixed lens (93°), IP67, WDR, 40m infrared mini bullets
- 2 x 2.0MP, 3.6mm fixed lens (91°), IP67, WDR, 50m infrared mini domes
- 2 x 10m, 1 x 20m, 1 x 30m pre-terminated CAT5 cables
- 1 x USB mouse / 1 x 1m HDMI cable / 1 x 1.5m CAT5 patch lead

(b) Model: NVR8COMPACK (8 channel model)

- 1 x NVR8COM compact NVR with pre-installed 2TB surveillance HDD
- 4 x 2.0MP, 3.6mm fixed lens (93°), IP67, WDR, 40m infrared mini bullets
- 4 x 2.0MP, 3.6mm fixed lens (91°), IP67, WDR, 50m infrared mini domes
- 4 x 10m, 2 x 20m, 2 x 30m pre-terminated CAT5 cables
- 1 x USB mouse / 1 x 1m HDMI cable / 1 x 1.5m CAT5 patch lead

(c) Model: NVR16COMPACK (16 channel model)

- 1 x NVR16COM compact NVR with pre-installed 4TB surveillance HDD
- 8 x 2.0MP, 3.6mm fixed lens (93°), IP67, WDR, 40m infrared mini bullets
- 8 x 2.0MP, 3.6mm fixed lens (91°), IP67, WDR, 50m infrared mini domes
- 8 x 10m, 4 x 20m, 4 x 30m pre-terminated CAT5 cables
- 1 x USB mouse / 1 x 1m HDMI cable / 1 x 1.5m CAT5 patch lead

Modifying kit configurations such as HDD addition, camera changing etc. may incur additional costs.

# Securview Victory Series™: The latest in HD over coax

## Versatile HD CCTV solution

The Securview Victory Series utilises the HDCVI transmission standard, made by the industry for the industry. It is designed for bringing HD video to existing coaxial analogue systems.

- HDCVI transmission: HD video, PTZ, alarm and audio sent across a single coaxial cable.
- Long transmission distances of 300m in 1080p and up to 500m in 720p systems.
- Low latency and anti-interference properties
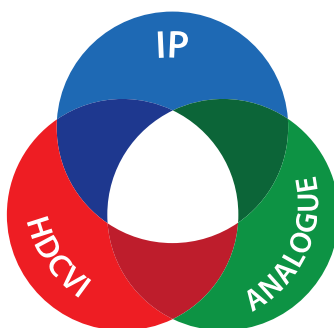
## Ideal for any upgrade installs

Each DVR in the Securview Victory Series can accommodate a combination of HDCVI, analogue and/or IP video inputs. This makes it ideal for upgrade installations.

- Perfect for multi-staged CCTV upgrades as cost effective solution to full system change.
- The flexibility of camera selection from VIP Vision, Watchguard & Securview ranges.
- Support for up to 5.0MP IP video recording.

## 1080p HD across the range

The latest updates to the Securview Victory Series have made full HD 1080p (1920 x 1080) standard across the entire DVR series, now with more cameras than ever before to choose from.

- Deliver amazing upgrade results.
- Achieve nearly 5 times higher resolution than typical D1 analogue (720 x 576).
- 1080p Victory Series DVRs are backwards compatible with 720p HDCVI cameras.

## 16 Channel Ultimate Series 1080p HDCVI DVR

Model: TVR16

- Max. 1080p / 2.0 megapixel resolution support (1920 x 1080)
- Records 1080p/25fps and 720p/25fps
- 2 x HDMI, 1 x VGA and 1 x BNC video output
- 8 x SATA up to 32TB capacity / 1 x eSATA / 4 x USB
- 2 x RJ45 (1000M) Ethernet port / 1 x RS485 / 1 x RS422 / 1 x RS232
- 16 channel alarm input / 6 channel relay output
- 16 channel BNC audio inputs / 1 channel audio BNC output
- Max. 16 simultaneous camera display split
- 2U size / 440 x 460 x 89mm / 6.50kg (no HDD)
- ONVIF 2.4 conformance

Up to 16 HDCVI or analogue inputs (via direct BNC input) up to 1080p/25fps
Up to 16 additional IP inputs (via external network switches) up to 1080p/25fps
Up to 32 total IP inputs; IP channels substitute HDCVI/analogue channels

# Victory Series™ DVRs: Analogue, IP and HD over Coax

## 4 Channel Professional Series 1080p HDCVI DVR

Model: CVR4V5

- Max. 1080p / 2.0 megapixel resolution support (1920 x 1080)
- Records 1080p/12fps and 720p/25fps
- HDMI and VGA video output
- 1 x SATA up to 6TB capacity / 2 x USB / 1 x RS485
- 1 x RJ45 (100M) Ethernet port / 4 x RCA audio in / 1 x RCA audio out
- 4 channel alarm input / 3 channel relay output
- Mini 1U size / 325 x 255 x 55mm / 1.50kg (no HDD)
- ONVIF 2.4 conformance

Up to 4 HDCVI or analogue inputs (via direct BNC input) up to 1080p/12fps
Up to 2 additional IP inputs (via external network switches) up to 5.0MP/12fps
Maximum 24Mbps IP input record bandwidth, 1 channel main stream playback

## 8 Channel Professional Series 1080p HDCVI DVR

Model: CVR8V5

- Max. 1080p / 2.0 megapixel resolution support (1920 x 1080)
- Records 1080p/12fps and 720p/25fps
- HDMI and VGA video output
- 2 x SATA up to 12TB capacity / 2 x USB / 1 x RS485
- 1 x RJ45 (100M) Ethernet port / 4 x RCA audio in / 1 x RCA audio out
- 8 channel alarm input / 3 channel relay output
- 1U size / 375 x 285 x 55mm / 2.35kg (no HDD)
- ONVIF 2.4 conformance

Up to 8 HDCVI or analogue inputs (via direct BNC input) up to 1080p/12fps
Up to 4 additional IP inputs (via external network switches) up to 5.0MP/12fps
Maximum 48Mbps IP input record bandwidth, 1 channel main stream playback

## 16 Channel Professional Series 1080p HDCVI DVR

Model: CVR16V5

- Max. 1080p / 2.0 megapixel resolution support (1920 x 1080)
- Records 1080p/12fps and 720p/25fps
- HDMI and VGA video output
- 2 x SATA up to 12TB capacity / 2 x USB / 1 x RS485
- 1 x RJ45 (1000M) Ethernet port
- 1 channel RCA audio input / 1 channel RCA audio output
- 1U size / 375 x 285 x 55mm / 2.35kg (no HDD)
- ONVIF 2.4 conformance

Up to 16 HDCVI or analogue inputs (via direct BNC input) up to 1080p/12fps
Up to 8 additional IP inputs (via external network switches) up to 5.0MP/12fps
Maximum 96Mbps IP input record bandwidth, 1 channel main stream playback

## 32 Channel Professional Series 1080p HDCVI DVR

Model: CVR32V2

- Max. 1080p / 2.0 megapixel resolution support (1920 x 1080)
- Records 1080p/12fps and 720p/25fps
- 2 x HDMI, 1 x VGA and 1 x TV video output
- 8 x SATA up to 32TB capacity / 4 x USB / 1 x eSATA / 1 x RS485 / 1 x RS232
- 2 x RJ45 (1000M) Ethernet port / 16 x BNC audio in / 1 x BNC audio out
- 16 channel alarm input / 6 channel relay output
- 2U size / 440 x 460 x 89mm / 6.50kg (no HDD)
- ONVIF 2.4 conformance

Up to 32 HDCVI or analogue inputs (via direct BNC input) up to 1080p/12fps
Up to 32 IP inputs (via external network switches) up to 1080p/12fps
IP channels substitute HDCVI/analogue channels

# The ideal Full HD upgrade to analogue surveillance

**NEW**

## 1080p Ultimate Motorised WDR HDCVI Bullet
Model: VSCVI2MPFBIRM100M

- 1080p / 2.0MP maximum resolution (1920 x 1080)
- Streams 1080p/25fps, 720p/25fps
- 2.7~12mm motorised varifocal lens / auto iris, 95° (wide) ~ 36° (tele)
- 100m infrared range, day/night (auto ICR), 2D/3D DNR, true WDR (120dB)
- Single channel alarm input/output; Single channel audio input
- Dedicated BNC HDCVI & CVBS video outputs for easy HD or SD input
- Up to 500m HD video transmission distance (75-3 coax)
- Dual voltage: Power via 12VDC or 24VAC
- IP67 weather resistant housing

Dual voltage, auto iris motorised lens, alarm I/O, audio input and true WDR
Impressive colour low light performance with 0.005lx/F1.4 min. illumination
Analogue mode configuration using on-camera buttons, or via OSD

**NEW**

## 1080p Professional Motorised WDR HDCVI Bullet
Model: VSCVI2MPFBIRMV2

- 1080p / 2.0MP maximum resolution (1920 x 1080)
- Streams 1080p/25fps, 720p/25fps
- 2.7~12mm motorised varifocal lens / fixed iris, 99° (wide) ~ 37° (tele)
- 60m infrared range, day/night (auto ICR), 2D/3D DNR, true WDR (120dB)
- Dedicated BNC HDCVI & CVBS video outputs for easy HD or SD input
- Up to 500m HD video transmission distance (75-3 coax)
- Dual voltage: Power via 12VDC or 24VAC
- IP67 weather resistant housing

Now with true WDR (120dB) and dual voltage compatible
Analogue mode configuration via OSD using HDCVI DVR or tester

**NEW**

## 1080p Professional Fixed WDR HDCVI Mini Bullet
Model:  VSCVI2MPFBIRV4

- 1080p / 2.0MP maximum resolution (1920 x 1080)
- Streams 1080p/25fps, 720p/25fps
- 3.6mm fixed lens (90°)
- 40m infrared range, day/night (auto ICR), 2D/3D DNR, true WDR (120dB)
- Dedicated BNC HDCVI & CVBS video outputs for easy HD or SD input
- Up to 500m HD video transmission distance (75-3 coax)
- Power via 12VDC
- IP67 weather resistant housing

Now with true WDR (120dB) for performance in all lighting conditions
Analogue mode configuration via OSD using HDCVI DVR or tester

## 1080p 20x Zoom Infrared HDCVI PTZ Dome
Model: VSCVI2MPPTZIRB

- 1080p / 2.0MP maximum resolution (1920 x 1080)
- Streams 1080p/25fps, 720p/25fps
- 4.7~94.0mm motorised varifocal lens (54.1°~ 3.2° angle of view)
- 2 x alarm input / 1 x alarm output, 1 x audio input, 1 x RS485
- High / Standard Definition switchable video output (HDCVI / CVBS)
- 100m infrared range, day/night (auto ICR), Digital WDR, 2D/3D DNR
- Power via 24VAC/3A, auto-restore status on power loss
- Full 360° pan; -15~90° tilt; and 180° auto-flip
- PTZ modes: 5 pattern, 8 tour, auto pan, auto scan
- Preset speed: 240°/s pan, 200°/s tilt
- Up to 300m transmission distance (75-3 coax)
- IP66 weather resistant housing

Includes right angle wall mount bracket and 24VAC power supply
Switch to analogue mode, zoom & focus adjust using on-camera buttons

**NEW**

## 1080p Ultimate Motorised WDR HDCVI Dome
Model: VSCVI2MPVDIRM50M

- 1080p / 2.0MP maximum resolution (1920 x 1080)
- Streams 1080p/25fps, 720p/25fps
- 2.7~12mm motorised varifocal lens / auto iris, 95° (wide) ~ 36° (tele)
- 50m infrared range, day/night (auto ICR), 2D/3D DNR, true WDR (120dB)
- Single channel alarm input/output; Single channel audio input
- Dedicated BNC HDCVI & CVBS video outputs for easy HD or SD input
- Up to 500m HD video transmission distance (75-3 coax)
- Dual voltage: Power via 12VDC or 24VAC
- IK10 vandal / IP67 weather resistant housing

Dual voltage, auto iris motorised lens, alarm I/O, audio input, true WDR, triaxis
Impressive colour low light performance with 0.005lx/F1.4 min. illumination
Analogue mode configuration using on-camera buttons, or via OSD

**NEW**

## 1080p Professional Motorised WDR HDCVI Dome
Model: VSCVI2MPVDIRMV2

- 1080p / 2.0MP maximum resolution (1920 x 1080)
- Streams 1080p/25fps, 720p/25fps
- 2.7~12mm motorised varifocal lens / fixed iris, 105° (wide) ~ 33° (tele)
- 30m infrared range, day/night (auto ICR), 2D/3D DNR, true WDR (120dB)
- Dedicated BNC HDCVI & CVBS video outputs for easy HD or SD input
- Up to 500m HD video transmission distance (75-3 coax)
- Power via 12VDC
- IK10 vandal / IP66 weather resistant housing

Now with true WDR (120dB) and triaxis adjustable camera module
Analogue mode configuration via OSD using HDCVI DVR or tester

**NEW**

## 1080p Professional Fixed WDR HDCVI Mini Dome
Model: VSCVI2MPVDIRV2

- 1080p / 2.0MP maximum resolution (1920 x 1080)
- Streams 1080p/25fps, 720p/25fps
- 3.6mm fixed lens (90°)
- 30m infrared range, day/night (auto ICR), 2D/3D DNR, true WDR (120dB)
- Dedicated BNC HDCVI & CVBS video outputs for easy HD or SD input
- Up to 500m HD video transmission distance (75-3 coax)
- Power via 12VDC
- IK10 vandal / IP66 weather resistant housing

Now with true WDR (120dB) and triaxis adjustable camera module
Analogue mode configuration via OSD using HDCVI DVR or tester

## 1080p 20x Zoom Infrared HDCVI PTZ Dome
Model: VSCVI2MPPTZIR

- 1080p / 2.0MP maximum resolution (1920 x 1080)
- Streams 1080p/25fps, 720p/25fps
- 4.7~94.0mm motorised varifocal lens (54.1°~3.2° angle of view)
- 2 x alarm input / 1 x alarm output, 1 x audio input, 1 x RS485
- High / Standard Definition switchable video output (HDCVI / CVBS)
- 100m infrared range, day/night (auto ICR), Digital WDR, 2D/3D DNR
- Power via 24VAC/3A, auto-restore status on power loss
- Full 360° pan; -15~90° tilt; and 180° auto-flip
- PTZ modes: 5 pattern, 8 tour, auto pan, auto scan
- Preset speed: 240°/s pan, 200°/s tilt
- Up to 300m transmission distance (75-3 coax)
- IP66 weather resistant housing

Includes right angle wall mount bracket and 24VAC power supply
Switch to analogue mode, zoom & focus adjust using on-camera buttons

# Victory Series™ kits: Analogue upgrades made easy

## Five times the image resolution

Deliver a truly stunning experience by upgrading your customers' analogue footage to full HD using the Securview Victory Series analogue upgrade surveillance kits:

- Increase image resolution five fold (from D1)
- Available in 4, 8 and 16 channels for upgrade jobs of varying sizes.
- All purpose cameras featuring infrared, IP67 weather and IK10 vandal resistance

## Designed for analogue upgrades

Take advantage of the thousands of analogue upgrade jobs available by implementing Victory Series surveillance kits into your product offering. Consider these unique advantages:

- Each camera features dual BNC HDCVI & CVBS video output, allowing Victory Series cameras to be used with analogue DVRs
- With up to 500m transmission distance at 1080p, upgrade *and* expand existing installs

## Remote view config in seconds

Each DVR bundled with Securview Victory Series surveillance kits features everything you need to deliver professional remote view capabilities to your client, including:

- Simply connect the DVR to the internet, change the default password, scan the QR code and your client's set up
- QR code compatible with Apple® iOS™ and Google® Android™ smartphones/tablets.

# Installing Victory Series™ kits at a new site?

## Victory Series Kit Power Supply Accessory Pack
Model: CVR4PACKACC

- Accessory pack built Securview Victory Series new installs
- 1 x 12VDC/5A switch mode power supply with lead
- 1 x 5 port DC plug loom
- 4 x DC power connector packs (male & female)
  * Coaxial cable not included, order separately
  One accessory pack powers up to 4 cameras

# Fast to upgrade with impressive HD image quality

## 4 Channel 1080p Analogue Upgrade Kit

Model: CVR4PACK5

- 1080p / 2.0MP maximum resolution (1920 x 1080)
- Records 1080p/12fps across all channels
- HDMI and VGA video output
- Pre-installed 1TB surveillance hard drive
- DVR supports HDCVI, analogue and IP video inputs

Included cameras

- 4 x 2.0MP, 3.6mm lens (90°), true WDR, IP67, 40m infrared mini bullet

Included accessories

- 1 x 1m HDMI cable, 1 x 1.5m CAT5 patch lead
- 4 x High visibility CCTV warning stickers
   * Power/coaxial cables & connectors not included

## 8 Channel 1080p Analogue Upgrade Kit

Model: CVR8PACK5

- 1080p / 2.0MP maximum resolution (1920 x 1080)
- Records 1080p/12fps across all channels
- HDMI and VGA video output
- Pre-installed 2TB surveillance hard drive
- DVR supports HDCVI, analogue and IP video inputs

Included cameras

- 4 x 2.0MP, 3.6mm lens (90°), true WDR, IP67, 40m infrared mini bullet
- 4 x 2.0MP, 3.6mm lens (90°), true WDR, IP67/IK10, 30m infrared mini dome

Included accessories

- 1 x 1m HDMI cable, 1 x 1.5m CAT5 patch lead
- 4 x High visibility CCTV warning stickers
   * Power/coaxial cables & connectors not included

## 16 Channel 1080p Analogue Upgrade Kit

Model: CVR16PACK5

- 1080p / 2.0MP maximum resolution (1920 x 1080)
- Records 1080p/12fps across all channels
- HDMI and VGA video output
- Pre-installed 2TB surveillance hard drive
- DVR supports HDCVI, analogue and IP video inputs

Included cameras

- 8 x 2.0MP, 3.6mm lens (90°), true WDR, IP67, 40m infrared mini bullet
- 8 x 2.0MP, 3.6mm lens (90°), true WDR, IP67/IK10, 30m infrared mini dome

Included accessories

- 1 x 1m HDMI cable, 1 x 1.5m CAT5 patch lead
- 4 x High visibility CCTV warning stickers
   * Power/coaxial cables & connectors not included

# Watchguard™ HDCVI Surveillance: Beyond Analogue

Watchguard™ Compact Series HDCVI surveillance range is ideal for jobs where cost effectiveness is paramount, but image quality is a close second. The range delivers an affordable & flexible selection of products that can be used as cost effective analogue surveillance, with the option to expand beyond 960H resolution to 720p HD where necessary.

DVRs support up to 16 analogue or HDCVI channels, allowing you to provide your customers with the flexibility they need to receive quality performance whilst landing within their budget. For installs with existing surveillance, Compact Series DVRs can substitute analogue / HDCVI video inputs for up to two IP channels.

Achieve almost double the resolution of 960H when you take advantage of the 720p video input options via IP or HDCVI. This makes the Compact Series more capable and equally affordable alternative to analogue-only surveillance systems.

## 8 Channel Compact Series 720p HDCVI DVR

Model: CVR8EV2

- Max. 720p / 1.0 megapixel resolution support (1280 x 720)
- Records 720p/12fps and 960H/25fps
- HDMI and VGA video output
- 1 x SATA up to 6TB capacity / 2 x USB / 1 x RS485
- 1 x RJ45 (100M) Ethernet port
- Compact 1U size / 260 x 220 x 40mm / 0.75kg (no HDD)
- ONVIF 2.4 conformance

Up to 8 HDCVI or analogue inputs (via direct BNC input) up to 720p/12fps
Up to 2 additional IP inputs (via external network switches) up to 5.0MP/12fps
Maximum 40Mbps IP input record bandwidth, 1 channel main stream playback

## 16 Channel Compact Series 720p HDCVI DVR

Model: CVR16E

- Max. 720p / 1.0 megapixel resolution support (1280 x 720)
- Records 720p/12fps and 960H/25fps
- HDMI and VGA video output
- 1 x SATA up to 4TB capacity / 2 x USB / 1 x RS485
- 1 x RJ45 (100M) Ethernet port
- Compact 1U size / 260 x 220 x 40mm / 0.75kg (no HDD)
- ONVIF 2.4 conformance

Up to 16 HDCVI or analogue inputs (via direct BNC input) up to 720p/12fps
Up to 2 IP inputs (via external network switches) up to 720p/12fps
IP channels substitute HDCVI/analogue channels

# Boost analogue with HD quality HDCVI surveillance

## 1080p Infrared Fixed HDCVI Mini Dome

(a) Model: VSCVI2MPDIRV3

- 1080p / 2.0MP maximum resolution (1920 x 1080)
- Streams 1080p/25fps
- Fixed 3.6mm lens, 90° angle of view
- 50m infrared range, day/night (auto ICR), 2D DNR
- Up to 500m transmission distance (75-3 coax)
- IP67 weather resistant, full metal construction housing
- Power via 12VDC

(b) Model: VSCVI1MPDIRV4

- 1.0MP maximum resolution (1280 x 720), streams 720p/25fps
- 3.6mm fixed lens (88°), 800m video transmission distance (75-3 coax)

Triaxis 'eyeball' design with durable full metal construction housing
HDCVI BNC video output only (not SD switchable)

(a)          (b)

## 720p Infrared Fixed HDCVI Mini Bullet

Model: VSCVI1MPFBIRV2

- 720p / 1.0MP maximum resolution (1280 x 720)
- Streams 720p/25fps
- Fixed 3.6mm lens, 79.7° angle of view
- 20m infrared range, day/night (auto ICR), 2D DNR
- Up to 500m transmission distance (75-3 coax)
- IP66 weather resistant, full metal housing
- Power via 12VDC

HDCVI BNC video output only (not SD switchable)

## 4 Channel 720p HDCVI Surveillance Kit

Model: CVR4EPACK2

- 4 channel 720p HD over coax DVR
- Records 720p HD (1280 x 720)/25fps
- HDMI and VGA video output
- Pre-installed 1TB surveillance hard drive
- Supports HDCVI, analogue and IP video input

Included cameras

- 2 x 720p HDCVI fixed, infrared mini domes (indoors only)
- 2 x 720p HDCVI fixed, infrared mini bullet (IP67 weather rated)

Included accessories

- Pre-installed 1TB surveillance hard disk drive
- 4 x 18m (60ft) BNC video / power leads
- 1 x camera power supply with 4 way splitter, USB mouse

## 8 Channel 720p HDCVI Surveillance Kit

Model: CVR8EPACK2

- 8 channel 720p HD over coax DVR
- Records 720p/12fps and 960H/25fps
- HDMI and VGA video output
- Pre-installed 2TB surveillance hard drive
- Supports HDCVI, analogue and IP video input

Included cameras

- 4 x 720p HDCVI fixed, infrared mini domes (indoors only)
- 4 x 720p HDCVI fixed, infrared mini bullets (IP67 weather rated)

Included accessories

- Pre-installed 2TB surveillance hard disk drive
- 8 x 18m (60ft) BNC video / power leads
- 1 x camera power supply with 8 way splitter, USB mouse

# Watchguard™ Analogue: Cost effective CCTV solutions



(a)

(b) (c)

## Analogue Bullet Camera Series

(a) Model: VSWFF20MIR800BV2 (fixed lens mini bullet)

- 1/3" CMOS sensor, 756 x 504 pixels
- 800TVL maximum colour resolution
- 3.6mm fixed on-board lens, 0.1lx min. illumination
- 20m infrared range with auto IR-cut filter
- Power via 12VDC

(b) Model: VSWVF60MIR2.8-12 (varifocal lens bullet)

- 1/4" Pixelplus CMOS sensor, 976 x 582 pixels
- 800TVL maximum colour resolution
- 2.8~12mm manual varifocal lens, 0.01lx min. illumination
- 60m infrared range with auto IR-cut filter
- Power via 12VDC

(c) Model: VSWVF40MIR6-22 (varifocal lens bullet)

- 1/3" CMOS sensor, 752 x 582 pixels
- 800TVL maximum colour resolution
- 6~22mm manual varifocal lens, 0.01lx min. illumination
- 40m infrared range with auto IR-cut filter
- Power via 12VDC

Watchguard analogue bullet cameras are compatible with all HDCVI DVRs



(a)

(b)

(c)

## Analogue Dome Camera Series

(a) Model: VSDFF20MIR800VPV2 (fixed lens mini dome)

- 1/3" CMOS sensor, 756 x 504 pixels
- 800TVL maximum colour resolution
- 3.6mm fixed on-board lens, 0.1lx min. illumination
- 20m infrared range with auto IR-cut filter
- Power via 12VDC

(b) Model: VSDVF20MIR650 (indoor only varifocal lens dome)

- 1/3" Exview HAD CCD II sensor
- Sony Effio-E DSP
- 650TVL maximum colour resolution
- 4 ~ 9mm manual varifocal lens
- 20m infrared range with auto IR-cut filter
- Housing rated for indoor use only
- Power via 12VDC

Triaxis internal camera module in plastic dome body & shell

(c) Model: VSDVF30MIR2.8-12V3 (varifocal lens dome)

- 1/3" CMOS sensor, 752 x 582 pixels
- 800TVL maximum colour resolution
- 2.8 ~ 12mm manual varifocal lens with 0.1lx min. illumination
- 30m infrared range with auto IR-cut filter
- Full metal construction, IP66 weather rated
- Power via 12VDC

Triaxis 'eyeball' design with metal housing
Watchguard analogue bullet cameras are compatible with all HDCVI DVRs

# Make your HD & Ultra HD surveillance installs shine

## 18.5" Acer 720p Widescreen LED Monitor

Model: LCDACER19

- 18.5" widescreen energy efficient LED backlit monitor
- HD+ 720p resolution (1366 x 768 pixels), 16:9 aspect ratio
- TN (twisted nematic) panel technology
- 1 x VGA display input
- 5ms response time / 300cd/m$^2$ brightness / 10M:1 contrast ratio
- Ideal for 720p HD CCTV surveillance display applications
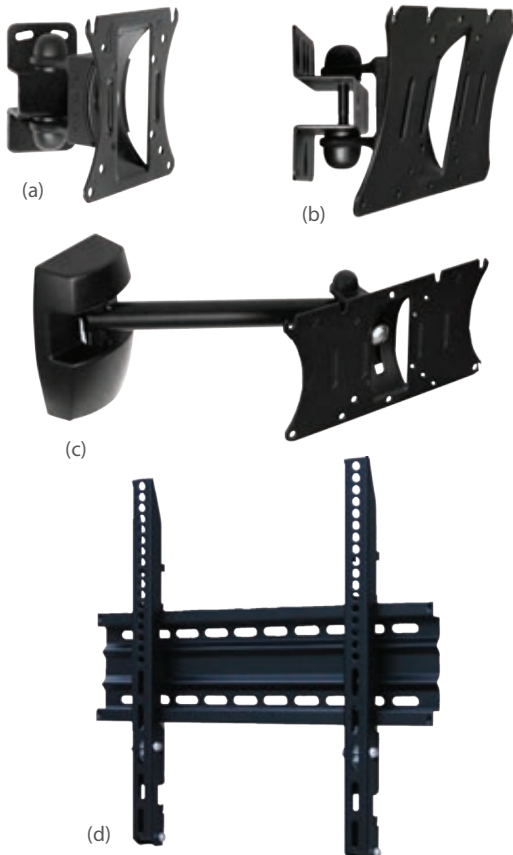- VESA wall mount compliant

## 23.5" LG Full HD 1080p Widescreen LED Monitor

Model: LCDLG24W

- 23.5" widescreen energy efficient LED backlit monitor
- Full HD 1080p resolution (1920 x 1080 pixels), 16:9 aspect ratio
- TN (twisted nematic) panel technology
- 1 x HDMI display input / 1 x VGA display input / 1 x headphone jack
- 5ms response time / 250cd/m$^2$ brightness / 5M:1 contrast ratio
- Ideal for 1080p+ CCTV surveillance display applications
- 100 x 100 VESA wall mount compliant

## Looking for an Ultra HD resolution monitor or TV?

If you require larger displays or greater resolution, we can cater to all display needs from 27" ~ 65", in both Full HD 1080p and Ultra HD 2160p / 4K resolutions. Please contact your sales representative for the most up to date models.

Full HD
1080

## Heavy Duty Monitor & Television Brackets

(a) Model: LCDBRACKET

- Standard wall mount bracket for monitors
- VESA 50/75/100 wall mount compliant
- Accommodates 10" ~ 22" size displays (diagonal measurement)
- 80mm distance from wall, ±15° vertical tilt and ±40° rotation
- 10kg maximum load capacity

(b) Model: LCDBRACKET20

- Standard wall mount bracket for monitors and televisions
- VESA 50/75/100/200x100/150/200 wall mount compliant
- Accommodates 10" ~ 32" size displays (diagonal measurement)
- 90mm distance from wall, ±20° vertical tilt and ±45° rotation
- 20kg maximum load capacity

(c) Model: LCDBRACKETSW

- Dual joint wall mount swivel bracket for monitors and televisions
- VESA 50/75/100/200x100 wall mount compliant
- Accommodates 10" ~ 32" size displays (diagonal measurement)
- 80~280mm distance from wall, depending on arm rotation
- ±20° vertical tilt with ±90° rotation (wall joint) and ±95° (arm joint)
- 20kg maximum load capacity

(d) Model: LCDBRACKET50

- Heavy duty wall mount bracket for monitors and televisions
- Adjustable with maximum VESA 600x400 wall mount compliant
- Accommodates 26" ~ 52" size displays (diagonal measurement)
- 35mm distance from wall with -12° vertical tilt
- 50kg maximum load capacity, includes spirit level

(a)
(b)
(c)
(d)

# Helping you deliver professional CCTV installations


(a)


(b)


(c)


(d)


(e)


(f)


(g)


(h)


(i)


(j)


(k)
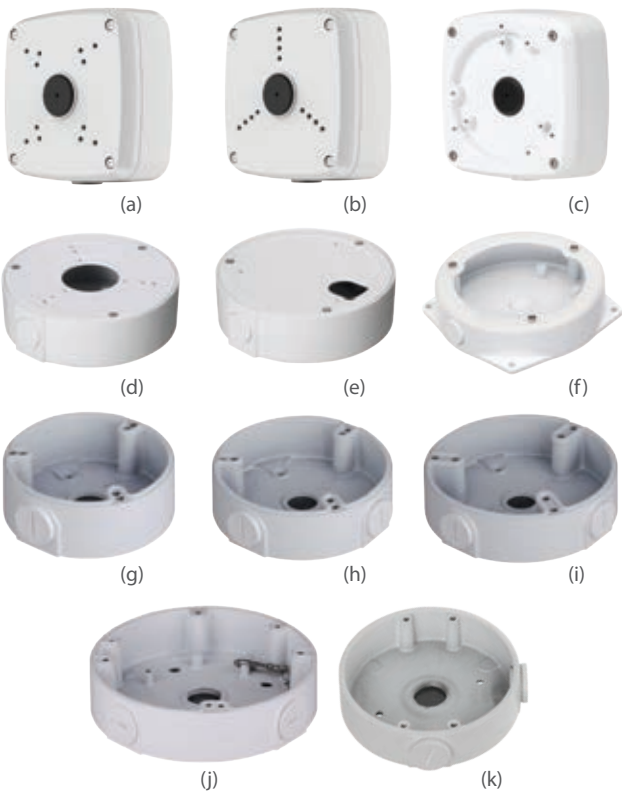
## Dome & Bullet Camera Junction Boxes

Model: See table below

- Make mounting cameras quick and easy; and deliver a professional install
- Durable aluminium and SECC zinc-plated steel construction
- Weather resistant models feature rubber grommets, gaskets and O-rings
- Junction boxes include mounting kit, including wall plugs and screws

For compatible models, see camera compatibility guide on following pages

| ID | Model | Max. Load | Dimensions (mm) | Weather Resistant |
|----|-------|-----------|-----------------|-------------------|
| (a) | VSBKTA121 | 3.0kg | 134 x 134 x 55 | Yes |
| (b) | VSBKTA122 | 3.0kg | 134 x 134 x 55 | Yes |
| (c) | VSBKTA123 | 3.0kg | 134 x 134 x 51 | Yes |
| (d) | VSBKTA130 | 3.0kg | Ø138 x 42 | No |
| (e) | VSBKTA131 | 3.0kg | Ø138 x 42 | No |
| (f) | VSBKTA132 | 3.0kg | 155 x 155 x 39 | No |
| (g) | VSBKTA135 | 1.0kg | Ø90 x 34 | Yes |
| (h) | VSBKTA136 | 1.0kg | Ø110 x 34 | Yes |
| (i) | VSBKTA137 | 1.0kg | Ø122 x 34 | Yes |
| (j) | VSBKTA138 | 3.0kg | Ø161 x 38 | Yes |
| (k) | VSBKTA139 | 1.0kg | Ø108 x 29 | Yes |


(l)


(m)

## PTZ Dome Camera Junction Boxes

Model: See table below

- Interfaces with PTZ dome camera right angle brackets
- Durable aluminium construction junction boxes
- Weather resistant models feature rubber grommets, gaskets and O-rings
- Junction boxes include mounting kit, including wall plugs and screws

For compatible models, see camera compatibility guide on following pages

| ID | Model | Max. Load | Dimensions (mm) | Weather Resistant |
|----|-------|-----------|-----------------|-------------------|
| (l) | VSBKTA120 | 7.0kg | 115 x 160 x 37 | Yes |
| (m) | VSBKTA140 | 8.0kg | 297 x 248 x 107 | Yes |


(n)


(o)


(p)


(q)


(r)


(s)

## Camera to Bracket Connectors

Model: See table below

- Connects large domes to right angle brackets and ceiling mount brackets
- Durable aluminium construction in a variety of sizes

For compatible models, see camera compatibility guide on following pages

| ID | Model | Description | Dimensions (mm) |
|----|-------|-------------|-----------------|
| (n) | VSBKTA100 | Right/ceiling mount connector | Ø151 x 37 |
| (o) | VSBKTA101 | Right/ceiling mount connector | Ø159 x 35 |
| (p) | VSBKTA102 | Right/ceiling mount connector | Ø169 x 37 |
| (q) | VSBKTA112 | 220mm ceiling mount extender | Ø53 x 220 |
| (r) | VSBKTA113 | 420mm ceiling mount extender | Ø53 x 420 |
| (s) | VSBKTA114 | PTZ dome bracket connector | Ø63 x 50 |
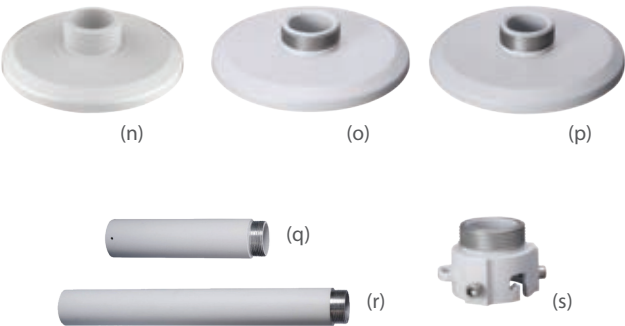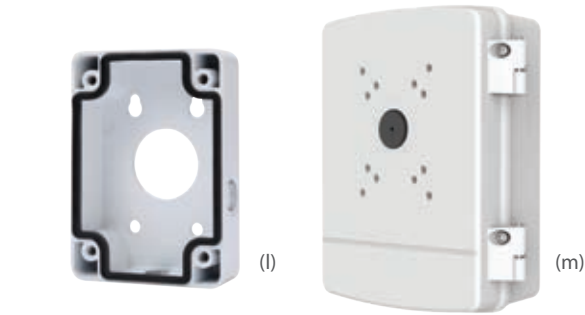
# Adaptable surveillance systems for every application

## Right Angle Mount Brackets for Small Cameras

Model: See table below

- Durable aluminium construction, built for small dome cameras
- **Weather resistant models:** fully enclosed aluminium unibody housing
- **Partial weather resistant models:** two piece construction with O-rings
- Right angle brackets include mounting kit, including wall plugs and screws

For compatible models, see camera compatibility guide on following pages

| ID | Model | Max. Load | Dimensions (mm) | Weather Resistant |
|----|-------|-----------|-----------------|-------------------|
| (a) | VSBKTB200W | 1.0kg | 160 x 120 x 74 | Partial |
| (b) | VSBKTB202W | 1.0kg | 160 x 122 x 76 | Yes |
| (c) | VSBKTB203W | 1.0kg | 160 x 122 x 76 | Yes |
| (d) | VSBKTB204W | 1.0kg | 160 x 122 x 76 | Yes |

## Right Angle Mount Brackets for Large Cameras

Model: See table below

- Durable aluminium construction, built for large dome cameras
- VSBKTB302S weather resistant with rubber grommets, gaskets and O-rings
- VSBKTB300S & VSBKTB303W come standard with select PTZ dome models
- Right angle brackets include mounting kit, including wall plugs and screws

For compatible models, see camera compatibility guide on following pages

| ID | Model | Max. Load | Dimensions (mm) | Weather Resistant |
|----|-------|-----------|-----------------|-------------------|
| (e) | VSBKTB302S | 3.0kg | 134 x 134 x 188 | Yes |
| (f) | VSBKTB300S | 3.0kg | 160 x 160 x 228 | Yes |
| (g) | VSBKTB303W | 7.0kg | 115 x 160 x 255 | Yes |

**NEW**

## Pole, Corner, Ceiling & Parapet Mount Brackets

Model: See table below

- Deliver professional installations no matter what the application
- Durable aluminium and SECC zinc-plated steel construction
- All brackets include mounting kit, including wall plugs and screws

For compatible models, see camera compatibility guide on following pages

| ID | Model | Description | Max. Load |
|----|-------|-------------|-----------|
| (h) | VSBKTA150 | Triple clamp, heavy duty pole mount | 10.0kg |
| (i) | VSBKTA152 | Double clamp, pole mount bracket | 3.0kg |
| (j) | VSBKTA151 | Heavy duty corner mount bracket | 10.0kg |
| (k) | VSBKTB300C | Ceiling mount pendant bracket | 7.0kg |
| (l) | VSBKTB303S | Parapet mount rotatable PTZ bracket | 7.0kg |

## Recessed Ceiling Mount Brackets for Dome Cameras

Model: See table below

- Neat solution for recessing ceiling mounted dome cameras
- Durable SECC zinc-plated steel and polycarbonate construction
- All brackets include mounting kit, including wall plugs and screws

For compatible models, see camera compatibility guide on following pages

**NEW**

| ID | Model | Max. Load | Dimensions (mm) | Weather Resistant |
|----|-------|-----------|-----------------|-------------------|
| (m) | VSBKTB200C | 1.0kg | Ø166 x 76 | No |
| (n) | VSBKTB201C | 1.5kg | Ø211 x 88 | No |

| Compatible Models | | Adapter | Right Angle | | | |
|---|---|---|---|---|---|---|
| **Camera Type** | | **Apply directly or use as a camera-to-bracket connector*** |  |  |  |  |
| Housing Reference | IP & HDCVI Models | | VSBKTB200W | VSBKTB202W | VSBKTB203W | VSBKTB204W |
| | VSIP12MPFBIRM VSIP4MPFBIRM VSIP2MPFBIRL VSCVI2MPFBIRM100M | VSBKTA121 | | | | |
| | VSIP4MPFBMINIIR VSIP2MPFBMINIIRV2 VSCVI2MPFBIRV4 | VSBKTA121 | | | | |
| | VSIP3MPFBIRM2.8-12 VSCVI2MPFBIRMV2 | VSBKTA122 VSBKTA135 | | | | |
| | VSCVI1MPFBIRV2 | VSBKTA122 VSBKTA130 | | | | |
| | VSIP12MPVDIRM VSIP4MPVDIRM VSCVI2MPVDIRM50M | **Connector:** VSBKTA101 / **Junction Box:** VSBKTA138 | | | | |
| | VSIP2MPVDIRL VSIP12MPFEIR | **Connector:** VSBKTA100 / **Junction Box:** VSBKTA132 | | | | |
| | VSIP4MPFE | VSBKTA123 VSBKTA131 | | | Direct | |
| | VSIP3MPVDIRM2.8-12 VSCVI2MPVDIRMV2 | VSBKTA123 VSBKTA137 | Direct | | Direct | |
| | VSIP4MPVDMINIIRC2.8/3.6/6.0 VSIP2MPVDMINIIRC3.6 VSCVI1MPDIRV4 VSCVI2MPDIRV3 VSCVI2MPVDIRFT | VSBKTA139 | | | | Direct |
| | VSIP4MPVDMINIIR VSCVI2MPVDIRV2 | VSBKTA123 VSBKTA131 VSBKTA136 | Direct | | Direct | |
| | VSIP2MPPTZV2 | VSBKTA102 | | | | |
| | VSIP2MPPTZMINI | VSBKTA137 | | Direct | | |
| | VSIP2MPPTZIR VSCVI2MPPTZIRB | **As Standard:** VSBKTA110 VSBKTB300S / VSBKTA120 VSBKTA140 | | | | |
| | VSIP2MPPTZIRL VSIP2MPPTZIRZ | **As Standard:** VSBKTA111 VSBKTB303W / VSBKTA120 VSBKTA140 | | | | |
| | VSCVI2MPPTZIR  *VSBKTB303W & VSBKTA114 required for use with VSBKTA120/140 | **As Standard:** VSBKT64FB / VSBKTA120* VSBKTA140* | | | | |

| Right Angle | Ceiling | Recessed | | Pole | | Corner | Parapet |
|---|---|---|---|---|---|---|---|
| VSBKTB302S | VSBKTB300C | VSBKTB200C | VSBKTB201C | VSBKTA150 | VSBKTA152 | VSBKTA151 | VSBKTB303S |
| | | | | | VSBKTA121 | VSBKTA121 | |
| | | | | | VSBKTA121 | VSBKTA121 | |
| | | | | VSBKTA135 | VSBKTA122 | VSBKTA122 VSBKTA135 | |
| | | | | | VSBKTA122<br>VSBKTA130 | VSBKTA122<br>VSBKTA130 | |
| VSBKTA101 | VSBKTA101 | | Direct | VSBKTA138<br>VSBKTA101 + VSBKTB300C<br>VSBKTA101 + VSBKTB302S | | VSBKTA138<br>VSBKTA101 + VSBKTB302S | |
| VSBKTA100 | VSBKTA100 | | | VSBKTA100 + VSBKTB300C<br>VSBKTA100 + VSBKTB302S | VSBKTA132 | VSBKTA100 + VSBKTB302S | |
| | | | | | VSBKTB203W | | |
| | Direct | | | VSBKTA137 | VSBKTA123<br>VSBKTB203W | VSBKTA123<br>VSBKTA137 | |
| | | | | VSBKTA139 | VSBKT204W | VSBKTA139 | |
| | | | | | VSBKTB203W<br>VSBKTA123<br>VSBKTA131 | VSBKTA123<br>VSBKTA131 | |
| VSBKTA102 | VSBKTA102 | | | VSBKTA102 + VSBKTB302S | VSBKTA102 + VSBKTB302S | VSBKTA102 + VSBKTB302S | |
| | Direct | | | VSBKTA137 | VSBKTB202W | VSBKTA137 | |
| | Direct with incl. adapter | | | Incl. adapter + VSBKTB300C<br>Incl. adapter + right angle | | Direct with incl. adapter + right angle | Direct with incl. adapter |
| | Direct with incl. adapter | | | Incl. adapter + VSBKTB300C<br>Incl. adapter + right angle | | Direct with incl. adapter + right angle | Direct with incl. adapter |
| | VSBKTA114 | | | VSBKTA114 + VSBKTB303W<br>VSBKTA114 + VSBKTB300C | | VSBKTA114 + VSBKTB303W | VSBKTA114 |

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# Seagate Surveillance-Optimised Storage Solutions

## Seagate® SkyHawk™ Surveillance HDDs

Model: HDxTBSH (where 'x' denotes capacity in TB)

- Available in 1TB, 2TB, 3TB, 4TB, 6TB, 8TB and 10TB capacities
- Designed and tested for reliable use in 24/7 operating environments
- Compatible in all VIP Vision™, Securview™ and Watchguard™ DVRs/NVRs
- **ImagePerfect™ firmware** supports 24×7 surveillance-optimized workloads tuned to record ~90% of the time and play back video footage the remaining 10%, and supports more cameras recording at higher resolutions than traditional drives.
- **Workload rating of 180TB/year** allows SkyHawk to perform reliably in write-intensive surveillance systems - 3 x the workload rating of a desktop-class drive.
- **Rotational vibration (RV) sensors** allow drives to maintain performance in RAID and multi-drive systems, giving customers the flexibility to grow with the booming NVR market and scale their systems when more storage is needed.
- **ATA streaming support** sustains recordings from up to 64 HD cameras for smooth, uninterrupted footage.
- **Up to 10TB or 10,000 hours of HD video storage** supports an increased number of cameras and helps to ensure longer data retention periods are met.
- **1M hours MTBF, 3-year limited warranty** represents an improved total cost of ownership (TCO) with reduced maintenance costs.
- **Lower power consumption** means a reduction in heat emissions, which improves reliability in surveillance solutions.
- **Tarnish-resistant components** help protect drive from environmental elements, increasing field reliability.

## Seagate® SkyHawk™ Surveillance HDDs + Rescue™ Service

Model: HDxTBSHR (where 'x' denotes capacity in TB)

- SkyHawk™ 1TB ~ 10TB drives with +Rescue™ Data Recovery Service plan
- 3-year Seagate Rescue™ plan included in price of the surveillance HDD
- Greater than 90% success rate; includes recovery for drives in a RAID array
- Recovers data in the event of data corruption from system or power failure
- Data recovery through Seagate® professional in-lab recovery services

Ask your sales representative about SkyHawk™ HDD for your next installation Available Spring 2016. For immediate needs, see Seagate Surveillance HDD

## Seagate® Surveillance HDDs

Model: HDxTBSV

- Available in 1TB, 2TB, 4TB, 6TB and 8TB capacities
- Purpose built for surveillance VX hard disk drives
- Offers performance even under continual and prolonged use
- Designed and tested for reliable use in 24/7 operating environments
- Used in all VIP Vision™, Securview™ and Watchguard™ DVRs/NVRs
- Come pre-installed in all CCTV surveillance kits

## Seagate® Surveillance HDDs + Rescue™ Service

Model: HDxTBSVR

- 3-year Seagate Rescue™ plan included in price of the surveillance HDD
- Greater than 90% success rate; includes recovery for drives in a RAID array
- Recovers data in the event of data corruption from system or power failure
- Data recovery through Seagate® professional in-lab recovery services

Ordering Information

- HDxTBSV(R), where 'x' is the capacity:
  Example: HD2TBSVR - Seagate® 2TB surveillance hard disk drive, with Rescue™

# Professional surveillance results with VIP Vision™

## Expandable Video Wall Controller

Model: VSVIDEOWALL

- 19" 4U rackmount expandable video wall controller
- Flexible configuration with simple plug-in card module design
- Features 10 service card slots for video input/video output cards
- Video wall splicing configurations up to a maximum of 40 displays
- Manage video wall configuration via VIP Vision™ Smart PSS/DSS
- Encoding: Up to 80 channels at 1080p or 320 channels at D1
- Decoding: Up to 160 channels at 1080p or 640 channels at D1
- Supports switching between standard & high definition streams
- Supports TCP/IP, RTP, RTSP, RTCP, TCP, UDP, DHCP, PPPoE
- 2 x 10/100/1000M RJ45 gigabit network ports
  * Image left shows video encoding, decoding & storage modules

Model: VSVWD-H (HDMI video decoding card)

- Features 4 x HDMI input card module (also available in DVI-I, VGA optional)
- Decode 16 channels at 1080p / 32 channels at 720p / 64 channels at D1

Video wall controller range is available by special order only
Video encoding, video decoding and SAS storage expanders optional
Please contact your sales representative for more information

## Network & Direct Control PTZ Keyboard

Model: VSIPPTZKBV2

- Compatible with VIP Vision, Securview and Watchguard models
- Control a variety of PTZ cameras and DVRs with this PTZ keyboard
- Features RS485, RS422, USB, RS232 & RJ45 connections
- Three dimensional joystick control of PTZ functions
- Preset position, auto scan, auto pan, auto tour & pattern control
- 3.2" on-keyboard LCD with user menu and operation/procedure tips
- Interfaces to PTZ domes and DVR/NVR via:
  **Network mode**: Control via RJ45 using IP address and ports
  **Direct mode**: Control via RS232/RS485 using protocols below:
  DVR: DH2 / Camera protocols: DH-SD, PELCO-D/-P/-D1/-P1
- Can connect and control via VIP Vision SmartPSS through USB

## Surveillance Camera & Cable Tester

Model: VSTEST100

- Test and configure IP, HDCVI and analogue surveillance cameras
- 4.0" IPS display (800 x 480), 12 control keys & flip-out QWERTY keyboard
- 2 x RJ45 (1000M), 2 x BNC (video in/out), RS485, USB and Audio-in
  **IP Surveillance (ONVIF 2.4.1, RTSP, RTP protocols)**
- Configure: static IP, DHCP client, DHCP server, camera configuration
- Test: camera discovery, realtime video PTZ control, audio, view and record
  **HDCVI & Analogue Surveillance (PAL/NTSC, D1/720p/1080p)**
- Configure: camera configuration (HDCVI); signal rate: 1Vpp
- Test: real time video, PTZ control, audio test, view and record
- Over 30 protocols for PTZ control with up to 19200bps baud rate
- TDR detection up to 150m; PoE testing (PD/PSE); and network analysis
- Generate PAL/NTSC video signals; support for local footage playback
- Power by PoE midspan; PoE (802.3af/at) and 12VDC/2A power outputs
- Up to 10 hours operation time with 3~4 hours recharge time
- Dual LED flashlight with support for online firmware upgrades

# Deliver truly outstanding surveillance installations

## Infrared LED Illuminators

Model: VSIRxWxD

- LED flood light style infrared illuminators for low-light CCTV illumination
- High performance LEDs with superb efficiency uniform illumination
- Excellent thermal management improves reliability and reduces LED decay
- Available in 120°, 60° and 30° beam angles
- Standard 850nm wavelength infrared LEDs
- Long rated LED lifespan of up to 50,000 hours
- IP66 weather resistant aluminium housing with adjustable wall bracket

| Model | Power | Beam Angle | Range |
|---|---|---|---|
| VSIR11W30D | | 30° | 90m |
| VSIR11W60D | 11W | 60° | 50m |
| VSIR11W120D | | 120° | 20m |
| VSIR28W30D | | 30° | 170m |
| VSIR28W60D | 28W | 60° | 100m |
| VSIR28W120D | | 120° | 50m |
| VSIR60W30D | | 30° | 280m |
| VSIR60W60D | 60W | 60° | 150m |
| VSIR60W120D | | 120° | 75m |

## Rackmount Data Cabinets

Model: RACKMOUNTCABxF (free standing variant)
RACKMOUNTCABxW (wall mount variant)

- Free standing and wall mount cabinets, in a variety of depths/rack units
- Tempered glass & solid steel construction with lockable glass/metal doors
- Feature power boards, fixed shelves, cable managers
- Wall brackets, fan kits and optional sliding shelves available
- Available pre-assembled or flatpacked (assembly fee may apply)

| Model | Rack Units (RU) | Depth (mm) |
|---|---|---|
| **Free Standing Cabinets** | | |
| RACKMOUNTCAB18-600F | 18 | 600 |
| RACKMOUNTCAB18-800F | | 800 |
| RACKMOUNTCAB22-600F | | 600 |
| RACKMOUNTCAB22-800F | 22 | 800 |
| RACKMOUNTCAB22-1100F | | 1100 |
| RACKMOUNTCAB32-600F | 32 | 600 |
| RACKMOUNTCAB32-800F | | 800 |
| RACKMOUNTCAB42-600F | | 600 |
| RACKMOUNTCAB42-800F | 42 | 800 |
| RACKMOUNTCAB42-1000F | | 1000 |
| RACKMOUNTCAB47-1100F | 47 | 1100 |
| **Wall Mount Cabinets** | | |
| RACKMOUNTCAB6-450W | 6 | 450 |
| RACKMOUNTCAB6-600W | | 600 |
| RACKMOUNTCAB12-450W | 12 | 450 |
| RACKMOUNTCAB12-600W | | 600 |
| RACKMOUNTCAB15-450W | 15 | 450 |
| RACKMOUNTCAB15-600W | | 600 |
| RACKMOUNTCAB18-450W | 18 | 450 |

## Audio Microphone for Surveillance Cameras

Model: VSAMICV2

- High sensitivity mini audio microphone to be mounted next to the camera
- 2VP-p (max) audio output
- 12VDC/10A power input

# Build professional, cost effective CCTV networks

## Cisco 300 Series Managed Ethernet Switches

CISCO-SF/SG Series: See models below

- Wide range of affordable managed Ethernet switches from Cisco
- Build a powerful foundation for professional surveillance networks
- The best combination of affordability, performance and capabilities
- Intuitive browser-based switch configuration and management
- Advanced multi-layered security capabilities for network protection
- Enables more productive and effective use of network bandwidth
- Improves availability of critical applications such as CCTV surveillance

## VIP Vision Managed Ethernet Switches

VSPOE Series: See models below

**NEW**

- Two-layer network management PoE switch
- Provides data transfer rates up to 1000Mbps
- Easy remote management system featuring port rate control, VLAN settings, security, PoE output setup and more

## Unmanaged Ethernet Switches

Model: VS8PORTSWITCH

- Unmanaged Gigabit Ethernet switch (no PoE)
- Provides data transfer rates up to 1000Mbps

| Model | Ports | Brand | PoE Per Port | PoE Total | Expansion |
|---|---|---|---|---|---|
| **Fast Ethernet** | | | | | |
| VSPOE-SW8 | 8-port 10/100 | VIP Vision | ≤30W | 93W | 1 x 10/100/1000 and 1 x 1000 uplink ports |
| VSPOE-SW16 | 16-port 10/100 | | ≤30W | 250W | 2 x 10/100/1000 uplink ports |
| VSPOE-SW24 | 24-port 10/100 | | ≤30W | 370W | |
| CISCO-SF300-08 | 8-port 10/100 | Cisco Systems | - | - | - |
| CISCO-SF302-08MPP | | | ≤30W | 124W | 2 x Combo* mini-GBIC slots |
| CISCO-SF300-24 | 24-port 10/100 | Cisco Systems | - | - | 2 x 10/100/1000 ports and 2 x Combo* mini-GBIC slots |
| CISCO-SF300-24PP | | | ≤30W | 180W | |
| CISCO-SF300-24MP | | | ≤30W | 375W | |
| CISCO-SF300-48 | 48-port 10/100 | | - | - | |
| CISCO-SF300-48PP | | | ≤30W | 375W | |
| **Gigabit Ethernet** | | | | | |
| VS8PORTSWITCH | 8-port 10/100/1000 | D-Link | - | - | - |
| CISCO-SG300-10 | | Cisco Systems | - | - | 2 x Combo* mini-GBIC slots |
| CISCO-SG300-10PP | | | ≤30W | 62W | |
| CISCO-SG300-10MPP | | | ≤30W | 124W | |
| CISCO-SG300-20 | 18-port 10/100/1000 | | - | - | |
| CISCO-SG300-28 | 26-port 10/100/1000 | | - | - | |
| CISCO-SG300-28PP | | | ≤30W | 180W | |
| CISCO-SG300-28MP | | | ≤30W | 375W | |
| CISCO-SG300-52 | 50-port 10/100/1000 | | - | - | |
| CISCO-SG300-52P | | | ≤30W | 375W | |
| CISCO-SG300-52MP | | | ≤30W | 740W | |
| **Expansion Modules** | | | | | |
| CISCO-MGBLX1 | Single-mode fibre (1310nm) mini-GBIC module, 10/100/1000 Mbps for Cisco Switches | | | | |
| CISCO-MGBSX1 | Multi-mode fibre (1310nm) mini-GBIC module, 10/100/1000 Mbps for Cisco Switches | | | | |

* Each combo mini-gigabit interface converter (GBIC) port has one 10/100/1000 Ethernet port and one mini-GBIC/Small Form-Factor Pluggable (SFP) Gigabit Ethernet with one port active at a time.
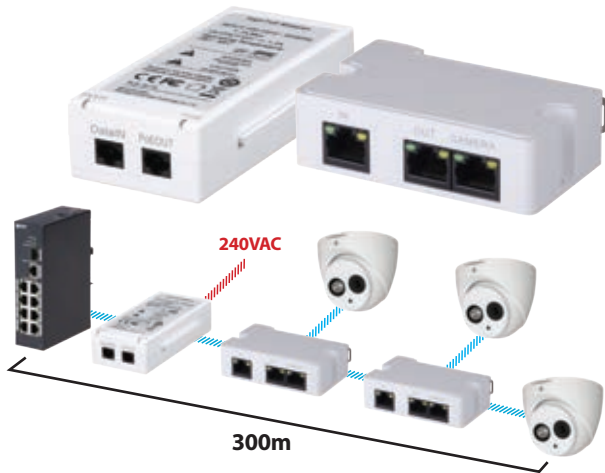
## Power Over Ethernet (PoE) Midspan & Extender
Model: VSPOE-MS (Midspan)

- Connect to VSPOE-EX to extend 3 IP cameras up to 300m (if camera ≤8W)
- 1 x 10/100/1000 Ethernet port and 1 x 10/100/1000 PoE power supply port
- 60W PoE supply for high power consumption cameras like PTZ domes
- Wall mounting kit included

Model: VSPOE-EX (Extender)

- Facilitates passive PoE power supply cascade & Ethernet data exchange
- 3 x 10/100 PoE ports (unit power, camera power & next extender power)
- Junction box mounting / DIN rail mounting

**240VAC**

**300m**

## Power Over Ethernet (PoE) Injectors & Receivers
Model: WT-CAT5POEI

- Ethernet line-in Power over Ethernet injector
- Provides 48VDC power and up to 100Mbps data transfer rates

Model: WT-CAT5POER

- Ethernet line-in Power over Ethernet receiver
- Provides 5VDC and 12VDC power output up to 100m
- Supports gigabit speeds (1000Mbps) and is 802.3af compliant

# Hassle-free surveillance Internet configuration

## TP-Link Portable 3G/4G Wireless N Router
Model:  TP-TL-MR3020

- Share a 3G/4G* mobile connection, compatible with 120+ LTE/HSPA+/
  HSPA/UMTS/EVDO 3G/4G USB modems, tested in the field
- Travel-size design, small and light enough to take on the road
- Enables users to share a 3G/4G* mobile connection, coverage dependent
- Experience wireless speeds up to 150Mbps
- 3G/4G* router / WISP client router / Travel router mode (AP mode)
- With 3G/4G* and WAN fail-over back-up strategy, the wireless router can
  provide a sustained internet connection
  * If your device doesn't support 4G sharing, upgrade to the latest firmware

## NetComm Industrial 4G Wifi Router
Model: VSWAN4G

- Provides real-time M2M (Machine-to-Machine) data connectivity
- Creates reliable point-to-point or point-to-multi-point WAN connections
- Powerful 720Mhz ARM Cortex A8 processor with 128MB DDR2 RAM
- 256MB flash memory (~120MB available on-board space for user storage)
- 2 x 10/100/1000 Base-T Ethernet RJ45 ports with auto MDIX
- Transparent bridge mode using PPPoE to allow the router to transparently
  forward Public WAN IP address to a downstream device

## Huawei 3G/4G USB Dongle Modem
Model: E3276V2

- Delivers convenient mobile broadband to your DVRs / computers
- Connect DVRs / computers over 4G in under 5 minutes
- Simple plug-and-play installation
- GSM: 850/900/1800/1900 MHz
- 3G Bands (MHz) UMTS 900/2100 MHz
- 4G Bands (MHz) LTE 1800/2300 MHz
  * Future support for 700MHz when available.

# Expand surveillance networks further than imagined

**NEW**

## Ubiquiti LiteBeam® ac Sector Access Point

Model: WT5-ULB

- 5GHz ultra-lightweight Gigabit Ethernet airMAX ac Access Point
- 2 x 2 MIMO, 16 dBi gain antenna / vertical & horizontal polarisation
- Intelligent QoS (quality of service) with priority given to voice/video
- airMAX™ engine for improved latency, throughput and scalability
- TDMA (time division multiple access) protocol for intelligent sending and receiving of data using pre-designated time slots; eliminates hidden node collisions and maximises airtime efficiency
- Cost effective point-to-point network antenna for wireless bridging
- Ideal for point-to-multipoint networks, such as in WISP deployment
- Includes intuitive and powerful Ubiquiti software: airOS / airView
- Triple axis rotational hinge and on-unit bubble level for perfect installation
- Includes ball joint mount and metal strap clamp for pole mounting
- 452 x 79 x 55mm / 0.42kg (not including mount)

## Ubiquiti PowerBridge®M5 Panel Antenna

Model:WT5-UPB

- 4.9~6.0GHz super-efficient 25dBi 2x2 MIMO antenna array
- 150+ Mbps of real outdoor throughput and up to 20km+ range
- Dual-polarity design provides optimum performance at long distances
- PoE built-in for single cable installation
- UV stabilised plastic for both indoor and outdoor use
- PowerBridge®M5 pole mounting kit included

**NEW**

## Ubiquiti Unifi® Wireless Access Points with PoE

Available in single or dual radio models

- Long range 2.4GHz wireless access point; built-in PoE for easy installation
- Unique LED provisioning ring simplifies deployment & configuration
- Up to 183m range, create high-performance wireless networks
- 12~24V passive Power over Ethernet built-in for easy installation
- Sleek industrial design; indoor use only;  includes ceiling/wall mount

Model: WT2-UAPLR (Single band - 2.4GHz)

- 2.4 GHz single band wireless access point (802.11 b/g/n)
- Throughput of up to 300Mbps

Model: WT2-UAPACLR (Dual band - 2.4GHz & 5GHz)

- 2.4 GHz / 5 GHz dual band wireless access point (802.11 a/b/g/n/ac)
- Throughput of up to 450Mbps (2.4 GHz) and 867Mbps (5 GHz)

## 2.4GHz Digital Wireless Transmitter and Receiver Set

Model: AVTXRX2.4

- Wireless solution for audio/ video/ data signals connection
- 2.4GHz frequency hopping spread spectrum module
- Supported max. 25 auto hopping channels for resisting interference to other 2.4GHz devices
- Point to point mode only; 100mW RF output (Average)
- MPEG-4 (D1) standard video compression and stereo audio inputs
- 5-bit ID pairing key for security
- Max. 250 meters (line-of-sight)

# Add an interactive centrepiece to your showroom



## Multipurpose Custom Display Stands

These interactive display stands are ideal for demonstration, testing and training purposes. Great care is taken to ensure the stand fits with your stores corporate identity and branding with a customisable vinyl artwork overlay.
Available with CCTV surveillance, alarms, intercoms or LED lighting.

Model: DISPLAYFS (Free-standing display)

- Constructed from 15mm thick melamine board with black trimming
- Optionally include rubberised feet or castor wheels
- Bench-top stand dimensions 2000 x 700 x 380mm
  * Model includes display stand only; products ordered separately

Model: DISPLAYBT (Bench-top display)

- Multipurpose bench-top display stand
- Bench-top stand dimensions 1100 x 700 x 340mm (15mm thick board)
  * Model includes display stand only; products ordered separately

Select your own range to be displayed on the bench-top stand
Level of artwork customisation may incur additional cost
Product restrictions and limitations apply, contact RhinoCo for more details

# Quick reference: Digital Video Recorders

| | Image | Model | Maximum Resolution | PoE | Fisheye Dewarp | Total Bandwidth | Storage |
|---|---|---|---|---|---|---|---|
| 4CH | | NVR4COM | 5.0MP (2560 x 1920) | 4 Ports | No | 80Mbps | 1x HDD / 4TB |
| 4CH | | NVR4PRO2 | 5.0MP (2560 x 1920) | 4 Ports | No | 200Mbps | 2x HDD / 8TB |
| 8CH | | NVR8COM | 5.0MP (2560 x 1920) | 8 Ports | No | 80Mbps | 1x HDD / 4TB |
| 8CH | | NVR8PRO4 | 12.0MP (4000 x 3000) | 8 Ports | Yes | 256Mbps | 2x HDD / 12TB |
| 16CH | | NVR16COM | 5.0MP (2560 x 1920) | 16 Ports | No | 200Mbps | 2x HDD / 8TB |
| 16CH | | NVR16PRO6 | 12.0MP (4000 x 3000) | 16 Ports | Yes | 320Mbps | 4x HDD / 24TB |
| 16CH | | NVR16PRO6NP | 12.0MP (4000 x 3000) | - | Yes | 320Mbps | 4x HDD / 24TB |
| 32CH | | NVR32PRO16P2 | 12.0MP (4000 x 3000) | 16 Ports | Yes | 320Mbps | 4x HDD / 24TB |
| 32CH | | NVR32PRONP | 12.0MP (4000 x 3000) | - | Yes | 256Mbps | 4x HDD / 24TB |
| 32CH | | NVR32ULTNP | 12.0MP (4000 x 3000) | - | Yes | 384Mbps | 8x HDD / 48TB |
| 64CH | | NVR64ULTNP | 12.0MP (4000 x 3000) | - | Yes | 384Mbps | 16x HDD / 96TB |
| 128CH | | NVR128ULTNP | 12.0MP (4000 x 3000) | - | Yes | 384Mbps | 16x HDD / 96TB |

| | Image | Model | Cameras via Coaxial | | Cameras via IP* | Storage |
|---|---|---|---|---|---|---|
| 4CH | | CVR4V5 | 4 channel combination: | HDCVI: 1080p / 12fps<br>Analogue: 960H / 25fps | Up to 6 channels at 5.0MP (24Mbps max.) with 1CH main stream playback | 1x HDD / 4TB |
| 8CH | | CVR8EV2 | 8 channel combination: | HDCVI: 720p / 12fps<br>Analogue: 960H / 25fps | Up to 10 channels at 5.0MP (40Mbps max.) with 1CH main stream playback | 1x HDD / 4TB |
| 8CH | | CVR8V5 | 8 channel combination: | HDCVI: 1080p / 12fps<br>Analogue: 960H / 25fps | Up to 12 channels at 5.0MP (48Mbps max.) with 1CH main stream playback | 2x HDD / 8TB |
| 16CH | | CVR16E | 16 channel combination: | HDCVI: 720p / 12fps<br>Analogue: 960H / 25fps | Up to 2 channels 720p / 12fps | 1x HDD / 4TB |
| 16CH | | CVR16V5 | 16 channel combination: | HDCVI: 1080p / 12fps<br>Analogue: 960H / 25fps | Up to 24 channels at 5.0MP (96Mbps max.) with 1CH main stream playback | 2x HDD / 8TB |
| 16CH | | TVR16 | 16 channel combination: | HDCVI: 1080p / 25fps<br>Analogue: 960H / 25fps | Up to 32 channels 1080p / 25fps | 8x HDD / 32TB |
| 32CH | | CVR32V2 | 32 channel combination: | HDCVI: 1080p / 12fps<br>Analogue: 960H / 25fps | Up to 32 channels 1080p / 12fps | 8x HDD / 32TB |

# ACCESS & SECURITY

Watchguard™

VIP VISION™

# Watchguard™ professional building security solutions
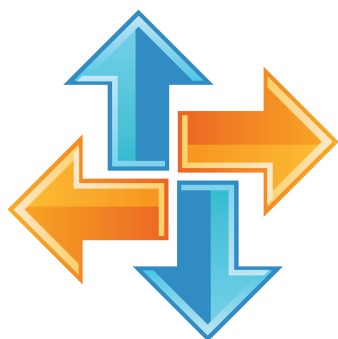
### Expandable & easy to install

Driven by a passion to eliminate clutter and complexity, the Watchguard hardwired alarm range offer elegant and practical solutions to accommodate a wide range of security needs.

- Program quickly via keypad or Windows PC
- Alarm panel expands effortlessly up to 64 zones through simple zone expander boards
- Easily implement wireless zone expansion or alarm notification via SMS as needed

### Adapts to your job needs

Watchguard™ hardwired alarm systems are powerful, versatile and highly configurable, providing immediate notification of burglary, fire, medical and panic conditions.

- Enjoy using a scalable and versatile alarm solution with low cost per additional zones
- Integrates with a wide range of detectors, sensors, sirens and other accessories for professional results on all installations

### Twenty years of development

Produced by South Africa's leading control panel manufacturers, Watchguard's hardwired alarm systems have over twenty years of research and development behind them.

- Built by leaders Inhep Digital Security (IDS)
- Used by premier monitoring and response companies in South Africa, arguably the world's most demanding security market
- Compliance with international standards

# Require professional monitoring?

If you need to supply monitoring services to your customers, RhinoCo Technology can provide professional back-to-base monitoring with each of its compatible alarm systems, including the WGAP864 and the WGDIGITAL. Provide your customers the services they need to feel safe, secure and protected with:

- State of the art grade A-1 certified security monitoring centre
- High speed automated notification system supported by 24/7 professional operators
- Online account interface with report generation & integrated billing system
- Australian owned monitoring service

Contact your RhinoCo Technology sales representative for more information regarding monitoring services.
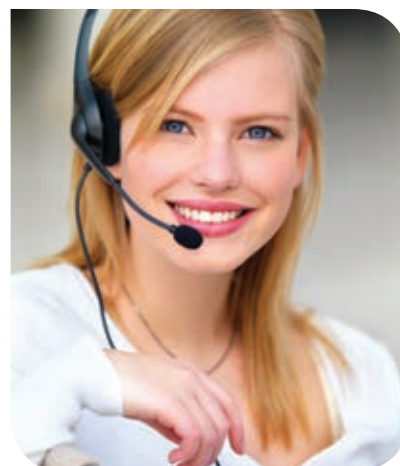
# Watchguard™ 864 panel: Expandable up to 64 zones

## Professional Expandable 8 Zone Alarm Panel

Model: WGAP864 Model: WGAP864

- Provides immediate notification of burglary, fire, medical or panic
- Easily expandable up to 64 monitored zones
- Simple on-board expansion system, plug directly into the panel
- 8 partitions with auto arm/disarm per partition
- Up to 25 fully programmable outputs
- Up to 4 bus receivers, fully programmable from the keypad
- Easy arming with 3 quick arm modes: Stay / Away / Stay and Go
- 4 stay profiles: Stay / Night Stay / Day Stay / Perimeter
- Supports star/daisy chain modules up to 300m
- Supports up to 8 keypads, 128 user codes and logs 1000 events
- Contact ID security dialer for back-to-base remote monitoring
- Optional tamper per zone with separate box tamper zone
- No activity arming function and dedicated panic zone
- 1.5A available on-board power (dual power supply)
- Dynamic battery self-test & 500mA charger for backup management
- Excellent protection against lightning with transient suppressors

Model: WGAP864KP (Included in WGAP864, extras sold separately)

- Watchguard™ WGAP864 panel supports up to 8 keypads
- 16 zone curved LED keypad with end of line monitored zone input
- Features large soft-touch, backlit keys and 2-line LED display
- Access and view alarm information and configure your system
- 3 dedicated emergency keys and 3 quick arm modes
- Auto-arm, away-arm, bypass zones and set/change user codes

## WGA864 Panel Plug-in Zone Expanders

Model: WGAP864EXP816

- 8 zone expander, expands panel from 8 to 16 zones (all onboard)
- Expander module plugs directly into the WGAP864 panel
- Powered by 1.5A onboard power-supply
- Comes pre-configured for zones 9 ~ 16
- 8 wired end of line supervised zone inputs
- Optional tamper per zone using double end of line resistors

Model: WGAP864EXP1664

- 8 zone expander, expands panel 16 zones upwards
- 8 wired end of line supervised zone inputs
- Programmable loop response time
- Features dedicated box tamper input
- Optional tamper per zone using double end of line resistors

## USB Panel Interface Cable - Program via PC

Model: WGAPCABLEUSB

- Programming USB cable to program the WGAP864 via Windows PC
- Direct, high speed communication from control panel to the PC
- Easily program the panel using a PC in less than 30 seconds
- Utilises the IDSwift software for panel control/configuration

# Connect and control your Watchguard™ 864 panel

## Communication Modules for WGAP864 Panel

**Model: WGAP864VM**

- Alarm voice panel module for the Watchguard™ 864 panel
- Inquire about the alarm and make changes to security settings
- Bi-directional DTMF (dual-tone multifrequency) control
- Arm, disarm, bypass, trigger outputs, cancel siren and check alarm status
- Requires PSTN or GSM connection

**Model:  WGAP864SMS**

- SMS communication module for the Watchguard™ 864 panel
- Controls the WGAP864 Alarm Sytem via any cell phone handset
- Receive SMS message from your WGAP864 Alarm System
- Arm and disarm with partition control
- Query system status and partition status
- Trigger the control panel outputs
  * Requires SIM card, sold separately

Alarm event reporting via call

Alarm event reporting via SMS

**Model: WGAP864VM**
Panel voice module

**Model: WGAP864SMS**
Panel SMS module

Control and configure via DTMF

Control and configure via SMS

## Permaconn IP/3G/GPRS Alarm Communicator

**Model: PM45-3G**

- Enables constant secure link between supervised areas & central station
- Alarm communicator reports to central stations via IP, 3G and GPRS
- Plug and play solution with various diagnostic LEDs for easy installation
- Compact unit fits inside panel enclosure, interfaces via Contact ID
- Primary path IP, followed by 3G & GPRS in the event of Ethernet failure
- Secure AES128 encryption for alarm data over the public internet
- Automatically acquires IP address using your clients DHCP service
- Compliant to Australian and New Zealand standards (2201.5:2008)

Send Alarm Event

IP/3G/GPRS Communicator

Security Monitoring Centre

Receive call from monitoring centre

Constant link to Monitoring Centre
via landline, 3G, GPRS, ADSL/NBN
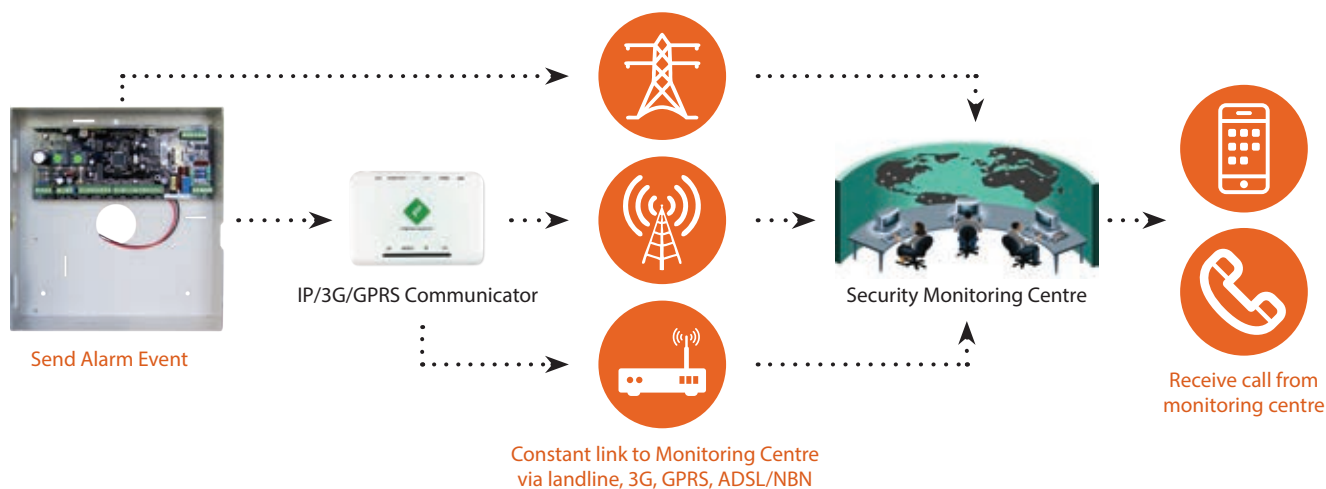
# Wireless expansion made easy with Watchguard™

### Wireless Receivers for WGAP864 Panel

Model: WGAP864WRX16

- 16 channel wireless receiver for the WGAP864 panel
- Expand the 864 panel to include an additional 16 wireless zones
- Detectors are fully supervised & report alarms, supervision and more
- Maximum 4 receivers and up to 64 wireless detectors per system
- 100m line of sight between detectors and receiver

Model: WGAP864WRX2

- 2 channel 433.92MHz wireless receiver with 2 x rolling code remotes
- Give the convenience of remote control instead using the keypad
- Added security of 3 second any-button panic option via the remote
- 2 x relay outputs with 1A contacts, perfect for garage/gate or light control
- Operate arm/disarm, stay arm and panic from the remotes

### Wireless Detectors for WGAP864 Panel

Model: WGAP864WPIR

- Wireless pet friendly passive-infrared sensor for WGAP864
- 12 x 12m detection range and 90° field of view
- Selectable pulse count and alarm / low battery / tamper transmission
- Switches to power saving mode when detecting high traffic
- Adjustable wall/ceiling mount bracket included, uses 9V battery

Model: WGAP864WDC

- Wireless door contact sensor for WGAP864 alarm system
- Wireless magnetic contacts with 100m range (LoS)
- Alarm and low battery transmission plus one input alarm terminal

# Watchguard™ complete hardwired alarm package

### Complete 8 Zone Hardwired Alarm System

Model: WGAP864PACK

- Complete 8 zone surveillance kit using the Watchguard™ 864 panel
- Includes a keypad and a variety of hardwired accessories and detectors
- Assembled in a high quality retail ready Watchguard™ package

Included components

- 1 x 8 zone alarm control panel and LCD keypad (WGAP864)
- 3 x High quality pet immune passive infrared sensors (PIRHWDT2)
- 2 x Surface reed switches for doors and windows (DSRLW)
- 1 x Complete outdoor siren and strobe (COS)
- 1 x Indoor top-hat style piezo siren (DPS)
- 1 x 7Ah lead acid backup battery (D12V7)
- 1 x 16VAC power supply (PS16VAC)

Expanders, cabling, central monitoring and additional keypads sold separately

# Watchguard™ hardwired alarm system accessories



(a)

(b)

(c)

NEW

## Hardwired Motion Detectors

(a) Model: PIRHWDT2

- Pet immune (up to 25kg) passive-infrared motion detector
- Detects human movement up to 15m in a 90° field of view
- Adjustable plus count and dual element, low noise pyroelectric sensor
- Auto temperature compensation reducing false alarm
- Includes wall / ceiling mount bracket

(b) Model: PIRHWTT

- Passive infrared and adjustable microwave motion detector
- Ideal for false-alarm-prone environments with rapid changes in heat
- Automatically compensates for temperature changes to avoid false alarm
- Requires microwave and PIR to trigger before activating alarm output
- Up to 12m detection range and selectable N.O / N.C alarm outputs
- 3 indicator LED's: green/PIR, yellow/WAVE and red/ALARM
- Detector case N.C tamper switch
- PIR bracket sold separately (Model: PIRLHLB)

(c) Model: PIRHW360DT

- Quad element pyroelectric sensor for reliable operation
- Normally closed alarm output (28VDC 0.1A with 10Ω resistor)
- 0.5 - 1.5m/sec motion detection speed
- Fully sealed optical chamber and unique hard shell spherical lens
- 20m diameter ground level coverage (when mounted at 3.6m)
- DIP-switch adjustable pulse count and case-open tamper protection
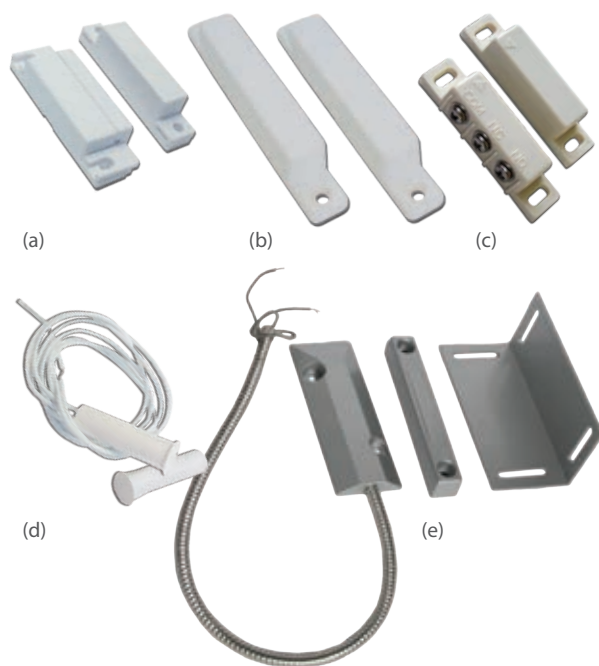
## Hardwired Reed Switches

(a) Model: DSRLW

- Mini surface mount reed switch for door/window protection
- Compact design allows for discreet and unobtrusive placement
- N.C contact with solder terminals

(b) Model: DSRHDW

- Large surface mount reed switch for door/window protection
- Industry standards compliant reed switch
- N.C contact with solder terminals

(c) Model: DSRNONC

- Normally Open (N.O) and Normally Closed (N.C) reed switch
- Surface mount reed switch for door/window protection
- Easy to always choose the correct contact

(d) Model: DCRW

- Concealed reed switch with 15 ~ 25mm operating distance
- Simple push-in installation perfect for tops of doors or hidden areas
- N.C / N.O output (change over available)

(e) Model: DRSR

- Roller shutter reed switch for heavy duty applications
- Built tough heavy duty cast housing for vandal resistance
- Contact termination via a stainless steel flexible conduit
- N.C contacts



(a)

(b)

(c)

(d)

(e)

## Hardwired Compact Smoke Detector

Model: SMODET2

- Infrared photoelectric hardwired smoke detector
- Dust and insect resistant design
- Up to 20m² smoke detection range
- Power via 12VDC
- Only Ø100 x 53mm

# Create bespoke hardwired systems for your clients


(a)


(b)


(c)


(d)


(e)


(f)


(g)


(h)

## Hardwired Sirens and Strobes

(a) Model: COS

- Complete outdoor 115dB siren (AC/DC) and strobe with tamper switch
- Highly durable, moisture and UV resistant external housing
- Includes rear protective cover; pre-terminated wiring
- Comes fully assembled saving you time on installation

(b) Model: W24SIREN

- European style 115dB piezo siren with integrated blue strobe
- Includes tamper switch, simple 2 wire connection and 12VDC power

(c) Model: DPS

- Ultra loud, high frequency indoor piezo siren, top-hat design
- Connect to the negative on alarm output on your alarm system

(d) Model: DPSF

- Ultra loud, indoor piezo siren, flush mount design
- Emits a high frequency, oscillating siren, intolerable to the human ear

(e) Model: S42

- Single tone siren, 115dB, 12VDC
- Typically used with control panels that have no internal siren driver

(f) Model: DPSCY

- Highly durable replacement for old or damaged siren covers
- Moisture and UV resistant, designed in Australia

(g) Model: DSBM

- Low profile LED blue strobe light designed for use with external sirens

(h) Model: DTBS

- N.C 1A/25V tamper switch for siren covers, switch open when depressed
- For siren covers such as the DPSCY that do not have a tamper switch


(a)


(b)


(c)


(d)

## Hardwired Emergency Buttons & Switches

(a) Model: DEBSDUAL

- N.O dual button emergency switch, eliminates accidental triggering
- Push to close momentary contacts, pre-wired for quick installation
- Sturdy metal case, silver plated contacts; rated 1A at 25VDC

(b) Model: DOORRELEASE

- N.O and N.C flush or surface mount emergency break glass door release
- Plastic film on glass; 25VDC / 1A operating power

(c) Model: REL01LOOM

- 12V 15A contact rated universal switching relay
- Relay contact is closed when power is applied

(d) Model: 2POSSPST

- On/off keyswitch with 2 keys; used in a variety of applications
- 2 positions, single pole, single throw change over



## Hardwired Shock Sensor

Model: SHOCKHW

- Hardwired shock sensor with photo electric vibration sensor
- Improved false alarm immunity with adjustable sensitivity
- Compact shape with tamper immunity and flexible mounting

# Watchguard™ 2020: Professional Wireless Security

## Stay accessible, remain secure

You can interact with the alarm system directly on the panel, via a paired remote control, a paired RFID tag, its iOS or Android smartphone app, an SMS text message or a phone call.

- Alert notifications via SMS or phone call.
- Low-battery notifications from wireless sensors and accessories.
- When an alarmed event goes off, alerts will go out in succession to the programmed phone numbers.

## Expand to up to 50 sensors

Pair wireless sensors with no wires and no fuss. Provide a compatible SIM & power, download the free iOS/Android application, configure your connection and begin adding sensors.

- Add up to 50 wireless sensors (GSM model) and up to 30 total sensors (WiFi model)
- Add or remove wireless sensors to the alarm via your smartphone application.
- Add multiple remote controls and strobe sirens.

## GSM & WiFi Alarm Systems

Connection is made easy with SIM slot for 3G and 4G or connect to existing WiFi network allowing you to control and monitor your alarm system via the free Apple or Android App.

- The SIM card allows the unit to double as a mobile phone, enabling you to make calls directly on the panel (GSM only).
- Supports up to 5 emergency phone numbers and 5 text message numbers (GSM model only).

# Security control from anywhere

With the advent of home automation and rapid rise in adoption of power smartphones and tablets, you can no longer provide a standalone solution when it comes to residential security systems. Deliver the product features your customers ask for with the smartphone integration they desire by choosing Watchguard wireless alarm systems:

- Each control panel features a minimal and elegant, user friendly design
- Control panels and accessories include backup battery incase of power failure
- Each security system can be linked to your smartphone via free alarm application
- Offer complete building security control from anywhere via the integrated app

* SIM card connectivity only available in select GSM models. Contact us for more details. Push notification features available for iOS or Android devices via free application. Smartphone not included.

# Easily expandable: Perfect for home and business

**NEW**

## Watchguard 2020™ 3G/4G Wireless Alarm System

Model: ALC-PACK1

- Professional anti-intruder security system with user friendly control panel
- Supports 3G and 4G SIMs and networks for mobile internet/sms service
- Interact with alarm system via control panel, remote control, RFID tag, smartphone app, SMS or a phone call
- Connect up to 50 wireless sensors, 50 RFID tags and 10 remote controls
- Administrator can be advised which user has disarmed the alarm
- Simple arm/disarm via remote or mobile when entering/leaving
- Alert notifications via SMS or phone calls (up to 5 mobile numbers)
- Control panel internal siren volume 95dB
- Low-battery notifications from wireless sensors and accessories
- 12VDC power supply with backup 3.7V Lithium battery
  * Mobile phone and SIM card not included

Included components

- 1 x Watchguard 2020 3G/4G Alarm Control Keypad/Panel
- 1 x Wireless Door/Window Reed Switch
- 1 x Pet-Immune PIR Motion Detector
- 2 x Remote Control Keyfobs
- 2 x RFID Tags

Add up to 50 wireless sensors, 50 RFID tags and 10 remote controls to the alarm

**NEW**

## Watchguard 2020™ WiFi Wireless Alarm System

Model: ALC-PACK2

- Anti-intruder security system for residences, small offices and small shops
- Ready to go as soon as it is connected to your WiFi router
- Add and remove wireless accessories such as door/window contacts, smart plugs, sirens, motion/flood/gas/smoke detectors via smartphone app
- Adjust 85dB siren volume and time as well as exit and entry delays
- Connect up to 30 wireless sensors and 10 remote controls
- When alarmed the system will send you push notifications, in real-time
- 12VDC power supply with 3.7V Lithium backup battery

Included components

- 1 x Watchguard WiFi Alarm Control Panel
- 1 x Wireless Door/Window Reed Switch
- 1 x Pet-Immune PIR Motion Detector
- 2 x Remote Control Keyfobs

Add up to 30 wireless sensors and 10 remote controls to the alarm system

**NEW**

## Watchguard 2020™ Wireless RFID Keypad

(a) Model: ALC-KP1

- Keypad connects wirelessly to control panel up to 80m
- Arm or disarm your security alarm system via code or up to 50 RFID tags
- Functions such as delay alarm, emergency call, stay mode, mute mode
- Can be hard-wired to electronic door lock to work as access control system
- DC12V power supply plus 3x AAA batteries

(b) Model: ALC-TAG1

- Swipe tag used to arm or disarm alarm control panel
- Each tag contains a memory chip with a unique identification code
- Transmission range within 2cm of control panel

# Watchguard™ easy to install wireless alarm systems


(a)

(b)

(c)

## Watchguard 2020 Wireless PIR Motion Detectors

(a) Model: ALC-PIR1

- Wireless supervised passive infrared motion detector
- Up to 8m detection range with 110° field of detection
- Automatic temperature compensation and anti-draft technology
- Features tamper switch and pet immunity for small animals up to 25kgs
- Low-battery supervision with notification
- 3VDC power supply (2 x AA batteries)
- Includes wall mount bracket

(b) Model: ALC-PIR2

- Wireless supervised ceiling mounted passive infrared motion detector
- Up to 6m detection range (3.6m high) and 360° field of detection
- False alarm prevention with dual infrared processing technology
- Low-battery supervision with notification
- 3VDC power supply (2 x AA batteries)
- Includes ceiling mounting plate

(c) Model: ALC-PIR4

- Wireless supervised solar-powered dual-tech outdoor motion detector
- Up to 8m detection range with 110° field of detection
- False alarm prevention using microwave and infrared dual detections
- Adjustable microwave sensitivity and zone mode options
- Automatic temperature compensation and anti-draft technology
- IP65 rated for outdoor use and built in tamper switch
- 3.7V solar rechargeable lithium battery & wall mount bracket

(a)

(b)

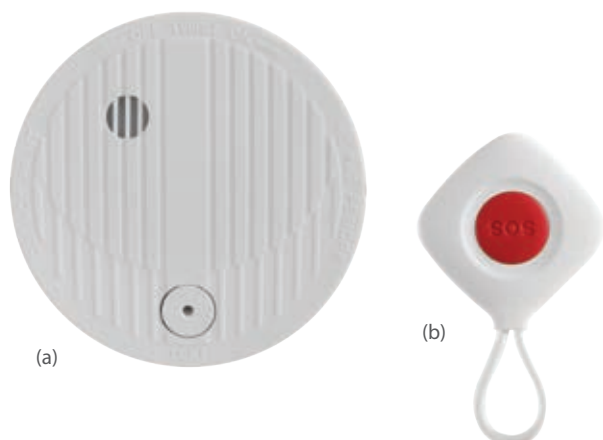## Watchguard 2020 Wireless Glass Break Detector

(a) Model: ALC-GB1

- Glass break detector can detect breaking glass up to 7m
- Pinpoints glass-breaking incidents with a high-precision microphone
- Minimizes false alarms with sophisticated signal processing
- Transmitting distance up to 100m
- DC12V power supply

## Watchguard 2020 Wireless Flood Detector

(b) Model: ALC-FLD1

- This contact wireless water detector reacts to conductivity when liquid reaches  the 2 probes of the detector
- Sends wireless signal to the control panel to activate alarm
- DC1.5V power supply (2x AAA batteries) included

(a)

(b)

## Watchguard 2020 Wireless Smoke Detector

(a) Model: ALC-SMK1

- Photoelectric smoke detector senses smoke within detector chamber
- Supervised: sends wireless signal to control panel to activate alarm
- Monitors up to 20m$^2$ and features 85dB alarm siren
- Built-in test button and low battery indicator
- 9VDC power supply (1x 9V battery)

## Watchguard 2020 Wireless Panic Button

(b) Model: ALC-PNB1

- Flat, elegantly designed emergency pendant with plastic keyring
- On press, stored alarm numbers receive SMS or phone call emergency alert
- Ideal in elderly or less able bodied care, or in duress applications
- Compatible with Watchguard 2020 GSM and WiFi alarm systems
- 315Mhz or 433.92MHz / ABS plastic / uses 1 x CR2032 battery
- 52 x 54.5 x 10mm

# Compatible with Watchguard 2020 Alarm Systems

## Wireless Door/Window Reed Switch

(a) Model: ALC-RSW1

- Wireless supervised door/window contact reed switch
- Features tamper protection and up to 80m transmission range
- Low-battery supervision with notification via LEDs
- 1.5VDC power supply (1 x AA battery)

## Wireless Roll Shutter Door Reed Switch

(b) Model: ALC-RSW2

- Heavy duty metal magnet and metal reed switch
- Features tamper protection and up to 80m transmission range
- Transmitter features external antenna, durable/flexible cable conduit
- 3VDC power supply (2 x AAA battery)

## Wireless Compact Indoor Strobe Siren

(a) Model: ALC-SIR1

- Wireless siren (90dB) with flashing strobe light for indoor use only
- Can be used as wireless siren by connecting to control panel
- Can work as a standalone alarm system by adding wireless accessories
- Features on/off night lamp (when used as standalone alarm)
- Features entry/exit delay
- AC 100V ~ 240V with rechargable 3.7V lithium backup battery

## Wireless Solar Powered Outdoor Strobe Siren

(b) Model: ALC-SIR2

- Solar wireless outdoor siren (110dB) with flashing strobe light
- Can be used as wireless siren by connecting to control panel
- Can work as a standalone alarm system by adding wireless accessories
- Adjustable siren volume and duration
- Features inbuild tamper switch
- Built in 3.7V rechargeable lithium solar-power battery

## Wireless Signal Repeater

(a) Model: ALC-RPT1

- Use where wireless alarm devices are used and signals need to be boosted
- Enhances wireless radio signals for longer transmission distances
- Uses secure encryption and decryption technology
- Wireless receiving range up to 90m (in open area)
- Wireless transmitting range up top 300m (in open area)
- Supports up to 40 accessories
- AC 110V-240V with 3.7V lithium backup battery

Unless stated otherwise, all Watchguard 2020 wireless sensors have transmitting distance up to 80m (open field/no interference).

## Wireless WiFi 720p Security Camera

(b) Model: ALC-CAM1

- WiFi quick link via QR code for quick and easy connectivity
- 1/4" CMOS sensor records HD video (1280 x 720)
- 2.4mm lens with 95° angle of view
- Night vision via 10m infrared LEDs (min. illumination 0.02 lux)
- HiFi two-way audio microphone for two-way communication
- Options to allow simultaneous viewing by multiple users
- Built-in microSD card slot, up to 32GB, with continuous recording
- Firewall and encryption for authorized account access only
- Power supply 5VDC

Use as standalone camera or with the WG2020 3G/4G alarm panel application

# Watchguard™ easy to install wireless alarm systems



(a)



(b)



(c)

## Watchguard Wireless Alarm Systems

(a) Model: WGDIGITAL (Back to base monitored wireless system)

- Professional back-to-base monitored, anti-intruder security system
- Enables 24/7 round-the-clock monitoring of residential or office premises
- Alarm detail (Contact ID) is sent via the phone line to central monitoring
- Simple arm/disarm via remote control when entering/leaving
  * Back to base monitoring sold separately, call RhinoCo for more info

Included components

- 1 x 8 zone main control unit with dialer for alarm event communication
- 2 x Passive infrared wireless sensors to detect intruder movement
- 2 x Code hopping remote controls, prevents scanning/code-copying
- 1 x Power supply and phone connection lead (Contact ID protocol)
- 

(b) Model: WGUARD (Standalone wireless system)

- Professional anti-intruder security system for home and office
- Affordable stand-alone security system without a monitoring service
- Very reliable with easy, do-it-yourself installation
- Simple arm/disarm via remote control when entering/leaving

Included components

- 1 x 8 zone main alarm control unit, add up to 8 wireless sensors
- 2 x Passive infrared wireless sensors to detect intruder movement
- 2 x Code hopping remote controls, prevents scanning/code-copying
- 1 x Complete external siren and strobe with tamper
- 1 x Backup 12VDC/1.2Ah battery and mains 16VAC plug pack

(c) Model: WGSENTINEL (Standalone wireless system)

- Entry level wireless anti-intruder security system for residential
- Affordable stand-alone security system without a monitoring service
- Very reliable with easy, three step do-it-yourself installation
- Simple arm/disarm via remote control when entering/leaving
- Can be expanded to accommodate 5 wireless devices (3 included)

Included components

- 1 x Passive infrared wireless sensor to detect intruder movement
- 2 x Fixed code remote controls for easy arm/disarm/panic
- 1 x Complete external siren and strobe with tamper
- 1 x 12VDC/1.5A plug pack



(a)



(b)



(c)

## Wireless Intrusion Detectors

(a) Model: PIRW3

- Wireless supervised passive infrared motion detector
- Dual Edge™ PIR sensor technology to avoid false alarms
- Up to 12m detection range with 90° field of detection
- Intelligent power saving mode in high traffic prolong battery life
- Selectable pulse count; 3 year lifespan from 1 x lithium coin battery

(b) Model: PIRWOD

- Wireless supervised passive infrared beam/curtain detector
- Features a high quality TAKEX and a fully sealed, UV resistant housing
- Four coverage patterns: wide/curtain 10m, long range 20m, vertical 3m
- Includes 9V battery for approximately 1 year of use
- Communicates alarm, low battery and supervision signals

(c) Model: WREEDI

- Wireless reed switch designed to monitor potential ingress points
- Features built-in terminals, allowing it to be used as a universal transmitter
- Up to 5 year lifespan from 2 x CR2450 lithium coin batteries
- Sends alarm, supervision, tamper and low battery warning
- Tamper protection on top and bottom of case

Compatible with above alarm systems; incompatible with WG2020 systems

## Wireless Numeric Mini Keypad

Model: WKP

- Mini wireless numeric keypad with backlit rubber buttons
- Greater security vs remotes: arm/disarm/panic via 4-digit PIN code
- Code hopping technology to prevent scanning/code-copying
- Compact size, only 45 x 55mm, wall mount or for portable use
- Operates on long life lithium batteries with low battery indicator
- Compatible with all Watchguard™ universal receivers and alarms

## Wireless Personal Emergency/Panic Pendant

Model: WPANIC

- Ideal for the elderly or less-able in case of duress emergency response
- Two internal switch design meets standards for hold-up buttons
- Large, splashproof, rubber button with nylon lanyard
- Dipswitch coding with operation distance of 200m (line of sight)
- Compatible with all Watchguard™ universal receivers and alarms

## Wireless Supervised External Siren

Model: WSIREN

- Wireless outdoor siren with flashing blue strobe and backup battery
- 10m of pre-terminated cable for plug-and-secure installation
- Sends tamper, low battery and supervision signals
- Includes low voltage plug pack
- Compatible with all Watchguard™ universal receivers and alarms

# Watchguard™ universal transmitters and receivers

(a)

(b)

(c)

## 433.92MHz Transmitter / Receiver Sets

(a) Model: RXPROR4

- 4 channel narrow-band UHF receiver/transmitter set with remote controls
- All outputs are individually programmable to suit almost any application
- Add Watchguard™ wireless alarm detectors to almost any alarm panel
- Programmable outputs: momentary, latched, timed or pulsed
- Up to 4 wireless detectors can be integrated into the RXPROR4
- Includes 2 code hopping remotes, prevents scanning/code-grabbing
- Can store up to 5 remote controls in total
- Supports detector low battery, supervision & tamper signal outputs
- Step by step programming via remotes with indication via LEDs
- Power supply requirement 12VDC @ 500mA

(b) Model: RCX (2 channel kit)

- Simple, compact and easy to use 2 channel transmitter/receiver set
- 1 second pulsed negative outputs for channels 1 ~ 2
- Separate negative on arm/latch and 12V LED flash outputs for channel 1
- 2 x 2-button code hopping remotes, prevents scanning/code-grabbing
- Can store up to 15 remote controls in total
- Up to 200m radio frequency range (line of sight)

(c) Model: RCX4 (4 channel kit)

- Simple, compact and easy to use 4 channel transmitter/receiver set
- 1 second pulsed negative outputs for channels 1 ~ 4
- Separate momentary negative outputs for channels 1 & 2
- 2 x 4-button code hopping remotes, prevents scanning/code-grabbing
- Can store up to 15 remote controls in total
- Up to 200m radio frequency range (line of sight)

Ideal for electric garages, gates, vehicle central locking, vehicle boot release
Perfect for replacing your old, large or low security remote controls
Interface with most devices that allow for remote on/off

# VIP Vision™ IP intercom solutions for home & business

### Stay accessible, remain secure

Through the benefits of IP technology, always be connected to base with your smartphone. Remote unlock access to those you recognise and take snapshots of those you don't.

- Remote unlock, remote view and take image snapshots from your intercom camera via your connected smartphone and app.
- Give the appearance that the premises is occupied, no matter where you are.

### Easy to install & expand

The residential models featured in the VIP Vision™ IP intercom range are easy to install and are eminently expandable to accommodate larger premises.

- Installation for a single door station and monitor is as easy as connecting both by CAT5 cable, then providing power.
- Use up to 6 indoor monitors & door stations.
- Use Power over Ethernet via a PoE receiver.

### IP systems integration

Being IP based, you are able to integrate the VIP Vision™ intercom range into existing PC or surveillance networks. Value add with VIP Vision IP CCTV surveillance systems and IP intercoms.

- View VIP Vision CCTV cameras' video stream on your IP intercom monitor, just like you would with the door station camera.
- Turn each monitor into a surveillance station.
- Cameras feed is at monitor display resolution.

# Offer clients more with VIP Vision™

With the advent of home automation and rapid rise in adoption of power smartphones and tablets, you can no longer provide a standalone solution when it comes to residential intercom systems. Deliver the product features your customers ask for with the smartphone integration they desire by choosing VIP Vision™ IP intercoms:

- Each indoor intercom monitor features a large, slim, 7" touch display for control
- Door stations include a megapixel camera with day/night for low light use
- Each intercom system can be linked to your smartphone via free/paid applications*
- Give complete access control alongside their surveillance, using the integrated app

* Push notification features only available in select models. Contact RhinoCo Technology for more details. Push notification features available for Google Android & Apple iOS devices via premium Flashview or DMSS application only. Smartphone not included.

# Professional IP intercom door stations & monitors

## Residential Intercom Indoor Monitors

Available in two styles, see models below

- 7" TFT LCD resistive touchscreen controlled, indoor intercom monitor
- Slimline, white gloss finish with quick-action on-device buttons
- 800 x 480 pixels resolution; 4GB internal SD card storage (inaccessible)
- Stores missed / received / placed calls with timestamp
- Comprehensive contact book, leave message and emergency call functions
- Monitor mode - view through the door station camera at any time
- Supports do not disturb and multiple outdoor station connectivity
- TCP/IP network protocol; 10/100Mbps self-adaptive Ethernet
- Power by 12VDC supply or PoE (requires receiver, Model: WT-CAT5POER)
- Includes mounting components

Model: INTIPMONBL (Black variant)
INTIPMONBLW (White variant)

- Slimline, black gloss finish with quick-action on-device buttons

## Residential Intercom Door Stations

Available in three styles, see models below

- IP intercom door stations with 1.0 megapixel day/night camera
- Omnidirectional microphone with bidirectional talk support
- Easy to use with single, backlit push button interface
- One-press calling, built-in voice response prompts user
- Visitor audio/video messaging function; tamper switch
- TCP/IP network protocol; 10/100Mbps self-adaptive Ethernet
- Interfaces with smartphones and tablets (iOS and Android only)
- Take snapshots, remote unlock and two-way talk via your smartphone
- Includes power supply and surface mount components
- Compatible with integrated circuit card for larger systems
- Supports customised call period and group call functionality

(a) Model: INTIPRDSB (Black surface mount variant)
INTIPRDSBW (White surface mount variant)

- Stylish black or white gloss finish with tempered front glass panel
- IP65 front glass panel only; recommended sheltered area mounting
- Partial weather resistance; sheltered mounting area recommended

(b) Model: INTIPRDSVW (Vandal resistant mount variant)
INTIPRDSVW-RS (Standard, surface mount rain-shield bracket)
INTIPRDSVW-FMA (Optional, flush mount junction box)

- Machined stainless steel front pane for vandal resistance
- Includes mounting components and weather grommet
- IP54 weather resistant and IK07 vandal rated door station

## Complete Residential IP Intercom Kits

Available in black and white models

- Pre-packaged IP intercom kit for residential/light commercial buildings
- Ideal for implementation in residential housing developments
- Surface mount door station and slimline indoor monitor
- Everything necessary for a 1 x monitor / 1 x door station setup
- Compatible with applications for push notifications with remote unlock
- Easy installation: connect monitor and door station with bundled CAT5 cable and then provide power using included power supplies
- Includes mounting components

Model: INTIPRKITBW (White intercom kit)
INTIPRKITB (Black intercom kit)

- 7" slimline touchscreen indoor monitor & surface mount door station
- 4GB on-board storage (inaccessible) for audio/video messages, snapshots
- 1 x 30m CAT5e pre-terminated Ethernet cable
- 2 x 12VDC power supplies

Kit is also compatible with INTIPRDSWV, additional cost may be incurred

# New from VIP Vision™: 2-wire Residential IP Intercoms



(a)

## 2-Wire Residential Intercom Indoor Monitor

(a) Model: INTIPMONFB2W

- 7" TFT LCD resistive touchscreen controlled, 2-wire intercom monitor
- Surface mount; white gloss and brushed aluminium finish
- 800 x 480 pixels resolution / Internal SD card storage (accessible)
- Omni-directional microphone with two-way talk support
- Supports 6 channels alarm input; 1 channel alarm output
- Stores missed calls / received calls / placed calls / audio-video messages
- Monitor door station camera mode / DND / Connect to multiple stations
- TCP/IP network protocol; 10/100Mbps self-adaptive Ethernet
- Supports network and 24VDC power over 2-wire bus
- Includes surface mounting components

## 2-Wire Residential Intercom Door Station

(b) Model: INTIPRDSVW2W

- IP intercom door stations with 1.0 megapixel day/night camera
- Omnidirectional microphone with bidirectional talk support
- Easy to use with single, backlit push button interface
- One-press calling, built-in voice response prompts user
- Machined stainless steel front pane for vandal resistance
- Includes mounting components and weather grommet
- IP54 weather resistant and IK07 vandal rated door station
- Supports network and 24VDC power over 2-wire bus
- Compatible with INTIPRDSVW mounting accessories (see previous page)



(b)                                                                (c)

## 2-Wire Residential Intercom Network Controller

(c) Model: INTIPNC2W

- Facilitates network/power connectivity to 4 x 2-wire intercom devices
- Connect intercom system to the Internet for use with remote view app
- Provides 24VDC power with a maximum power load of 30W
- Includes surface mount and DIN-rail mounting options

Upgrade your intercom/door bell using your existing two-wire infrastructure
Ideal for homes, villas, apartments, businesses, duplexes and more

# Require a Power over Ethernet solution?



## Power over Ethernet Switch for IP Intercom Systems

Model: INTIPMONPOE

- Integrate Power over Ethernet for easy intercom installation
- IEEE802.3af standard Power over Ethernet (up to 15.4W)
- Plug & play installation, requires no configuration or complex IP setup
- Facilitates network and power via CAT5e for up to 6 x IP indoor monitors
- 45W maximum switch load; 0.2W standby switch power consumption
- Includes surface mount and DIN-rail mounting options

Compatible with standard residential VIP Vision IP intercom products



## Power Over Ethernet (PoE) Receiver

Model: WT-CAT5POER

- Provides Power over Ethernet solution in VIP Vision™ IP intercom systems*
- Each door station and indoor monitor requires their own PoE receiver
- Ethernet line-in Power over Ethernet receiver
- Provides 5VDC and 12VDC power output up to 100m
- Supports gigabit speeds (1000Mbps) and is 802.3af compliant
  * Intercom PoE setups also require a PoE switch, see VS8PORTPOEV2

# Apartment door stations, connect up to 255 monitors

## Black Touch IP Intercom Door Stations for Apartments
Model: INTIPADSB

- Stylish black crystal glass panel features a resistive touch input keypad
- Apartment intercom door stations for large scale intercom installs
- Interfaces with intercom management systems/supervisor software
- 3.0" super-twisted nematic (STN) information display
- 1.3 megapixel day/night door station camera for low light/night use
- Omnidirectional microphone with bidirectional talk support
- Proximity sensor lights up keypad on detection of user
- Voice verification of key-presses and intercom function voice prompting
- Support for tamper detection and remote unlock by smartphone/app
- Adopt TCP/IP protocol assigns an unique IP address for each device
- Door station can communication with up to 255 indoor terminals
- Visitor audio/video messaging functionality
- Supports integrated circuit card and PIN code authentication
- Supports call indoor monitor and call management centre functions

Compatible with the entire VIP Vision™ range of IP intercom indoor monitors
Ideal for vertical solutions including commercial buildings, apartments and more
Supports security room contact and management for high security purposes
Log attendance via door station and integrate with existing alarm systems

Model: INTIPAFM100

- IP intercom apartment door station flush mounting box for INTIPADSB

## Aluminium IP Intercom Door Stations for Apartments
Model: INTIPADSS

- Durable cast aluminium construction for front plate and keypad buttons
- Apartment intercom door stations for large scale intercom installs
- Interfaces with intercom management systems/supervisor software
- 3.0" super-twisted nematic (STN) information display
- 1.3 megapixel day/night door station camera for low light/night use
- Omnidirectional microphone with bidirectional talk support
- Proximity sensor lights up keypad on detection of user
- Voice verification of key-presses and intercom function voice prompting
- Support for tamper detection and remote unlock by smartphone/app
- Adopt TCP/IP protocol assigns an unique IP address for each device
- Door station can communication with up to 255 indoor terminals
- Visitor audio/video messaging functionality
- Supports integrated circuit card and PIN code authentication
- Supports call indoor monitor and call management centre functions

Compatible with the entire VIP Vision™ range of IP intercom indoor monitors
Ideal for vertical solutions including commercial buildings, apartments and more
Supports security room contact and management for high security purposes
Log attendance via door station and integrate with existing alarm systems

Model: INTIPAFM101

- IP intercom apartment door station flush mounting box for INTIPADSS

# Watchguard™ stand-alone access control solutions



## Easily to integrate & retrofit

The Watchguard™ Standalone Access Control range features a selection of lightweight, customisable access readers and keypads, that can be fitted to just about anywhere:

- No access control module or central station
- Programming is performed from the reader or keypad, making it faster & more versatile
- Mullion mount keypads/readers fit snugly along side doors and ingress points



## Expandable and fully featured

Each reader-keypad can be expanded for use with up to three auxiliary readers for additional points of access. Every keypad or keypad-reader is IP55 or IP65 weather resistant for outdoor use.

- Hold up to 1,000 codes, card and keyfob IDs
- Configurable daily operational hours with customisable door lock timers
- Programmable visitor access control
- Features built-in door chime and tamper



## Multi-level authentication

Combine cards, keyfobs and PIN codes to Watchguard™ reader-keypads for multi-layered authentication. You can also split the process of authentication for greater security.

- Integrate a Watchguard™ split decoder to change the authentication signals sent via PIN codes, cards or keyfobs to data, bypassing the switching relay in the keypad
- Prevents sabotage of reader to force entry

# Flexible access control systems

The Watchguard™ Standalone Access Control range is best suited for small business access control jobs. However, it is versatile enough to be implemented in areas that pose more greater access control challenges. The Watchguard™ range can be configured in three different ways to adapt to your job requirements:

- **Stand-alone:** Keypad drives electric lock, perfect for single door applications.
- **Multi-station:** Expands to include additional readers for multi-door applications.
- **Split systems:** Separates authentication from keypad via a split-decoder for maximum security. Ideal for outdoor access control jobs, especially in high crime areas.

Contact your RhinoCo Technology sales representative for more information regarding implementation of the Watchguard™ Standalone Access Control range in your next access control install.

# Easy-install access control solutions for business

## Standalone Access Control Reader/Keypads

Available in ABS plastic and zinc-alloy variants

- Drives electronic door locks; compatible with fail-safe and fail-secure locks
- The reader can handle up to 1000 user code, RFID card/keyfobs
- Cards and PIN codes can be combined for multi-level authentication
- Programmable door lock striking timer for access customisation
- Uses a solid-state switch instead of mechanical relay for longer service life
- Available relay contact to operate an external low power door chime
- Features tamper switch and unauthorised access lock for vandal protection
- Includes 2 x proximity RFID access cards and installation components

Model: ACRDR102

- ABS plastic, IP55 weather resistant, access control reader/keypad
- Dual-level backlit access control keypad, soft plastic buttons

Model: ACRDR103

- Zinc alloy die cast, IP65 weather resistant, access control reader/keypad
- Dual-level backlit access control keypad & vandal resistant construction

Bi-directional data I/O bus enables up to 3 readers to be added to the system
Integrate ACRDR101 split-decoded access controller for greater security
Compatible with ACRDR100 auxiliary access control card reader
Compatible with all RFID proximity keys in the ACKEY range

## Standalone Access Control Card Reader

Model: ACRDR100

- ABS plastic, IP55 weather resistant, self contained access control reader
- Primarily used as an auxiliary reader for ACRDR102 and ACRDR103
- Drives electronic door locks; compatible with fail-safe and fail-secure locks
- The reader can handle up to 500 users with 5 super users
- Programmable door lock striking timer for access customisation
- Uses a solid-state switch instead of mechanical relay for longer service life
- Built-in chime relay contact to operate an external low power door chime
- Features tamper switch and unauthorised access lock for vandal protection
- Includes 2 x proximity RFID access cards and installation components

Built-in data I/O bus enables up to 3 additional ACRDR100s to be used together
Compatible with ACRDR102/103 as an auxiliary access control card reader
Compatible with all RFID proximity keys in the ACKEY range

## Split-Decoded Access Controller

Model: ACRDR101

- Splits the authentication process from the reader, improving security
- For systems susceptible to sabotage by forceful access to control wiring
- Important for standalone access control systems without supervision
- Door lock/unlock signals are interpreted as data at secure location
- Capable of decoding RFID card/keyfobs, PIN codes and remote signal
- Includes customisable unauthorised access lock for vandal protection
- Features control terminals for duress, egress, inter-lock and external alarms
- It also features 3 output relays and built-in door chime/tamper
- Includes 2 x remote controls with support for up to 40 remotes

Integrates with ACRDR102 and ACRDR103 reader/keypads

# Watchguard™ essential access control components



(a)

(b)

(c)

(d)
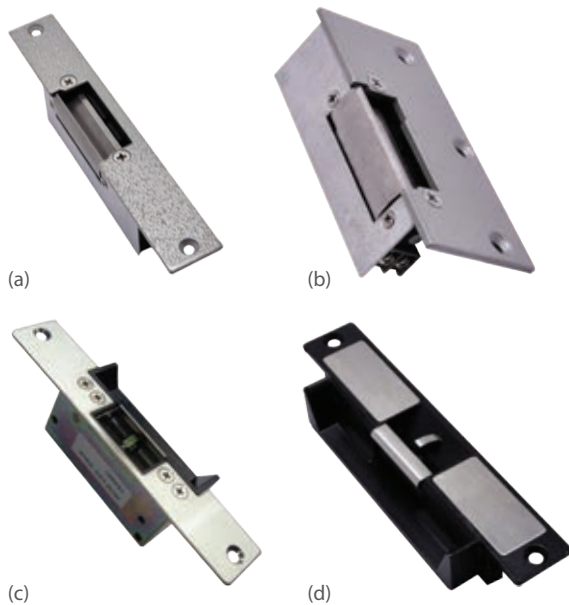
## Electronic Door Strikes

(a) Model: ACLOC100

- Compact mortise door strike with a durable steel faceplate
- Fail-secure configuration in the event of power loss
- 9.6mm keeper depth with 9.5mm applicable latch size
- Power input 12VDC at 400mA

(b) Model: ACLOC101

- Surface mount door strike with a durable steel faceplate
- Fail-secure configuration in the event of power loss
- 9.6mm keeper depth with 9.5mm applicable latch size
- Power input 12VDC at 400mA

(c) Model: ACLOC102

- Monitored mortise mount door strike with a durable steel faceplate
- Fail-secure / fail-safe convertible with door-latch and lock sensors
- 12.7mm keeper depth with 12.7mm applicable latch size
- Power input 12VDC at 260mA

(d) Model: ACLOC103

- Monitored mortise mount door strike with a durable steel faceplate
- Fail-secure / fail-safe convertible with door-latch and lock sensors
- 10.8mm keeper depth with 12.7mm applicable latch size
- Multi-voltage door strike with selectable 12/24VDC or AC input



## Door Release Buttons

Model: ACDSW100

- Heavy duty aluminium button with durable sandblasted finish
- Features 3 output contacts (N.O, N.C and COM)

Model: ACDSW101

- Slim door release button, smooth finsh, steel button, aluminium plate
- Features 2 outputs contacts (N.O and COM)

Model: ACDSW102

- Aluminium touch door release button with red/green status LED
- Features 3 output contacts (N.O, N.C and COM)



## RFID Proximity Token Packs

Available in thick and thin proximity cards, or blue keyfobs

- 125KHz RFID read-only memory keys, 64-bit code, ASK modulation
- Each model below comes in a pack of ten

Model: ACKEY100

- Thin RFID proximity card pack; only 0.75mm card depth

Model: ACKEY101

- Thick RFID proximity card pack; 1.90mm card depth with lanyard hole

Model: ACKEY102

- Blue RFID proximity keyfob pack; comes with keyring



## Surface Mount Door Loops

Model: DLW

- 400mm armoured stainless steel loop with plastic terminals
- For wire termination inside door/frame; 4 screws installation

Model: DLB

- 600mm armoured stainless steel loop with armoured steel terminals
- For wire termination inside door/frame; 8 screws installation

# VEHICLE SECURITY

## Rhino™ Vehicle Security

## Tracking, Safety & Surveillance

**Rhino**®
**Vehicle Security**

**Rhino Tracks**

# Rhino™ RA series: The ultimate in vehicle security

### Max security immobilisation

Rhino™ RA car alarms and immobilisers are top quality, Australian standards approved vehicle security products, designed to give you the maximum security for your vehicle.

- 3 point automatic immobiliser engine cuts
- Fuel pump, ignition system and starter motor are immobilised; cannot start until disarmed
- System immobilises automatically 40 seconds after ignition is turned off or when armed

### Intelligent vehicle security

Intelligent glass break and shock sensors give warn on light contact and can prevent damage being done to a vehicle completely; the RA also auto adjusts sensitivity to prevent false alarms.

- Smart glass break sensor triggers on sound frequency *and* impact, reducing false alarms
- Intelligent dual-stage shock sensor features ETS™ - Environment Tuned Sensor, to reduce false alarms from surroundings

### Comprehensive protection

The Rhino™ RA series features comprehensive door, bonnet, and boot protection; an independent battery backup siren; even secure features for turbocharged & courier vehicles.

- Alarm activation on door, bonnet, boot open
- Siren acts independently of the alarm
- Turbo timer functionality with presets and even integration with existing timers
- Courier function: engine runs while armed

# Our expertise in vehicle security

RhinoCo Technology first became known for its wide range of innovative, electronic vehicle security, which began over thirty years ago. Today, RhinoCo Technology delivers a large variety of electronic security, but you can still find this innovative approach to our newest vehicle security and safety range, with products such as:

- The best value, Australian designed, electronic vehicle security/alarms
- The RhinoTracks™ GPS tracking units with integrated online tracking service
- High definition mobile video recorders and vehicle surveillance systems
- Vehicle reversing sensors, monitors and safety products

For specialist jobs in electronic vehicle security, contact RhinoCo Technology to take advantage of our over thirty years of vehicle expertise.

# Australian designed and developed vehicle security

## RA Series Vehicle Alarm & Immobiliser

Model: RAV3

- Top quality Australian standards approved car alarm & immobiliser
- Features three point automatic engine immobilisation
- Intelligent glass break sensor and dual stage shock sensor with ETS™
- Indpendent coded battery back-up siren; stays on even if alarm is disabled
- Door, bonnet and boot protection and integrated central locking relays
- Turbo timer presets (1, 2 or 4 minutes); override preset via remote; ability to link existing turbo timer to the car alarm
- Control alarm with vehicle's factory key; compatible with most factory keys
- Special courier function allows for engine to run indefinitely while armed

Included components

- 1 x Australian standards approved 3-point immobiliser
- 2 x Water resistant, 4 button, rolling code remote controls
- 1 x Mini coded backup battery siren
- 1 x Intelligent glass break sensor

Model: RAKP (RA series alarm with keypad variant)

- Includes a mini-keypad for an additional layer of security to access you car
- Even if keys are stolen, a PIN code must be entered for car to start
- 20 second window to enter 4 digit PIN code after disarming the alarm
- Wireless, compact keypad allows for ease of operation

*RAKP only

## RA Series Vehicle Alarm & Immobiliser with Anti-Hijack

Model: RAV3-PNG

- Top quality Australian standards approved car alarm & immobiliser
- Added ability to detect a carjacking event and immobilise the vehicle
- Features three point automatic engine immobilisation
- Intelligent glass break sensor and dual stage shock sensor with ETS™
- Indpendent coded battery back-up siren; stays on even if alarm is disabled
- Door, bonnet and boot protection and integrated central locking relays
- Turbo timer presets (1, 2 or 4 minutes); override preset via remote; ability to link existing turbo timer to the car alarm
- Control alarm with vehicle's factory key; compatible with most factory keys
- Special courier function allows for engine to run indefinitely while armed

Included components

- 1 x Australian standards approved 3-point immobiliser
- 2 x Water resistant, 4 button, rolling code remote controls
- 1 x Mini coded backup battery siren
- 1 x Intelligent glass break sensor
- 1 x Push-up button

## GTS Series Vehicle Alarm & Immobiliser

Model: GTS

- Highly featured mid-level car alarm and engine immobiliser
- Features two point engine immobilisation (on-board relays)
- Immobiliser cuts to both starter motor and fuel pump
- Door, bonnet and boot protection and integrated central locking relays
- Dual stage car body impact sensor and backup battery siren
- Silent alarm/disarm and electric boot release output
- Numerous programmable features

Model: GTS24V (24V variant)

- Model for 24V power input vehicles; siren is non-battery backup

# Simple and affordable engine immobilisation

## ASA Three Point Engine Immobiliser

Model: JAGV3

- Top of the range engine immobiliser, recommended for high-risk vehicles
- Australian standards approved: AS / NZS 4601:1999 / amdt 1:2003
- Insurance approved including specialist insurers
- 3 on-board immobilisation relays plus all black wiring
- Includes 2 x code hopping remotes, prevents scanning/code-grabbing
- Automatic immobilisation (passive arming)
- On-board central locking relay outputs
- Numerous programmable features; can upgrade to full alarm system

Model: JAG24V (24V variant)

- Model for 24V power input vehicles

## Basic Immobiliser System & Remote Keyless Entry

Model: RCXI

- Adds remote control functions to existing key-operated central locking
- 1 second pulsed negative outputs for boot release, lock and unlock
- Features indicator flash outputs and a single engine immobilisation circuit
- Includes 2 x code hopping remotes, prevents scanning/code-grabbing
- Range of operation approximately 200 metres line of sight
- Maximum output rating: 150mA
- Ultra compact module at only 60 x 30 x 13mm
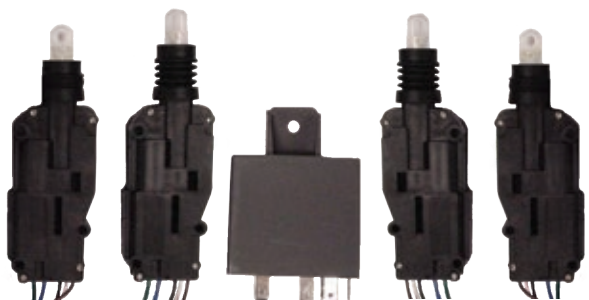
## Complete Central Locking Kits

Model: CLKHD

- 4 door heavy duty central locking kit
- 1 x control module with negative lock/unlock pulse inputs
- 2 x 5-wire master and 2 x 5 wire slave actuator/door lock motors
- High torque motors for activating stiff door locking mechanisms

Model: CLKHD2D (2 door variant)

- 1 x control module with negative lock/unlock pulse inputs
- 2 x 5-wire master actuator/door lock motors

Model: CLKHD24V (2 door variant in 24V)

- 2 door heavy duty central locking kit for 24V vehicles

## Central Locking Motor and Adapter

Model: DLHD101

- 5 wire master actuator / door lock motor, built for individual central locking

Model: DLHD102 (2 wire variant)

- 2 wire master actuator / door lock motor, built for individual central locking

Model: CLKHDCABLE

- Fits to vehicles with cable type lock actuators, CLKHD range compatible

## Upgrades for Existing Vehicles

Model: GLU400

- Automatic electric window lifter: closes 2 x windows when alarm is armed
- 2 units are required for vehicles with four doors

Model: DL105

- Electric boot release motor to add boot/hatch release function
- Compact design, only 70 x 115 x 27mm

Model: FL5

- Flush mount ultra bright red flashing LED light loom
- For high visibility 'alarm armed' indication

# Vehicle sirens, sensors, detectors and pin switches



(a)

(b)

(c)

(d)

## Vehicle Sirens

(a) Model: DPS

- Black cabin high frequency and super loud piezo siren
- Connect to the negative on alarm output on your alarm system

(b) Model: BBSCV3

- Coded backup battery siren (Australian Standards Approved)
- Utilise a special data code signal to switch siren on and off
- For use with Rhino RAV3 and JAGV3 only
- Available in 24V, Model: BBSCV324V

(c) Model: MINIBBSC

- Mini coded backup battery siren (Australian Standards Approved)
- Utilise a special data code signal to switch siren on and off
- For use with Rhino RAV3 and JAGV3 only

(b) Model: SBB

- Universal backup battery siren
- Negative & positive trigger inputs, override keyswitch

(c) Model: MINISBB

- Universal mini backup battery siren
- Negative & positive trigger inputs, override keyswitch

(d) Model: S42 (12VDC version)
   Model: S4224V (24VDC version)

- 115dB single tone siren, available in 12V/24VDC



(a)

(b)

(c)

(d)

(e)

(f)

(g)

(h)

(i)

## Sensors, Detectors and Pin Switches

(a) Model: UD6

- Ultrasonic body movement sensor
- Detect body movement inside the cabin of a hardtop vehicle

(b) Model: SHOCK2S

- 2 stage impact sensor to detect any shocks or impacts to your vehicle
- Adjustable sensitivity & LED test indicator

(c) Model: MDDZ

- Dual zone microwave detector
- Detects perimeter approach and internal movement

(d) Model: TILTSENSE2

- 3 dimension digital tilt sensor to protect your wheels and detect tow away
- Saves angle position on arming vehicle and unaffected by parking on slope

(e) Model: PRESSENSE

- Differential pressure sensor
- Detects minute or major changes in the internal pressure of a car

(f) Model: VANSW

- Sliding door switch
- For installing central locking on vehicles with sliding doors

(g) Model:  PIN410 (Right angled pinswitch)
(h) Model:  PIN409 (Standard pinswitch)
(i) Model:   PINSW (Metal pinswitch)

- Detects the opening of a vehicle bonnet, boot or doors



## 40A Five Pin Changeover Relays

Model: 40ARELAY

- For adding engine immobilisation circuits and;
- Connecting electric boot release motors to your vehicle

# RhinoTracks™ easy and effective online vehicle tracking

### Online tracking in real time

Have you ever needed to know where your vehicle is? Where it has been? How fast it was travelling? View the location of vehicles in real-time using the RhinoTracks service:

- View live tracking updates and recorded travel histories for multiple vehicles
- Vehicle monitoring, fleet management, anti-theft purposes and real-time tracking available via Rhinotracks GPS services

### Learn through tracking

Having a RhinoTracks GPS tracker goes beyond security. Tracking systems can help companies monitor fuel consumption, identify inefficiency and boost productivity.

- Identify company car location, how long service or sales calls take, boost productivity
- Monitor drivers and provide real-time estimates of driver arrival, ideal for couriers, taxi services, shuttle companies and more

### Demo RhinoTracks™ now

You can demo the free RhinoTracks™ tracking service right now at **www.rhinotracks.com.au.** Experience the system for yourself by seeing one of our very own tracked vehicles.

- View live vehicle location tracking via your browser.
- Get an idea of the service and how it can benefit you or your business.
- Easy to use browser interface.

**NEW**

## 3G GPS Vehicle Tracker

Model: RHINOTRACKS-ST4

- Standard vehicle tracker comes with GPRS and GPS antenna
- Vehicle location, remote monitoring and remote navigation
- Provides accident and travel history records
- Ideal for small scale fleet management, e.g: company cars
- Real-time tracking

RhinoTracks tracking service fees apply. Fee is charged quarterly in advance at time of purchase. Fee incurred from mobile network service charge only

* Google Maps and Street View are trademarks of Google Inc. The download and use are subject to applicable terms and conditions of Google Inc. RhinoCo Technology is in no way affiliated or associated with Google Inc. or any of its subsidiaries. ** RhinoTracks GPS products require your vehicle is located within selected mobile phone network carrier's GSM coverage, that GPS satellites are operational and that the vehicle is not undercover. RhinoTracks service fees are charged quarterly in advance at time of purchase.

# Combine mobile CCTV surveillance & GPS tracking

## 4 Channel 1080p Mobile NVR with GPS and PoE

Model: MNVR-GPS

- Full HD mobile network recorder with high precision GPS module
- Ideal for vehicles in freighting, public transport or law enforcement
- Built-in 4 port Power over Ethernet switch and H.264/MJPEG decoding
- Displays car number, time, channel, GPS, speed, etc.
- Max. 2.0 megapixel resolution support (1920 x 1080)
- Records 1080p / 2.0MP at 25fps
- 1 x VGA and 2 x TV (BNC) video output
- 2 x 2.5" SATA HDD / 1 x eSATA / 2 x USB / 1 x RS232 / 1 x RS485 inputs
- 1 x RJ45 (1000M) Ethernet port and 1 x SD card slot up to 32GB
- 8 channel alarm input / 3 channel relay output
- 4 channel audio input / single channel audio output
- Single channel two-way talk input/output (aviation connector)
- Remote view via browser, iOS/Android/Windows Phone & SmartPSS
- Wide voltage input, supports 8~36V; double-DIN size (180 x 100mm)
- ONVIF 2.0 conformance

2.5" hard disk drive and SD card not included, sold separately

**NEW**

## 4 Channel 1080p Mobile HDCVI DVR with GPS

Model: MCVR-GPS

- Full HD mobile digital video recorder with high precision GPS module
- Ideal for vehicles in freighting, public transport or law enforcement
- Max. 1080p Full HD resolution support (1920 x 1080)
- Records 1080p / 720p at 25fps with H.264 video compression
- 1 x VGA and 2 x TV (BNC) video output
- 1 x 2.5" SATA HDD / 2 x USB / 1 x RS232 / 1 x RS485 / 1 x CAN inputs
- 1 x RJ45 (10/100M) Ethernet port and 1 x SD card slot
- 7 channel alarm input / 2 channel relay output
- 4 channel audio input / single channel audio output
- Single channel two-way talk input/output (aviation connector)
- Remote view via browser, iOS/Android/Windows Phone & SmartPSS
- Wide voltage input, supports 6~36V; DIN size (180 x 50mm)
- Vibration-dampening housing

Model: MCVR-GPS4G (Mobile Internet compatible)

- As above, including 3G/4G module for remote view via mobile Internet
- SIM card required; not included

Compatible with the VSCVI2MPVDIRFT 1080p HDCVI mobile dome camera
2.5" hard disk drive and SD card not included, sold separately

**NEW**

## 1080p Fixed Mobile HDCVI Dome Camera

Model: VSCVI2MPVDIRFT

- Streams Full HD 1080p/2.0MP (1920 x 1080)
- Fixed 2.8mm lens; wide 106° viewing angle
- Up to 500m HD video transmission over coaxial cable (75-3)
- Infrared illumination up to 20m distance
- IP66/IK10 for weather & vandal resistance
- Built-in microphone / auto white balance / 3D noise reduction
- Shock-resistant metal chassis & cable connectors

Model: MCVR-CABLExM

- Heavy duty cable for MCVR-GPS, available in 3, 6, 12 and 18m lengths

# Protect your driving record with Rhino™ vehicle safety

## Vehicle Reversing Cameras

(a) Model: MSCAM-B18
- 400TVL 18.5mm bracket reverse camera
- 1/4" CMOS image sensor, 90° wide lens angle
- IP67 rated

(b) Model: MSCAM-S28
- 420TVL 28.0mm screw mount reverse camera
- 1/4" CMOS image sensor, 170° wide lens angle
- IP67 rated

(c) Model: MSCAM-FI18
- 420TVL 18.5mm flush infrared reverse camera
- 1/4' CMOS image sensor, 120° wide lens angle
- Minimum illumination : 0.05Lux
- IP67 rated

(d) Model: MSCAM-BI28
- 420TVL 28.0mm bracket infrared reverse camera
- 1/4" CMOS image sensor, 120° wide lens angle
- Minimum illumination : 0.05Lux
- IP67 rated

(e) Model: MSCAM-BF18
- 400TVL 18.5mm bracket/flush mount reverse camera
- 1/4" CMOS image sensor, 90° wide lens angle
- IP67 rated

## Number Plate Mount Reversing Camera

Model: MSCAM-NPI
- 420TVL infrared number plate mounted reversing camera
- 7 x Infrared LED illuminators for 5m night time viewing
- 120° wide horizontal viewing angle camera; mounts above plate
- Camera can be tilted up and down to provide the best view
- Compatible with MSMON-4 and other in-vehicle LCD display monitors
- IP67 rated for weather resistance
- Power input 12VDC

# Compact on-vehicle cameras for cars, buses & trucks

## Heavy Duty Analogue Camera for Large Vehicles

Model: MSCAM-TI

- 420TVL resolution reversing camera with heavy duty bracket
- 1/4" CMOS image sensor with 640 x 480 effective pixels
- 0.5 Lux minimum illumination, includes infrared for night viewing
- 110° wide angle lens for complete inside of vehicle capture
- IP67 rated weather resistant for use outside of vehicle
- Suitable for mounting inside rear windscreen or externally
- 12V~24V power input compatible

## Analogue Infrared Mini Dome Camera

Model: MSCAM-MD

- Compact and adjustable dome design for mounting inside vehicle cabin
- 420TVL resolution mini dome camera for large vehicles
- 1/4" colour CMOS sensor with 640 x 480 effective pixels
- 110° wide angle lens for complete inside of vehicle capture
- 0.5 Lux minimum illumination, includes infrared for 5m night viewing
- 1.0vp-p, 75ohm RCA connector video output
- IP67 rated weather resistant for use outside of vehicle
- 12V~24V power input compatible

## Analogue Infrared Dome Camera with Audio

Model: MSCAM-MDA

- 800TVL resolution mini dome camera with audio for large vehicles
- 1/3" colour CMOS sensor with 960x582 effective pixels
- 110° wide angle lens for complete inside of vehicle capture
- 1 x RCA audio input for microphone
- Supports digital wide dynamic range and digital noise reduction
- 0.001 Lux minimum illumination, includes infrared for 5m night viewing
- 1.0vp-p, 75ohm RCA connector video output
- IP66 rated weather resistant for use outside of vehicle
- 12V~24V power input compatible

## 7" Vehicle LCD Monitor with Stand

Model: MSMON-7

- 7.0" TFT dashboard monitor for vehicles with remote control included
- 480 x 234 pixels display resolution with 16:9 aspect ratio
- 4 video inputs, switchable when parking/reversing
- When turned off the monitor can be used as original car rearview mirror
- Multi-purpose LCD monitor for AV/TV in vehicle applications
- Perform all controls via the remote control
- Obstacle distance can be shown on the LED monitor in digits
- 12VDC power input compatible

# Complete vehicle reversing safety packages

## 4" Flip-down Vehicle LCD Monitor with Stand

Model: MSMON-4

- 4.3" TFT Flip-down monitor for vehicles
- 480 x 234 pixels display resolution with 16:9 aspect ratio
- Dual video inputs, switchable when parking/reversing
- When turned off the monitor can be used as original car rearview mirror
- Obstacle distance can be shown on the LED monitor in digits
- Monitor activates automatically when reversing
- 12VDC power input compatible

## 2.4GHz Wireless Mobile Vehicle Monitor Kit

Model: MSKIT-WRC

- 2.4GHz 420TVL wireless reversing camera kit
- Connect wirelessly between 7" LCD display and camera in seconds
- 2.4GHz wireless transmission for up to 12m usable range
- Power supply 12V/24VDC compatible
- 7" digital LCD showing image
- Monitor works with 2 AV channels

Camera Features:
- 420 TVL resolution
- Fixed 2.8mm lens for wide 120° field of view
- LEDs for night vision 30m infrared
- IP67 weather resistant

## 4 Sensor Audible Alert Reverse Sensor Kit

Model: MSKIT-RV4

- Four sensor vehicle reversing assistance / parking kit
- 40KHz ultrasonic sensors detect objects within 2.5m
- Includes digital control box and speaker for audible alerts
- Easy installation of high quality embedded sensors into bumper
- Ø19mm diameter hole cut size (drill bit included)
- 12VDC 20~200mA power input

| 4 Warning Beep Levels | |
|---|---|
| 1.5 - 1.1m | Safe |
| 1.0 - 0.6m | Warning |
| 0.5 - 0.4m | Danger |
| 0.3 - 0.0m | Immediate Danger |

* Reversing cameras and parking sensors are designed only as an aid to drivers. They should never be considered as a substitute for normal driver responsibility. Proper driving technique and use of mirrors whilst reversing should always be observed by the driver.

# SECURITY ESSENTIALS

SECURVIEW™

**SECURVIEW**

# Power supplies & UPS for CCTV surveillance systems

## 18 Channel Surveillance Power Supplies

Available in 12VDC with backup and 24VAC transformer models

- 18 individual fused outputs in a compact metal case
- Each features short circuit, high voltage and over current  protection
- Built for indoor operation only

Model: PS12VDC10A18CHB (12VDC, battery backup variant)

- Features secure keylock case and battery backup (battery sold separately)
- 100~240VAC, auto switch input voltage / 12VDC output voltage
- 10A total output current
  * Battery not included, sold separately. See D12V7 (page 75)

Model: PS24VAC10A18CH (24VAC variant)

- 24VAC heavy duty transformer/power supply
- 100~120VAC, 220~240VAC input voltage / 24VAC output voltage
- 10A / 240W total output current

## Professional UPS Tower Series

Available in 650VA, 1500VA and 2000VA models

- Built for standalone infrastructure such as DVRs, workstations, printers
- Integrate to protect IT & security in home, office and retail environments
- Easy to use control and monitor panel interface with LCD or LED (650VA)
- Automatic voltage regulation (AVR) to avoid unnecessary battery switching
- Integrated NTP protection against line overvoltage for LAN/ADSL
- Features standard 3-pin Australian sockets

| Model | Pn (W) | Sn (VA) | Back-up Time* | Sockets |
|---|---|---|---|---|
| UPS650VA | 360W | 650VA | 15 min | 2 |
| UPS1500VA | 900W | 1500VA | 55 min | 4 |
| UPS2000VA | 1200W | 2000VA | 60 min | |

* Back-up time tested for PC workstation and 17" LCD monitor

## Enterprise UPS Rackmount / Tower Series

Available in 1700VA, 2200VA and 3300VA models

- Designed to assure service continuity to critical enterprise applications
- Ideal solution for small servers, networking devices and peripherals
- Sine wave inverter: Compatible with any kind of load and power supply
- Convertible form: install in 19" rackmount (2U) or in standard tower mode
- Professional aesthetic with intuitive buzzer and LCD user interface
- Integrate with communication protocols such as JBUS, TCP/IP and SNMP
- Automatic voltage regulation (AVR) to avoid unnecessary battery switching
- Integrated NTP protection against line overvoltage for LAN/ADSL
- Features load segmentation, RS232 and emergency power off
- IT standard IEC 320 sockets simplify connectivity to IT infrastructure

| Model | Pn (W) | Sn (VA) | Back-up Time* | Sockets |
|---|---|---|---|---|
| UPS1700VAXCRM | 1350W | 1700VA | 6 min | 8 (10A) |
| UPS2200VAXCRM | 1800W | 2200VA | 8 min | 8 (10A) |
| UPS3300VAXCRM | 2700W | 3300VA | 6 min | 1 (16A) |

* Back-up time tested at 75% of maximum load

# Power essentials: Batteries and power supplies

## Lithium Cell Batteries

Model: CR2450BULK

- CR2450 3V lithium battery
- Suits PIRW3 (Wireless PIR detector), WREEDI (Wireless reed switch)

Model: CR2025BP

- CR2025 3V lithium battery
- Suits RCTX3-T (Remote control for RAV3 car alarm)

Model: CR2032BP

- CR2032 3V lithium battery
- Suits many general purpose remote controls

Model: CR1616BP

- CR1616 3V lithium battery
- Suits GTTX / GTSTX / GTRTX / RCTX4-U (2 / 4 button code hopping remote control for Rhino car alarms and Watchguard building alarms)

Model: TX12V23A

- 23A 12V lithium battery
- Suits PTX (4 button learning remote), GLTX (1 button remote for alarms)

## Sealed Lead Acid Batteries & Chargers

Model: D12V1.2

- 12V DC 1.2AH sealed lead acid battery
- Power failure backup battery

Model: D12V7

- 12V DC 7AH sealed lead acid battery
- Power failure backup battery

Model: PSLEADCHRG

- 12V sealed lead acid battery charger
- 350mA fully automatic

## Switchmode Power Supplies

Available in a variety of voltages, currents and plug types

- Inner Ø: 2.1mm / Outer Ø: 5.5mm for all plugs

| Model | Voltage | Current | Plug Type |
|---|---|---|---|
| PS5VDC500MA | 5VDC | 500mA | DC plug |
| PS12VDC500MA | 12VDC | 500mA | DC plug |
| PS5000SM | 12VDC | 5000mA | DC plug |
| PS16VAC | 16VAC | 1500mA | Bare Wire |
| PS24VDC2AMP | 24VDC | 2000mA | DC plug |
| PS24VAC2AMP | 24VAC | 2000mA | Bare Wire |

# Security cable rolls and pre-terminated cables
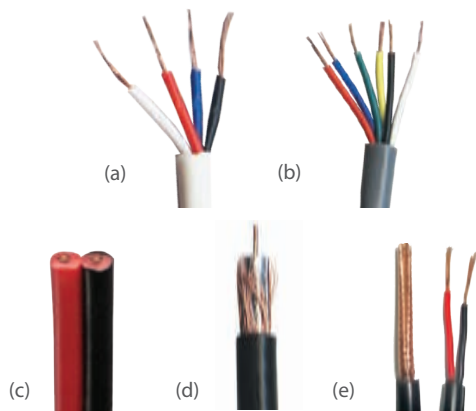
## Security Cables in 100m Rolls

(a) Model: D4CC  • 4 core cable 4 x 7/0.20mm stranded

(b) Model: D6CC  • 6 core alarm cable 6 x 7/0.20mm stranded

(c) Model: DF8C3  • Figure 8 cable 2 x 48/0.20mm stranded

(d) Model: DCOAXFC  • Coax cable RG59 75Ω 98% braiding

(e) Model: DCOAXPWR24FCBP  • Combined coax/power cable 95% braiding

## Ethernet Cable in 305m Pullboxes

Model: CAT5E, CAT5EU, CAT6BLU, CAT6RED

- 305m pullbox CAT5e shielded network cable - blue (CAT5E)
- 305m pullbox CAT5e unshielded network cable - grey (CAT5EU)
- 305m pullbox CAT6 network cable - blue (CAT6BLU)
- 305m pullbox CAT6 network cable - red (CAT6RED)
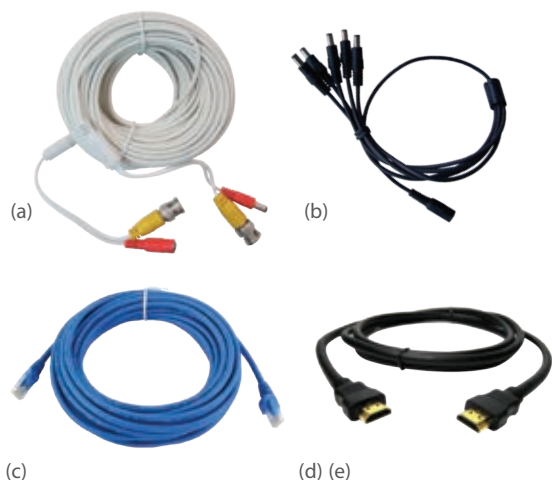
## Patch Leads & Pre-terminated Cables

(a) Model: RCA4CHLOOM10M, RCA4CHLOOM20M, RCA4CHLOOM30M

- Pre-terminated combined power & BNC video lead
- Available in 10m, 20m and 30m lengths
  * Not suitable for cameras which draw more than 700mA

(b)  Model: DC4CHLOOM, DC5CHLOOM, DC8CHLOOM

- Power splitter to power up multiple cameras
- 4-way, 5-way and 8-way power splitters available

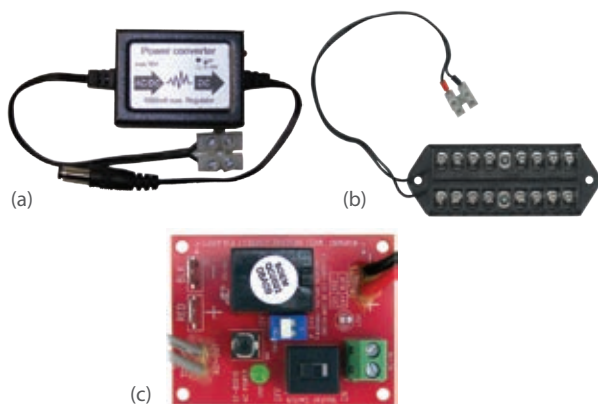(c) Model: NETCABLE10, NETCABLE20, NETCABLE30

- Pre-terminated CAT5 Ethernet cable in 10m, 20m and 30m lengths

(d) Model: HDMI1M, HDMI3M, HDMI5M, HDMI10M

- HDMI cable available in 1m, 3m, 5m and 10m lengths

(e) Model: HDMI5M4K, HDMI20M4K

- High speed 4K capable HDMI available in 5m and 20m lengths

## Power Accessories

(a) Model: VSPOWCONVERTER

- Regulated switchmode step down converter
- Converts AC or DC supply up to 36V to regulated 12VDC output, up to 1A

(b) Model: VSTBB

- Connector strip with screw terminals for distributing power to cameras
- 1 input / 8 outputs with polarity markings

(c) Model: VSPOWCUTOFF

- Low voltage battery cut-off
- Connects to your 12 or 24VDC power supply or alarm panel
- Prevents the complete discharge of the backup batteries
- Adjustable voltage cut-off and restore point

# Cabling essentials: Connectors, plugs and leads

## Connectors and Plugs

(a) Model: VSDCJ2JC  • DC Power jack to jack coupler

(b) Model: VSFR2B  • Male RCA To female BNC adaptors

(c) Model: VSFB2R  • Male BNC To female RCA adaptors

(d) Model: VSFBTA  • BNC / 'T' connector

(e) Model: VSFBNC  • BNC connector for RG59U 75 Ohm coax cable

(f) Model: VSFBNC3  • BNC connector with separate pin for RG59 coax cable

(g) Model: VSFBNC6  • High quality compression BNC plug for RG6 cable

(h) Model: VSFBNC59  • High quality compression BNC plug for RG59 cable

(i) Model: VSFBNCBULKHEAD  • BNC jack to jack bulkhead

(j) Model: VSFBNCTWIST  • Twist BNC Connector for RG6 cable

(k) Model: VSFRFPT  • RCA plug to F-Type jack

(l) Model: VSFFPBP  • F-Type plug to BNC plug

(m) Model: VSFFPRJ  • F-Type plug to RCA jack

(n) Model: VSFFPBJ  • F-Type plug to BNC jack

(o) Model: VSFBPRP  • BNC plug to RCA plug

(p) Model: VSFBPFJ  • BNC Plug to F jack

(q) Model: VSFB2B  • Inline BNC connector, socket to socket

(r) Model: VSFDCP  • DC power connector plug 9.5mm

(s) Model: VSFDCP2.5  • DC power connector plug 2.5mm

(t) Model: VSFDCPF2.1  • DC power connector socket 2.1mm

(u) Model: VSDCPPTB  • DC power connector -female and male

(v) Model: VSFRLPR  • RCA line plug male - Red

(w) Model: VSFRLPB  • RCA line plug male - Black

(x) Model: VSFRLPY  • RCA line plug male - Yellow

(y) Model: VSFRLSR  • RCA line socket female - Red

(z) Model: RJ45PLUGS  • 8 pin / 8 contact CAT5/5e/6 RJ45 connector

(1) Model: RJ45PLUG900  • Shielded single-piece CAT5e RJ45 connector (10 pack)

(2) Model: RJ45PLUG910  • Shielded two-piece CAT5e RJ45 connector (10 pack)
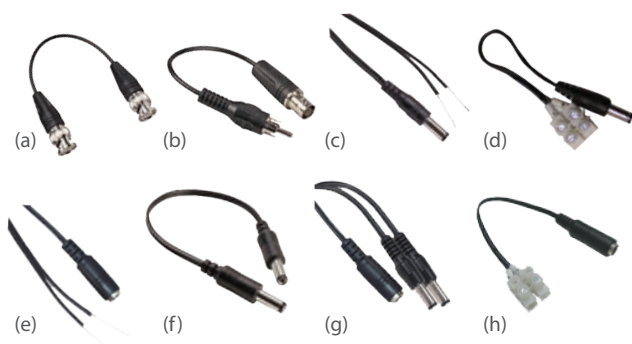
## Power Sockets and Leads

(a) Model: VSBNCP2PAC  • BNC plug to plug 6" adapter cable

(b) Model: VSRCAP2BNCJAC  • RCA plug to BNC jack 6" adaptor cable

(c) Model: VSPP36C  • 36" cable with 12VDC power plug on single end

(d) Model: VSDCCABLE  • DC power plug to screw terminal

(e) Model: VSPS36C  • 36" cable with power socket on single end

(f) Model: VSP2PAC  • Power plug to power plug 6" adaptor cable

(g) Model: VSDC1F2M  • 1 female to 2 male power couplers

(h) Model: VSPS2SMAC  • Power socket to screw mount 6" adaptor cable

# System surge protection and CCTV video baluns

(a)

(b)

(c)

(d)
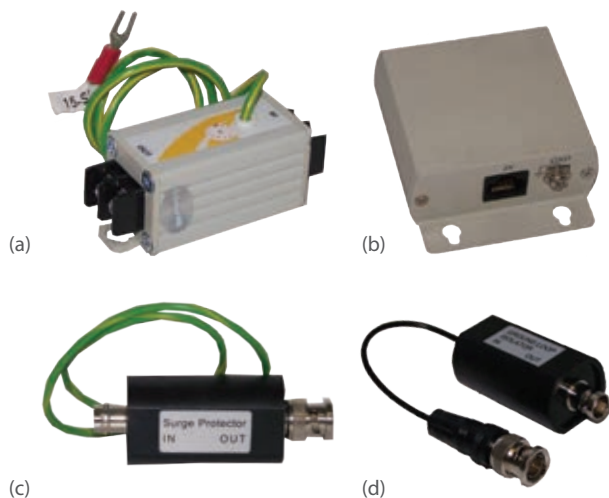
## Surge Protection & Ground Loop Isolation

(a) Model: VSSPU

- UTP data surge protection for PTZ controllers or data cables
- Surge protection attack time: 100ns, 5000A max.

(b) Model: VSSPR

- UTP video & data surge protection for IP cameras & network devices
- Surge protection attack time: 100ns, 50,000A max.

(c) Model: VSSPB

- Coaxial surge protection for CCTV cameras
- Surge protection attack time: 100ns, 5000A max.

(d) Model: VSVSI

- Ground loop isolator
- 75Ω BNC male to 75Ω BNC female
- Transient voltage suppressor: 12V RMS
- 100mm miniature coaxial cable input BNC male with BNC female output
- Isolation voltage: 750V DC
- Insulation resistance: >100 M ohm

(a)

(b)

(c)

(d)

(e)

(f)

## Video Baluns for CCTV Surveillance

(a) Model: VSBAL-MBMAA

- Monitor side BNC male video active balun
- BNC male to screw terminal
- 1800m CAT5 active-active transmission distance

(b) Model: VSEOCPAIR

- Transfers Ethernet signal through coax
- Data rate 10Mbps up to 100m cable
- Cost effective method of upgrading to IP

(c) Model: VSBALHDP

- Passive HDCVI / analogue balun pair
- BNC male to UTP cable
- 250m (1080p) or 400m (720p) CAT5/ CAT6/ UTP transmission distance

(d) Model: HDMICOAXSET

- HDMI over coaxial extender set
- Send HDMI signals over single coaxial cable up to 100m at 1080p resolution
- Supports daisy chain multiple remote  displays

(e) Model: HDMICAT5-TX

- 1-in 3-out HDMI to CAT5 Transmitter
- HDMI 1.3 compliant / HDCP compatible
- Maximum transmission range 100m at 1080p

(f) Model: HDMICAT5-RX

- 1-in 3-out HDMI to CAT5 Receiver
- HDMI 1.3 compliant / HDCP compatible
- Maximum transmission range 100m at 1080p

**NEW**

## HDCVI to HDMI / VGA / CVBS Video Converter

Model: VSCVIDECODER (input & output of image shown left)

- Convert and output HDCVI video signal to HDMI, VGA, CVBS
- HDCVI (BNC) input to HDMI / VGA / CVBS (BNC) / HDCVI (BNC) outputs
- Automatic adjustment of the output signal to the input signal
- Real-time transmission, lossless, uncompressed video transmission
- Supports 1080p / 720p resolutions (HDCVI / HDMI / VGA)
- Supports composite video (CVBS), PAL / NTSC auto detection
- RS485 interface, supports data rate 2400b/s, 4800b/s, 9600b/s, 115200b/s
- 12VDC 1.25A power supply / 162 x 160 x 30mm / 0.58kg
- Wall mount design, dust tight chassis / -10° ~ 55℃ operating temp.

# Professional cabling tools & standalone security



(a)
(b)
(c)
(d)
(e)
(f)
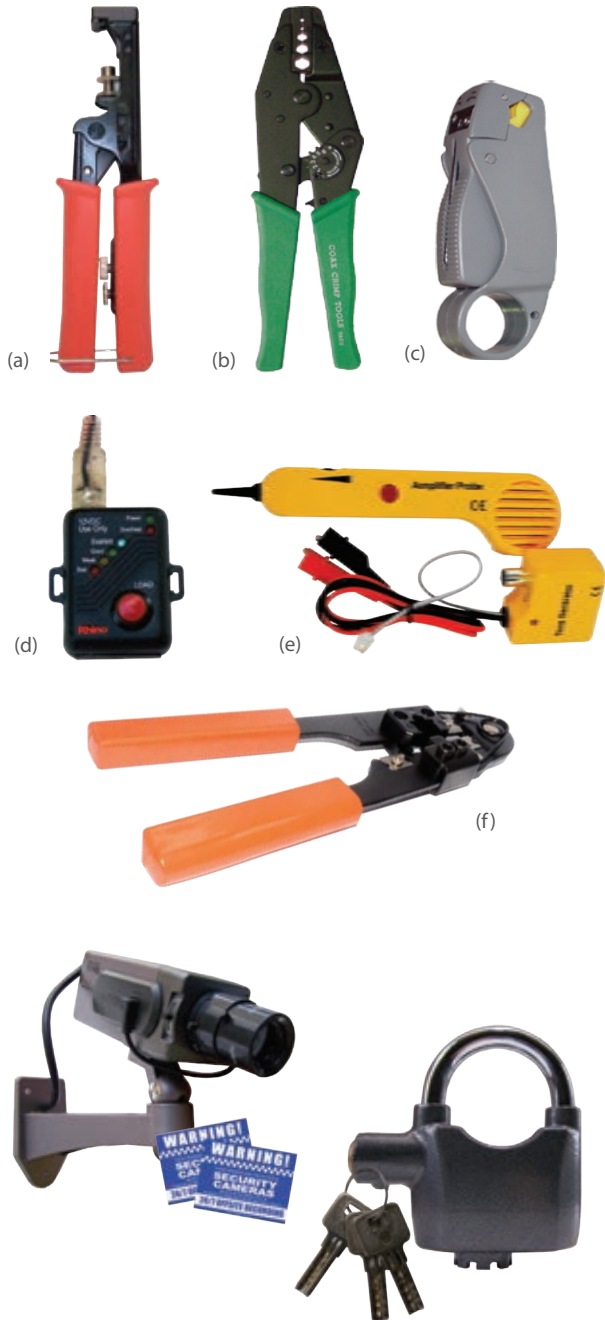
## Cable Tools, Crimpers and Testers

(a) Model: VSCOMPTOOL

- 7.6 inch professional compression tool
- Suitable for F/RCA/BNC RG-59, 6 (4C,5C) waterproof connectors

(b) Model: TSA50

- Coaxial connector cable crimping tool with 5 jaws
- Designed to crimp BNC/TNC  connectors to RG58C/U and RG62 coaxial cable as well as the centre pin to the centre conductor
- Hex sizes: 1.7, 2.5, 5.4, 6.5, 8.2mm

(c) Model: VSA18

- Coaxial cable stripping tool for RG58/59/6 cable
- 3 position stripper to strip cable revealing braid, dielectric and centre conductor

(d) Model: VSVOLTTESTER

- 5-in-1 multi purpose 12VDC tester
- Voltage test, load test, voltage drop test, PTC fuse test and polarity

(e) Model: VSCABLETRACER

- Tone generator & probe cable tracer
- For locating and Identifying cable pairs or individual conductors.
- Also function as a continuity and polarity tester

(f) Model: CRIMPTOOLRJ45

- Professional modular crimping tool
- Compatible with RJ45, RJ11, RJ12, 6PIN / 8PIN
- Single spring-loaded lever action
- Metal construction with stripping blades

## Replica Surveillance Camera

Model: VSCDFF

- Replica surveillance, indoor full body surveillance camera design
- Features professional appearance; includes 2 x CCTV warning stickers
- Also features red flashing LED (batteries required)
- Comes in stylish Watchguard™ retail packaging for on-shelf display

## 110dB Siren Alarmed Padlock

Model: WGALPAD

- Scare away would-be thieves with this shock/movement detecting padlock
- Unique arm-via-shackle; ultra-loud 110dB siren sounds, deterring thieves
- Stainless steel shackle and hardened zinc alloy body for durability
- Ideal for garden sheds, gates, garages, lock-boxes, bikes, tools and more
- Takes 6 x LR44 batteries (included) with lifespan up to 6 months

## High Visibility Security Warning Signage

(a) Model: VSCDSC (surveillance variant) / VSCDSA (alarm variant)

- A4 sticker pack: 2 x rear adhesive, 2 x front adhesive, text warning

(b) Model: VSA24 (A4 variant) / VSA24A3 (A3 variant)

- Corflute sign: 1 x weather/UV resistant, Securview brand, camera graphic

(c) Model: VSCDCC

- A3 corflute sign: 1 x weather/UV resistant, surveillance text warning

(d) Model: VS4STICKER

- 130 x 100mm sticker pack: 4 x rear adhesive, surveillance text warning

# Replacement remote controls and accessories



(a)  (b)  (c)



(d)  (e)  (f)

## Remote Control for Rhino and Watchguard Alarms

(a) Model: GLTX, GLRLTX

- Fixed code remote for Rhino LS and GA car alarms (Model: GLTX)
- Single button rolling code remote control (Model: GLRLTX)

(b) Model: GTTX, GTSTX, GTRTX

- Code hopping remote with YELLOW LED for Rhino RCX, RES4601V2 immobilisers and Watchguard WGUARDSMS2010 home alarm (GTTX)
- Code hopping remote with RED LED for Rhino GTS car alarm (GTSTX)
- Fixed code remote with GREEN LED for Rhino GTR car alarm (GTRTX)

(c) Model: RCTX3-T

- 3 button code hopping remote with LED torch
- For Rhino JAGV2, RAV3 & RAMV2 car alarm
- Also compatible with Rhino RCX, RES4601V2 immobilisers and Watchguard WGSMS2010 building alarms

(d) Model: RAV3TX

- 4 button code hopping remote control for RAV3 and JAGV3 car alarms
- Also compatible with Rhino RCX, RES4601V2 immobilisers and Watchguard WGSMS2010 building alarms

(e) Model: RCTX4-U

- 4 button code hopping remote for RXPROR4
- Optional use with Rhino RCX, RES, JAG, RAM car alarms and the WGSMS2010 building alarm

(f) Model: RS10

- Universal air conditioner remote
- Replace lost or damaged air conditioner remotes and can control multiple functions including fan speed and air swing direction
- Compatible with over 100 different world famous brands of air-conditioners



## UHF Programmable 4 Button Remote

Model: PTX

- 4 channel programmable remote control
- Duplicate a majority of fixed code remotes (not code hopping remotes)
- Many uses including car & home alarms, panic buttons, garage doors
- Copies most radio frequency fixed code remote controls
- 255~500 MHz adjustable frequency; learns in seconds
- Ideal for replacing old or misplaced remote control
- Includes battery



## RF Remote Control Frequency Counter

Model: FREQCOUNTER

- Ideal for home and vehicle technicians
- Quickly check if UHF remotes, re-tune to correct frequency if required
- Large & easy to read display; Reads 250~500MHz
- Remote control not included

# LED LIGHTING

## ENSA™ LED Lighting

# ENSA™

### Energy Saving Devices

# Change more than your power bill with ENSA™

### The light of the future

Lighting represents almost 20% of global energy consumption. The ENSA™ LED lighting range aims to greatly reduce global consumption so we may maintain quality of life into the future.

- Reduction in energy use means less carbon dioxide is released into the atmosphere
- Long life: relamping is far less necessary, saving on manufacturing and production processes
- Safer to dispose and recycle LED lights

### Stronger performance

Each product in the ENSA™ range sports features that cannot be matched by conventional HID, halogen or metal-halide lamps. This translates to a better lighting experience for your clients.

- High lumen output beyond 75lm/W
- No warm-up phase; instant-on lighting
- Vibration & shock resistant; robust lighting
- Up to 50,000 hours rated lifespan
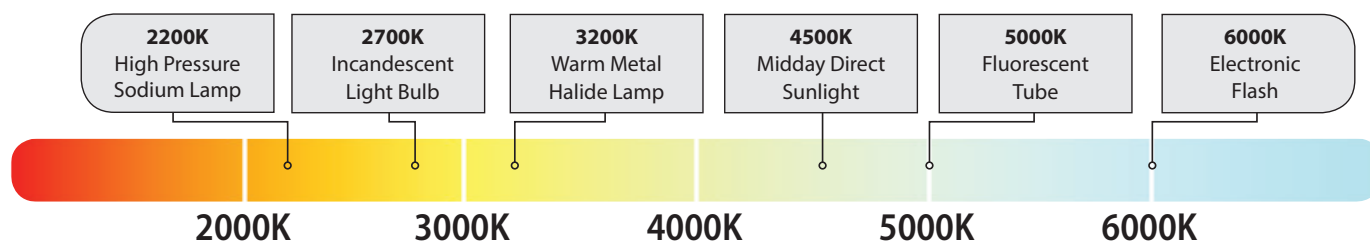- No buzzing, light flickering or ambient heat

### Local assembly & testing

Select ENSA™ LED light series are assembled and tested in Australia to ensure the best performance and reliability over the lifespan of the light.

- Superior light quality, particularly in luminous efficacy (lm/W) and colour rendering index; longer lifespan and higher maximum operating temperatures
- Look out for lights with an Australia marker

# What colour temperature light works best for you?

The ENSA LED lighting range is available in a number of colour temperatures to suit your needs. Below is a reference scale charting existing light sources and their colour temperature. Use this chart as an approximate guide when selecting from our LED lighting range.

| 2200K High Pressure Sodium Lamp | 2700K Incandescent Light Bulb | 3200K Warm Metal Halide Lamp | 4500K Midday Direct Sunlight | 5000K Fluorescent Tube | 6000K Electronic Flash |
|---|---|---|---|---|---|

2000K    3000K    4000K    5000K    6000K

** Information presented is intended as a guide only. While care is taken to ensure accuracy, actual results may vary.
RhinoCo Technology is not responsible for any loss or damages as a result of using the information presented in this catalogue.

# Professional and customisable LED high bay lighting

## Professional LED High Bay Lighting

Available in 150W and 200W models in one colour temperature

- Innovative heatsink design with phase-change cooling technology
- Beam angle controlled by precision-built glass lens; compact & robust
- Doesn't require an aluminium/polycarbonate reflector (optional)
- Save up to 70% on power costs when compared to HPS and metal-halide
- Ideal for large scale industrial and commercial/retail environments
- Suitable mounting heights range from 6 ~ 12m
- Up to 50,000 hour lifespan with <15% decay after 25,000 hours
- Each model comes standard with a 90° beam angle glass lens
- Available in natural white 4500K colour temperature with >70 CRI
- Includes steel fail-safe cable, primary eyelet mount and AC plug

Model: LEDHB150W3

- 150W with 12,750lm output, 90° beam angle, equivalent to 250 ~ 300W HID

Model: LEDHB200WV2

- 200W with 17,000lm output, 90° beam angle, equivalent to 300 ~ 400W HID

60° and 120° beam angle lenses, alternate colours and reflectors are optional
DALI digital dimming is available for integration by special order

## LHB-A SERIES
## Commercial LED High Bay Lighting

Available in 120W and 200W models in one colour temperature

- Uses superb quality Samsung LEDs for reliability and performance
- High efficiency, low energy use LED high bay light
- Up to 100lm/W luminous efficacy for excellent energy use reduction
- 50,000 hour lifespan, save on power costs and lamp replacement
- Available in cool white 6500K colour temperature
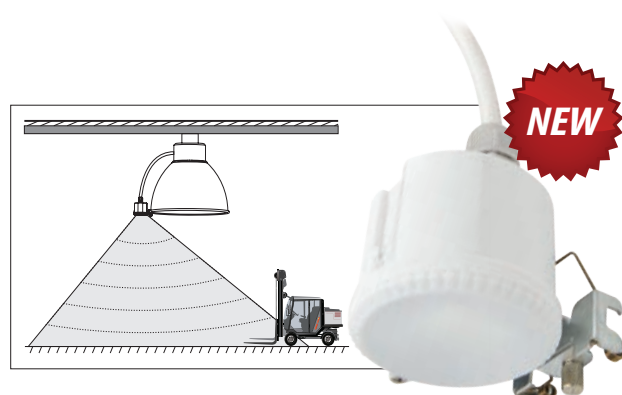- Includes aluminium reflector and mounting eyeletØ

Model: LHB-A120-CW

- 120W with 12,000lm output, 60° beam angle, equivalent to 200 ~ 250W HID

Model: LHB-A200-CW

- 200W with 20,000lm output, 60° beam angle, equivalent to 300 ~ 400W HID

Available in 80W and 160W models and alternate colours by special order only

## Intelligent Sensor Switch for LED High Bay Lighting
Model: ENSA-MS5

- Supplied bracket allows complete integration with high bay LED lights
- Purpose built 15m microwave motion detection for high factory ceilings
- Add three fully adjustable energy saving steps to your commercial lighting:
  **1) Daylight sensor:** Activates motion sensor when lux levels fall below limit
  **2) Motion sensor:** Detects movement, turns light on only when necessary
  **3) On-timer:** Light-on duration is set only as long as is required
- 360° arc/15m microwave detection, built for indoor use only
- Sensor adjust: Dimming (10~50%) / Motion (0.5~3m/s) / Hold (5s~30min)

## High Bay Reflectors

Model: LEDHBRF45 / 90 / 120

- Selection of 45°, 90° and 120° aluminium reflectors for up to 12m high ceilings

Model: LEDHBRF45P (45° polycarbonate prismatic reflector variant)

# Professional LED floods, Australian assembled & tested



## Professional 100W LED Flood Light

Model: LEDFLP100W45K

- High power, low energy-use, professional LED flood light
- IP65 weather resistant with coated aluminium construction
- Exceptional luminous efficacy of 85lm/W for impressive light output
- 10,000 lumens light output, equivalent to 240W metal-halide lamp
- Available in natural white 4500K colour temperature with >90 CRI
- Wide 120° beam angle for far-reaching illumination
- Up to 50,000 hour rated lifespan with <15% decay after 30,000 hours
- High lumen maintenance versus metal halide: 96% after 7,000 hours
- 180° angle adjustable, 2-point fastened U-shaped bracket
- Includes pre-terminated power cable with plug

Model: LEDFLP100W55K (Cool white 5500K variant)



## Professional 200W LED Flood Light

Model: LEDFLP200W45K

- High power, low energy-use, professional LED flood light
- IP65 weather resistant with coated aluminium construction
- Exceptional luminous efficacy of 85lm/W for impressive light output
- 20,000 lumens light output, equivalent to 450W metal-halide lamp
- Available in natural white 4500K colour temperature with >90 CRI
- Wide 120° beam angle for far-reaching illumination
- Up to 50,000 hour rated lifespan with <15% decay after 30,000 hours
- High lumen maintenance versus metal halide: 96% after 7,000 hours
- 180° angle adjustable, 2-point fastened U-shaped bracket
- Includes pre-terminated power cable with plug

Model: LEDFLP200W55K (Cool white 5500K variant)



## Professional Ultra LED Flood Light Series

Available in 400W and 600W models in one colour temperature

- High power, low energy-use, professional LED flood light
- Amazing 30,000+ lumen light output for large scale illumination
- High thermal efficiency phase-change cooling copper-pipe heatsink
- Available in natural white 4500K colour temperature with >90 CRI
- 62° degree beam angle for intense lighting mounted at distance
- Up to 50,000 hour rated lifespan with <15% decay after 30,000 hours
- 216° angle adjustable, 2-point fastened, heavy duty U-shaped bracket
- Includes pre-terminated power cable with plug

Model: LEDFLP400W45K

- 400W LED flood, 34,000lm light output, equivalent to 600 ~ 800W HID

Model: LEDFLP600W45K

- 600W LED flood, 51,000lm light output, equivalent to 800 ~ 1200W HID

# Long life, high efficiency ENSA™ LED flood lighting

**NEW**

**NEW**

**NEW**

**LFL-B SERIES**
## Commercial LED Flood Light Series
Available in 20W, 30W, 50W, 70W, 100W, 150W and 200W models

- Slim chassis, high power, low energy-use, professional LED flood lights
- Exceptional luminous efficacy of +100lm/W for impressive light output
- 50,000 hour lifespan, save on energy and lamp replacement costs
- Illuminate a large areas easily with 100 x 100° rectangular beam angle
- Accurate colour rendering >80 CRI and power factor of 0.95
- Instant-on LEDs with vibration resistant housing & no audible buzzing
- IP65 rated for weather resistance, rated for -20°C ~ +50°C
- Convenient 180° adjustable U-shape bracket

Model: LFL-B20-C

- 20W / 2200lm light output / 5000K / 217 x 152 x 40mm / 0.78kg

Model: LFL-B30-C

- 30W / 3300lm light output / 5000K / 227 x 167 x 40mm / 1.10kg

Model: LFL-B50-W/C

- 50W / 5500lm light output / 3000K or 5000K / 311 x 220 x 50mm / 1.70kg

Model: LFL-B70-W/C

- 70W / 7700lm light output / 3000K or 5000K / 355 x 245 x 55mm / 2.75kg

Model: LFL-B100-W/C

- 100W / 11,000lm light output / 3000K or 5000K / 403 x 295 x 60mm / 3.90kg

Model: LFL-B150-W/C

- 150W / 16,500lm light output / 3000K or 5000K / 431 x 330 x 60mm / 5.10kg

Model: LFL-B200-W/C

- 200W / 22,000lm light output / 3000K or 5000K / 470 x 360 x 60mm / 6.30kg

Model images featured left, top to bottom: 50W, 100W and 150W models

**NEW**

**LFL-C SERIES**
## Commercial LED Sensor Flood Light Series
Available in 20W, 30W and 50W models light/motion sensing & on-time delay

- Set light detect sensitivity, motion sensitivity & on-time delay (5s ~ 5min)
- 85lm/W light output; wide 120° beam angle; tempered glass diffuser
- 5000K cool white colour temperature; colour rendering of >70 CRI
- Durable metal IP65 rated chassis, rated for -20°C ~ +50°C; PF >0.9
- Versatile adjustable U-shape mount with over 180° of motion

Model: LFL-C20-CS

- 20W / 1700lm light output / 5000K / 274 x 155 x 53mm / 1.00kg

Model: LFL-C30-CS

- 30W / 2550lm light output / 5000K / 323 x 205 x 65mm / 1.80kg

Model: LFL-C50-CS

- 50W / 4250lm light output / 5000K / 323 x 205 x 65mm / 2.54kg

**NEW**

## Portable Rechargeable 20W LED Flood Light
Model: LEDFL20W5KR

- Energy efficient 20W flood light with 1300lm light output
- Aluminium internal reflector for wide 120° beam angle
- Rechargeable 7.4V 4000mA lithium battery, rated for 800 recharges
- 3 hours uptime (5 hours recharge time) with 2 brightness settings
- Versatile, detachable stand with full rotation and over 180° of tilt range
- 5000K cool white colour temperature and rated lifespan of 30,000 hours
- Product comes standard with mains and vehicle chargers

# Efficient lighting solutions for large scale applications

## LSL-A SERIES
### LED Street Lighting

LSL-A Series: Available in 100W & 200W in natural white colour temperature

- All-weather, high efficiency LED street lights
- Superior vs HPS for light distribution, accurate CRI and vertical illumination
- Available in a variety of models for all road types, parks, squares and more
- High-accuracy colour rendering: CRI >80
- Up to 50,000 hour rated LED lifespan, saving on lamp replacement costs
- Effective street light distribution with rectangular 140° x 60° beam angle
- Up to 100lm/W performance with Philips Lumileds LEDs
- Superior aluminium thermal management system
- Available in 4500K natural white colour temperature
- IP65 dust and weather resistant for external use
- Standard pole interface across the range: Ø57 ~ 63mm
- Operating ambient temperature: -40°C ~ +50°C

Model: LSL-A100-NW

- 100W LED street light with 10000lm light output
- Equivalent to 240W HPS lamp

Model: LSL-A200-NW

- 200W LED street light with 20000lm light output
- Equivalent to 480W HPS lamp

Product variations in colour temperature & wattage available by special order

## LCL-B SERIES
### LED Canopy Lighting

Model: LCL-B150-N (natural white colour temperature)

- Energy efficient, recessed and surface mount light fixtures
- 150W LED canopy light with 15500lm light output
- Purpose built for low-bay or canopy lighting applications
- Ideal for petroleum stations, industrial lighting, car parks and more
- High-accuracy colour rendering: CRI >80
- Square light pattern with 90° x 90° beam angle
- High quality Samsung LEDs with 30,000 hours rated lifespan
- Superior aluminium thermal management system
- Available in 4500K natural white colour temperature
- IP65 dust and weather resistant for external use
- Models come standard with recessed *and* surface mounting kits

Surface Mount Configuration
- Surface mount canopy light (mounting kit incl.)
- Overall dimensions: 300 x 300 x 89mm

Recessed Mount Configuration
- Recessed mount canopy light (mounting kit & bracket incl.)
- Overall dimensions: 400 x 400 x 90mm
- Hole cut size: 320 x 320mm

Product variations in colour temperature & wattage available by special order
Modified recess size options also available by special order

# Create modern spaces with quality ENSA™ lighting

**LPL-A SERIES**

## LED Panel Lighting

LPL-A Series: Available in 36 and 48W models in one colour temperature

- Stylish 9mm thick light that compliments modern minimalist design
- Ideal for replacing traditional twin-batten fluorescent tube lighting
- Perfect in offices, schools, retail environments, conference rooms & more
- Illuminate large areas easily with a wide 110° beam angle
- Up to 25,000 hours rated lifespan; features high CRI of >80
- Available in 6000K cool white colour temperature
- Frosted diffuser and UGR<19 for appealing, evenly lit rooms
- Versatile mounting options: surface, recessed or suspended mount
- Includes LED transformer

Model: LPL-A36-CW

- 36W LED downlight with 3300lm light output
- 300 x 1200mm standard ceiling tiles hole cut size

Model: LPL-A48-CW

- 48W LED downlight with 4500lm light output
- 300 x 1200mm standard ceiling tiles hole cut size

Surface/recessed mount standard, suspended mount kits available

Model: LPL-AS

- Surface mount kit: 4 x matte white aluminium panels (includes fasteners)

Model: LPL-AH

- Hanging mount kit: Lockable steel cable tethers (includes clips & fasteners)

## LED T8 Tube Lighting

Available in standard & sensor variants in one colour temperature

- Minimum of 50% power reduction, compared to fluorescent tubes
- Easily retrofitted into existing locations, including magnetic/electric ballast
- Available in cool white 6500K colour temperature
- Frosted diffuser for soft light that eliminates LED glare
- Wide 130° beam angle; up to 30,000 hours rated LED lifespan
- Standard T8 fitting size with options for 1.2m and 1.5m lengths
- Full polycarbonate design; no mercury or UV radiation vs. fluorescents

Model: LTU-A18-CW (18W standard tube, 4ft/1200mm length variant)

- 18W LED tube light with high efficiency 1800lm light output

Model: LTU-A22-CW (22W standard tube, 5ft/1500mm length variant)

- 22W LED tube light with high efficiency 2200lm light output

Model: LTU-A18-CWS (18W sensor tube, 4ft/1200mm length variant)

- 18W LED tube light with PIR sensor and 1800lm light output
- Compound energy savings by combining LED & motion detection
- Tube light dims to 30% brightness when no motion is detected
- 7m / 120° PIR detection arc with built-in 3 minute on-timer
- Ideal for carparks, underpasses and areas with low people traffic
- Aluminium and polycarbonate construction

## LED Linkable Cabinet Lighting

Model: LEDBR13W[3/65]K

- Energy efficient LED light in a uniquely versatile, slim package
- Connect up to 3 lights together; mount them flat or at right angles
- Ideal for shelf and cabinet lighting, accent lighting, and strip lighting
- 13.5W LED light with 1050 lumens light output; equivalent to 45W halogen
- Wide 135° beam angle; up to 30,000 hours lifespan
- 3000K (warm) and 6500K (cool) colour temperatures with >80 CRI
- Frosted diffuser eliminates any LED glare; includes on/off switch
- Includes standard power cable, wall mounting clips & light connectors
- 1170mm length, similar to standard T8 fluorescent tube lights

# Intelligent ENSA™ LED lighting that saves you more

(a)

(b)

(c)

## Intelligent LED Batten Lighting

### LEDBTS SERIES

Available in 18W/600mm and 36W/1200mm models

- Effectively halve power consumption compared to fluorescent battens
- Wide 140° beam angle, CRI >70, up to 50,000 hours rated LED lifespan
- Adjustable 360° microwave motion sensor, up to Ø16m max. range
- Adjustable 10s ~ 12 min on-timer controls delay for light activation
- Available in 6000K cool white colour temperature with frosted diffuser
- IP65 rated: polyurethane gaskets, stainless steel clips & polycarb diffuser

(a) Model: LEDBT18WS (18W / 600mm)
　　　　　 LEDBT36WS (36W / 1200mm)

- 1350lm (18W) / 3240lm (36W) light output, replaces 40/80W fluorescent
- **One-stage dimming: 100% to 0% brightness after last detected motion**
  1. When light levels fall below set level (3~2000lux), motion sensor activates
  2. After last detected motion, set on-time delay begins (10s ~ 12mins)
  3. After on-time delay expires, batten light turns off completely

### LEDBTS2 / LEDBTSE SERIES

Available in 18W/600mm & 36W/1200mm, in standard & battery backup models

- Adjustable 360° microwave motion sensor, up to Ø16m max. range
- Wide 120° beam angle; up to 35,000 hours lifespan; CRI >80
- Available in 6000K cool white colour temperature with frosted diffuser
- IP65 rated: polyurethane gaskets, stainless steel clips & polycarb diffuser

(b) Model: LEDBT18WS2 (18W / 600mm)
　　　　　 LEDBT36WS2 (36W / 1200mm)

- 1600lm (18W) / 3000lm (36W) light output, replaces 40/80W fluorescent
- **One-stage dimming: 100% to 20% brightness after last detected motion**
  1. After last detected motion, set on-time delay begins (5s, 30s, 90s, 180s)
  2. After on-time delay expires, light dims to 20% of original brightness

(c) Model: LEDBT18WSE (18W / 600mm / 1500mAh NiMH backup battery)
　　　　　 LEDBT36WSE (36W / 1200mm / 2500mAh NiCd backup battery)

- 1600lm (18W) / 3000lm (36W) light output, replaces 40/80W fluorescent
- Features NiMH or NiCd battery backup for 2 hours emergency lighting
- Includes panel on every light for routine individual batten battery testing
- **Two-stage dimming: 100% brightness to Dim Mode to After-Dim Mode**
  1. After last detected motion, set on-time delay begins (5s, 30s, 90s, 180s)
  2. After on-time delay expires, light dims to set level (20%, 40%, 60%, 75%)
  3. In dim mode, dimming timeout begins (0s, 90s, 180s, infinity)
  4. After dimming timeout expires, batten light turns off completely

Motion sensor detects movement through doors, glass or even thin walls
Ideal for areas with intermittent people traffic, stairwells, car parks, etc

## Intelligent LED Oyster Lighting

Available 10W and 16W models, with the option of battery backup

- Intelligent LED light with light & motion sensing and on-timer
- 16W LED light with 1200 lumens light output; equivalent to 75W halogen
- Ideal for areas with intermittent people traffic, stairwells, bathrooms, etc.
- Wide 120° beam angle; up to 30,000 hours lifespan; >80 CRI
- On/off via 5.8GHz microwave & daylight sensors for greater energy savings
- Adjust sensitivity: 1~8m radius (microwave); 3 ~ 2000lx (daylight)
- Adjustable 10s ~ 12min on-time delay to control on/off via motion
- Available in warm (3000K) and cool white (5000K) colour temperatures
- IP44 weather resistant; frosted diffuser eliminates any LED glare

(a) Model: LEDDL16W[3/5]KS (Standard model, in 3000K/5000K)

- Intelligent LED light with light & motion sensing and on-timer
- 16W LED light with 1200 lumens light output; equivalent to 75W halogen
- Ideal for areas with intermittent people traffic, stairwells, bathrooms, etc.

(b) Model: LEDDL10W[3/5]KSE (Battery backup model, in 3000K/5000K)

- Intelligent LED light with light & motion sensing, on-timer & battery backup
- 10W LED light with 700 lumens light output; equivalent to 50W halogen
- 7.2V 1800mAh NiMH battery for >120 minutes of emergency lighting at 5W
- Ideal for emergency stairwells and in other essential lighting applications

# 3 step energy saving: light, motion & time sensing

## 2 Channel Mains Voltage RF Receiver

Model: ENSA-RS1

- 240VAC 433.92MHz fixed code receiver with up to 100m RF range (LoS)
- Remote control your LED lighting for added security and energy savings
- Integrate wireless PIR and reed switches for automatic activation of lights
- Features 2 programmable relay outputs (latched or timed)
- Comes standard with two remote control keyfobs
- Adding outdoor remote control function for your light switch
- Add up to 128 remotes or universal transmitters
- IP55 weather/dust resistant; suitable for mounting with lighting

Integrates with Watchguard™ wireless universal transmitters (sold separately):
PIRWOD-M wireless outdoor passive-infrared detector
WREEDI-M wireless reed switch indoors only
PIRW3-M wireless passive-infrared detector

## Intelligent Sensor Switches Series

- Ensure lights only turn on when you need them to with sensor switches
- ENSA™ sensor switches automatically activate and deactivate your lighting
- Models feature light sensing, motion sensing (microwave or PIR) & on-timer
- Add three step energy saving to any light with sensor switches:
  1) **Daylight sensor:** Activates motion sensor when lux levels fall below limit
  2) **Motion sensor:** Detects movement, turns light on only when necessary
  3) **On-timer:** Light-on duration is set only as long as is required
- On-timer, daylight and motion sensors can be adjusted to your exact needs
- Available in a variety of PIR or 5.8GHz microwave detection models

(a) Model: ENSA-MS1 (Microwave detection)

- 360° arc/8m microwave detection, built for indoor use only
- Sensor adjust: Light (5~2000lx) / Motion (2~8m) / On-timer (5s~10min)

(b) Model: ENSA-MS2 (Microwave detection)

- 360° arc/8m microwave detection, circular ceiling mount, indoor use only
- Sensor adjust: Light (3~2000lx) / Motion (1~8m) / On-timer (10s~12min)

(c) Model: ENSA-MS3 (Microwave detection)

- 180° arc/15m microwave detection, wall mount angle adjustable, IP44 rated
- Sensor adjust: Light (3~2000lx) / Motion (5~15m) / On-timer (10s~12min)

(d) Model: ENSA-PS1 (PIR detection)

- 180° arc/12m PIR detection, wall mount angle adjustable, IP65 rated
- Sensor adjust: Light (3~2000lx) / On-timer (5s~10min)

(e) Model: ENSA-PS2 (PIR detection)

- 360°/4 by 20m rectangular PIR detection, ceiling mount, indoor use only
- Sensor adjust: Light (3~2000lx) / On-timer (10s~30min)

(f) Model: ENSA-PS3 (PIR detection)

- 360° arc/6m PIR detection, recessed ceiling mount, indoor use only
- Sensor adjust: Light (3~2000lx) / On-timer (10s~15min)

## Daylight Sensor Switch

Model: ENSA-LC1

- Compact daylight sensor switch for simple dusk/dawn light control
- Automatically turn on lights at dusk, turn off lights at dawn
- Configurable daylight sensor sensitivity (<5 ~ 50 lux)
- IP44 ingress protection rated

# ENSA™ Premium Series: For the best in light quality

## Premium Dimmable Fixed LED Downlights

Available in 20W, 36W and 48W models in two colour temperatures

- Premium LED downlight series, ideal for shopfitting and commercial jobs
- Superior build quality, heatsink and high quality Samsung LEDs
- Available in warm (3000K) and cool white (5500K) colour temperatures
- Wide 100° beam angle and TRIAC dimmable downlight
- Up to 50,000 hours rated lifespan; features superior CRI of >80
- Elegant white gimble surround with completely frosted diffuser
- Includes LED transformer; pre-terminated with power plug

Model: LEDDL20W [3/5] K6RD

- 20W, 1835lm light output, replaces 100W halogen, Ø165mm hole cut size

Model: LEDDL36W [3/5] K6RD

- 36W, 3370lm light output, replaces 150W halogen, Ø165mm hole cut size

Model: LEDDL48W [3/5] K8RD

- 48W, 4600lm light output, replaces 240W halogen, Ø205mm hole cut size

## Premium Adjustable LED Downlight Series

Available in 20W, 38W and 60W models in two colour temperatures

- Premium LED downlight series, ideal for shopfitting and commercial jobs
- Superior build quality, heatsink and high quality Samsung LEDs
- Available in warm (3000K) and cool white (5500K) colour temperatures
- Ideal for wide-spot or key lighting with a 60° beam angle
- Fully adjustable housing with 350° rotation and 60° vertical tilt adjust
- Up to 50,000 hours rated lifespan; features superior CRI of >80
- Elegant white gimble surround with completely frosted diffuser
- Includes LED transformer; pre-terminated with power plug

(a) Model: LEDDL20W [3/5] KR

- 20W, 1890lm light output, replaces 100W halogen, Ø165mm hole cut size

(a) Model: LEDDL38W [3/5] KR

- 38W, 3640lm light output, replaces 180W halogen, Ø165mm hole cut size

(b) Model: LEDDL60W [3/5] KR

- 60W, 6300lm light output, replaces 300W halogen, Ø215mm hole cut size

(a)

(b)

## Premium Rectangular Adjustable LED Downlight Series

Available in 20W, 38W and 48W models in two colour temperatures

- Premium LED downlight series, ideal for shopfitting and commercial jobs
- Superior build quality, heatsink and high quality Samsung LEDs
- Available in warm (3000K) and cool white (5500K) colour temperatures
- Ideal for bay lighting or reflected light with a wide 120° beam angle
- Tilt adjustable housing with 60° vertical tilt adjust
- Up to 50,000 hours rated lifespan; features superior CRI of >80
- Elegant white gimble surround with completely frosted diffuser
- Includes LED transformer; pre-terminated with power plug

Model: LEDDL20W [3/5] KS

- 20W, 1950lm light output, replaces 100W halogen, 227 x 130mm hole cut

Model: LEDDL38W [3/5] KS

- 38W, 3750lm light output, replaces 180W halogen, 227 x 130mm hole cut

Model: LEDDL48W [3/5] KS

- 48W, 4760lm light output, replaces 240W halogen, 227 x 130mm hole cut

# ENSA™ Commercial Series: Perfect for shop fitouts

**LDL-BD SERIES**

## Fixed Dimmable LED Downlights

Available in 9W, 15W, 20W, and 30W in two colour temperatures

- LED downlight series ideal for residential or small business applications
- Available in warm (3000K) and cool white (6000K) colour temperatures
- Ideal for general purpose lighting with wide beam angles
- Up to 35,000 hours rated lifespan; features high CRI of >80
- Discreet white gimble surround and partially frosted diffuser
- All models are dimmable and include LED transformer

Model: LDL-BD9-F [W/C]

- 9W, 700lm light output, replaces 26W halogen, 95° beam angle
- Ø95mm hole cut size

Model: LDL-BD15-F [W/C]

- 15W, 1100lm light output, replaces 45W halogen, 36° beam angle
- Ø120mm hole cut size

Model: LDL-BD20-F [W/C]

- 20W, 1500lm light output, replaces 60W halogen, 75° beam angle
- Ø165mm hole cut size

Model: LDL-BD30-F [W/C]

- 30W, 2100lm light output, replaces 80W halogen, 108° beam angle
- Ø195mm hole cut size

**LDL-BD SERIES**

## Adjustable Dimmable LED Downlights

Available in 10W, 12W, 15W, 25W, 35W and 45W in two colour temperatures

- Ideal for spot or feature lighting in retail and residential environments
- Available in warm (3000K) and cool white (6000K) colour temperatures
- 30 ~ 45° narrow beam angle: illuminate to highlight key areas/features
- Up to 35,000 hours rated lifespan; features high CRI of >80
- Adjustable white gimble surround with 20° tilt; clear diffuser
- All models are dimmable and include LED transformer

Model: LDL-BD10-A [W/C]

- 10W, 700lm light output, replaces 30W halogen, 30° beam angle
- Ø75mm hole cut size

Model: LDL-BD12-A [W/C]

- 12W, 800lm light output, replaces 35W halogen, 35° beam angle
- Ø80mm hole cut size

Model: LDL-BD15-A [W/C]

- 15W, 1050lm light output, replaces 45W halogen, 35° beam angle
- Ø90mm hole cut size

Model: LDL-BD25-A [W/C]

- 25W, 1800lm light output, replaces 75W halogen, 35° beam angle
- Ø110mm hole cut size

Model: LDL-BD35-A [W/C]

- 35W, 2600lm light output, replaces 100W halogen, 35° beam angle
- Ø145mm hole cut size

Model: LDL-BD45-A [W/C]

- 45W, 3200lm light output, replaces 120W halogen, 45° beam angle
- Ø160mm hole cut size

# Stylish, energy efficient, dimmable LED downlights



(a)



(b)

## LDL-BC SERIES

### Dimmable Adjustable LED Downlights

Available in 10W and 12W models, in two housing styles & colour temperatures

- 20° tilt adjustable in each direction, allows for flexible light setup
- Available in warm (3000K) and cool white (6000K) colour temperatures
- Up to 35,000 hours rated lifespan; high CRI of >80

(a) Model: LDL-BC10-A [W/C] 1 (Deep-recess design, ellipse opening)
LDL-BC10-A [W/C] 2 (Deep-recess design, circular opening)

- 10W LED with 650lm light output, equivalent to 35W halogen
- Intelligent deep-recess design removes glare at almost all angles
- Offers discreet and minimalist lighting with modern styling
- 20° beam angle and flat white matte-finish gimble surround
- Elliptical front opening, Ø80mm hole cut size

(b) Model: LDL-BC12-A [W/C] (Standard design)

- 12W LED with 900lm light output, equivalent to 40W halogen
- 60° beam angle and bevelled gloss-white gimble surround
- Up to 35,000 hours rated lifespan; features high CRI of >80
- Ø70mm hole cut size, includes LED transformer



NEW

(a)



(b)



(c)

NEW



(d)

NEW



(e)

## LDL-BB SERIES

### Small Form Factor Dimmable LED Downlights

Available in 10W, 12W and 13W models, in multiple formats and colour temps.

- LED downlight series ideal for residential & small business applications
- Available in warm (3000K) and cool white (6000K) colour temperatures
- Wide beam angles & frosted diffusers for pleasant, evenly distributed light
- Flat & bevelled gimble styles; some models feature integrated LED drivers
- Rated LED lifespan of 35,000 hours and minimum CRI of >75

(a) Model: LDL-BB10-F [W/C]

- 10W LED downlight in bevelled gimble style, external driver included
- 700lm light output, replaces 30W halogen, 120° beam angle, CRI >75
- Ø75mm hole cut size

(b) Model: LDL-BB10-F [W/C] 2

- 10W LED downlight in flat gimble style, features integrated driver
- 800lm light output, replaces 35W halogen, 120° beam angle, CRI >80
- Ø90mm hole cut size

(c) Model: LDL-BB12-F [W/C]

- 12W LED downlight in flat gimble style, external driver included
- 850lm light output, replaces 35W halogen, 100° beam angle, CRI >80
- Ø90mm hole cut size

(d) Model: LDL-BB13-F [W/C] I

- 13W LED downlight in flat gimble style, features integrated driver
- 900lm light output, replaces 40W halogen, 100° beam angle, CRI >80
- Ø90mm hole cut size

### Colour Switchable Dimmable LED Downlight

(e) Model: LDL-BB13-FM

- 13W LED downlight in flat gimble style, features integrated driver
- 845lm light output, replaces 35W halogen, 100° beam angle, CRI >75
- Wide beam angle & frosted diffuser for pleasant, evenly distributed light
- Cycle between 3000K / 4500K / 6500K with a quick flip of the light switch
- Regular use of the light does not change colour temperature
- Rated LED lifespan of 30,000 hours
- Ø90mm hole cut size

# Affordable, multi-purpose, LED lighting solutions

(a)

(b)
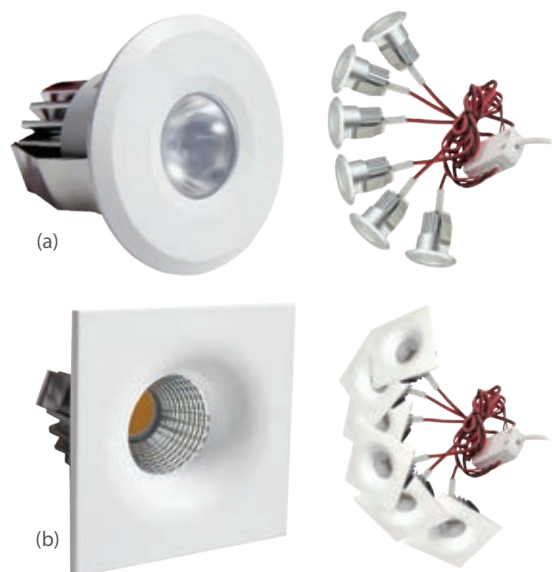
### LDL-BA SERIES
## Dimmable LED Cabinet Lights

Available in 3W, round or square design, in two colour temperatures

- Ideal for use as a downlight in display cases, in retail & in residential
- Available in warm (3000K) and cool white (6000K) colour temperatures
- Spot 45° beam angle for concentrated light distribution
- Up to 35,000 hours rated lifespan; high CRI >80
- Each unit comes with 6 lights connected to an LED transformer

(a) Model: LDL-BA3-F [W/C] 1 (round variant)

- 3W LED with 200lm light output, equivalent to 15W halogen
- Ø28mm hole cut size, set of 6 lights with LED transformer

(b) Model: LDL-BA3-F [W/C] 2 (square variant)

- 3W LED with 200lm light output, equivalent to 15W halogen
- Ø38mm hole cut size, set of 6 lights with LED transformer

### LDL-A SERIES
## Fixed LED Downlight Series

Available in 12W models in two colour temperatures

- LED downlight series ideal for residential or small business applications
- Available in warm (3000K) and cool white (6500K) colour temperatures
- Illuminate large areas easily with a wide 110° beam angle
- Up to 30,000 hours rated lifespan; features high CRI of >75
- Discreet white gimble surround and partially frosted diffuser
- Includes LED transformer

Model: LDL-A12- [W/C] W

- 12W LED downlight with 1020lm replaces 50W halogen
- Ø150mm hole cut size

### LDL-C SERIES
## Ultra Thin LED 12~24VDC Downlights

*NEW*

Available in 3W, 4W or 9W in 4500K natural white colour temperature

- 15mm LED downlight thickness for shallow cavity light mounting
- Available in natural white (4500K) colour temperature
- Illuminate large areas easily with a wide 120° beam angle
- Up to 25,000 hours rated lifespan; high CRI >80
- Discreet white gimble surround and frosted diffuser to elimanate glare
- Low voltage 12~24VDC models; includes LED transformer

Model: LDL-C3-FN

- 3W LED with 210lm light output, replaces 10W halogen
- Ø75mm hole cut size

Model: LDL-C4-FN

- 4W LED with 280lm light output, replaces 15W halogen
- Ø95mm hole cut size

Model: LDL-C9-FN

- 9W LED with 630lm light output, replaces 30W halogen
- Ø205mm hole cut size

# Retail-ready, energy efficient ENSA™ LED globes

## Bayonet and Screw Series LED Light Bulbs

Available in 6W, 9W and 11W models in two colour temperatures

- Non-dimmable, easy retrofit LED light bulbs with B22 & E27 base fixtures
- Incredible 10 year warranty with a rated lifespan of up to 30,000 hours
- Available in 3000K and 6500K colour temperatures with >80 CRI
- Wide 160° beam angle for excellent general purpose illumination
- Frosted diffuser delivers soft light, eliminating LED glare
- Comes in attractive retail-ready packaging

Model: LEDBL6WB22 [3/65] K (B22 bayonet base)
        LEDBL6WE27 [3/65] K (E27 screw base)

- 6W LED bulb with 485lm light output, equivalent to 40W incandescent

Model: LEDBL9WB22 [3/65] K (B22 bayonet base)
        LEDBL9WE27 [3/65] K (E27 screw base)

- 9W LED bulb with 795lm light output, equivalent to 60W incandescent

Model: LEDBL11WB22 [3/65] K (B22 bayonet base)
        LEDBL11WE27 [3/65] K (E27 screw base)

- 11W LED bulb with 1025lm light output, equivalent to 75W incandescent

See full warranty terms and conditions at the end of this catalogue

## MR16 Series LED Light Bulbs

Available in 5W models in two colour temperatures

- Non-dimmable, easy retrofit LED light bulbs with GU10 & GU5.3 base fixtures
- Incredible 10 year warranty with a rated lifespan of up to 30,000 hours
- Available in 3000K and 6500K colour temperatures with >80 CRI
- Wide 105° beam angle for excellent general purpose illumination
- Frosted diffuser delivers soft light, eliminating LED glare
- Comes in attractive retail-ready packaging

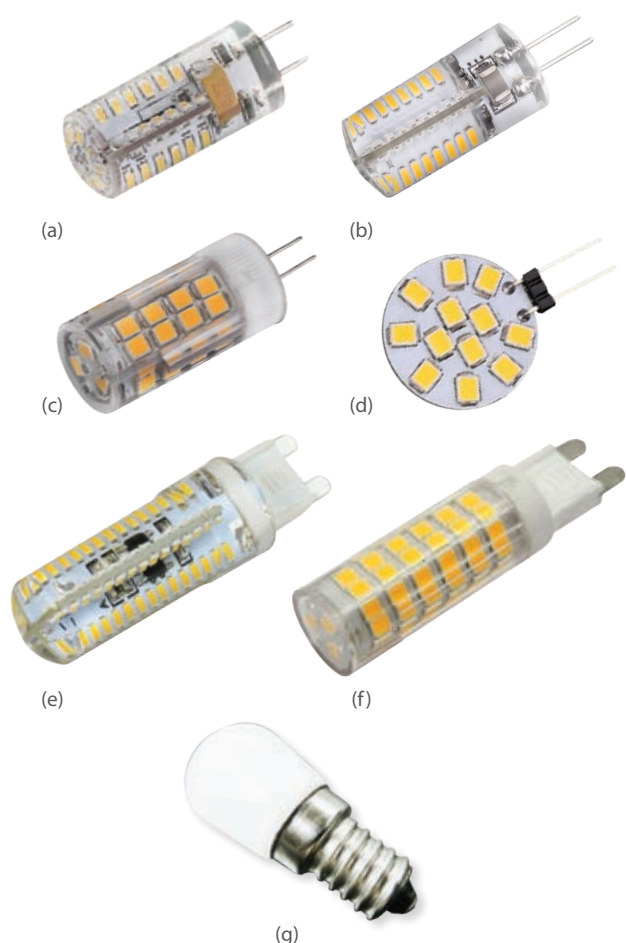Model: LEDGL5WGU [3/65] K (GU10 bayonet 240VAC base)

- 5W LED bulb with 410lm light output, equivalent to 30W halogen

Model: LEDGL5WMR [3/65] K (GU5.3 bi-pin 12VDC base)

- 5W LED bulb with 410lm light output, equivalent to 30W halogen

See full warranty terms and conditions at the end of this catalogue

# Energy saving in an instant: ENSA™ LED retrofit range



(a)

(b)

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(d)

(e)

(f)

(g)

## Residential Retrofit LED Light Bulbs

Available in a variety of base fixtures, wattages and two colour temperatures

• Easy retrofit LED light bulbs with a variety of base fixtures
• Available in warm (3000K) and cool white (6000K) colour temperatures
• Variety of material options including silicon & ceramic LED substrates
• 360° beam angle for excellent general purpose illumination
• Lifespan of up to 30,000 hours and CRI >80

**LBL-BA SERIES**
G4 base replacements for downlights, desk lamps, RV & caravan lamps, and more

(a) Model: LBL-BA3- [W/C] 1 (Silicon substrate)

• 3W LED bulb with G4 base, 200lm output, 12VDC, replaces 12W halogen

(b) Model: LBL-BA3-[W/C] 2 (Silicon substrate)

• 3W LED bulb with G4 base, 200lm output, 240VAC, replaces 12W halogen

(c) Model: LBL-BA3-[W/C] 3 (Ceramic substrate)

• 3W LED bulb with G4 base, 300lm output, 12VDC replaces 15W halogen

(d) Model: LBL-BA2-[W/C] (Plastic substrate)

• 2W LED bulb with G4 base, 140lm output, 12VDC replaces 10W halogen

**LBL-BB SERIES**
G9 base replacements for halogen fixtures in kitchens, bathrooms, caravans etc.

(e) Model: LBL-BB5-[W/C]1 (Silicon substrate)

• 5W LED bulb with G9 base, 360lm output, 240VAC replaces 20W halogen

(f) Model: LBL-BB5-[W/C]2 (Ceramic substrate)

• 5W LED bulb with G9 base, 550lm output, 240VAC replaces 25W halogen

**LBL-BC SERIES**
E14 screw base LED replacement for appliance lighting, e.g: refrigerators

(g) Model: LBL-BC1-[W/C]

• 1.5W LED bulb with E14 base, 120lm output, 240VAC, replaces 10W halogen



## Commercial & Industrial Retrofit LED Light Bulbs

Available in a variety of base fixtures, wattages and two colour temperatures

**LBL-BD SERIES**
E27 screw base LED replacement for lamp post lighting, wall lamps and more

Model: LBL-BD36-[W/C]

• Easy retrofit LED light bulbs with E27 screw base fixture
• 36W LED bulb with 3600lm light output, equivalent to 150W halogen
• Available in warm (3000K) and cool white (6000K) colour temperatures
• 360° beam angle for excellent general purpose illumination
• Lifespan of up to 30,000 hours and CRI >80

**LBL-BE SERIES**
E40 screw base LED replacement for metal halide and HPS high bay lighting

Model: LBL-BE120-[W/C]

• Easy retrofit LED light bulbs with E40 screw base fixture
• 120W LED bulb with 12000lm light output, equivalent to 250W HID
• Available in warm (3000K) and cool white (6000K) colour temperatures
• 360° beam angle for excellent general purpose illumination
• Lifespan of up to 30,000 hours and CRI >80

### RAPID LED RETROFIT

Directly replace metal halide bulbs found in old flood & high bay lights

# Maximise lighting control, efficiency & energy savings



**(a)**





**(b)**
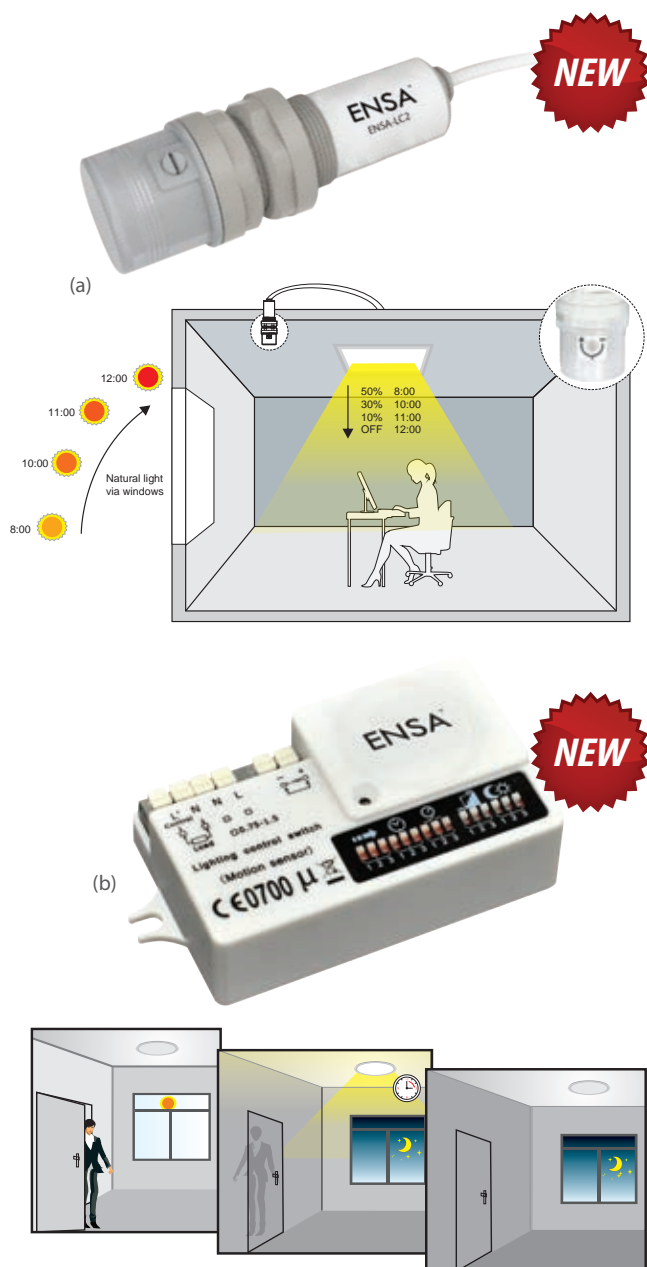


## Daylight Harvesting Control Systems

Light sensing & microwave motion sensing with 0~10V dimming systems

- Incorporate and integrate available natural light into your building
- Increase energy efficiency and create comfortable living & work spaces
- Automate your artificial light sources and multiply your energy savings
- Lights dim or brighten, reacting to available light and/or motion detection
- Add daylight harvesting to any 0~10VDC dimmable lighting system
- Combine light sensing (ENSA-LC2) and motion sensing (ENSA-MS4)
- IP20 weather rated - for indoor use only

### (a) Model: ENSA-LC2

- Daylight harvesting adjustable light sensor (1~100% brightness)
- Set brightness easily via a potentiometer on the side of the sensor
- Up to 4m installation height / 50mA maximum current sink
- Requires compatible 0~10VDC dimmable LED drivers
- Small ceiling mount profile: Ø22 x 70mm, with 800mm cable

As ambient light levels rise & fall during the day, the ENSA-LC2 controls the brightness of artificial lights to reach set target light levels. See below.

### (b) Model: ENSA-MS4

- Adjustable microwave motion sensor that augments the ENSA-LC2
- Adds light control via motion detection and standby dimming functions
- Ø16 x 10m detection range; 360° (ceiling), 150° (wall) detection angle
- 1200W (resistive), 800W (inductive) maximum rated load
- Multiple configurable settings via DIP switches to control light use:
  **Daylight sensing:** 5lx / 10lx / 30lx / 50lx / Disabled
  **Detection sensitivity:** 100% / 75% / 50% / 25% / 10%
  **On-time delay:** 10s / 30s / 90s / 3min / 20min / 30min
  **Standby delay:** 5s / 5min / 10min / 30min / 60min / Disabled
  **Standby dimming:** 50% / 30% / 20% / 10%

If the ENSA-LC2 detects sufficient ambient light levels, controlled lights remain off, regardless of motion detected by the ENSA-MS4.

When ambient light levels fall below the set target, the ENSA-MS4 switches the light on upon detecting movement. If ambient light levels are below the set target, after the last detected motion the ENSA-MS4 will switch off after a standby period. Standby delay period and standby brightness levels are configurable on the ENSA-MS4.

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## ELECTRONIC SECURITY / COMMUNICATION / LED LIGHTING PRODUCT CATALOGUE

### 26TH EDITION