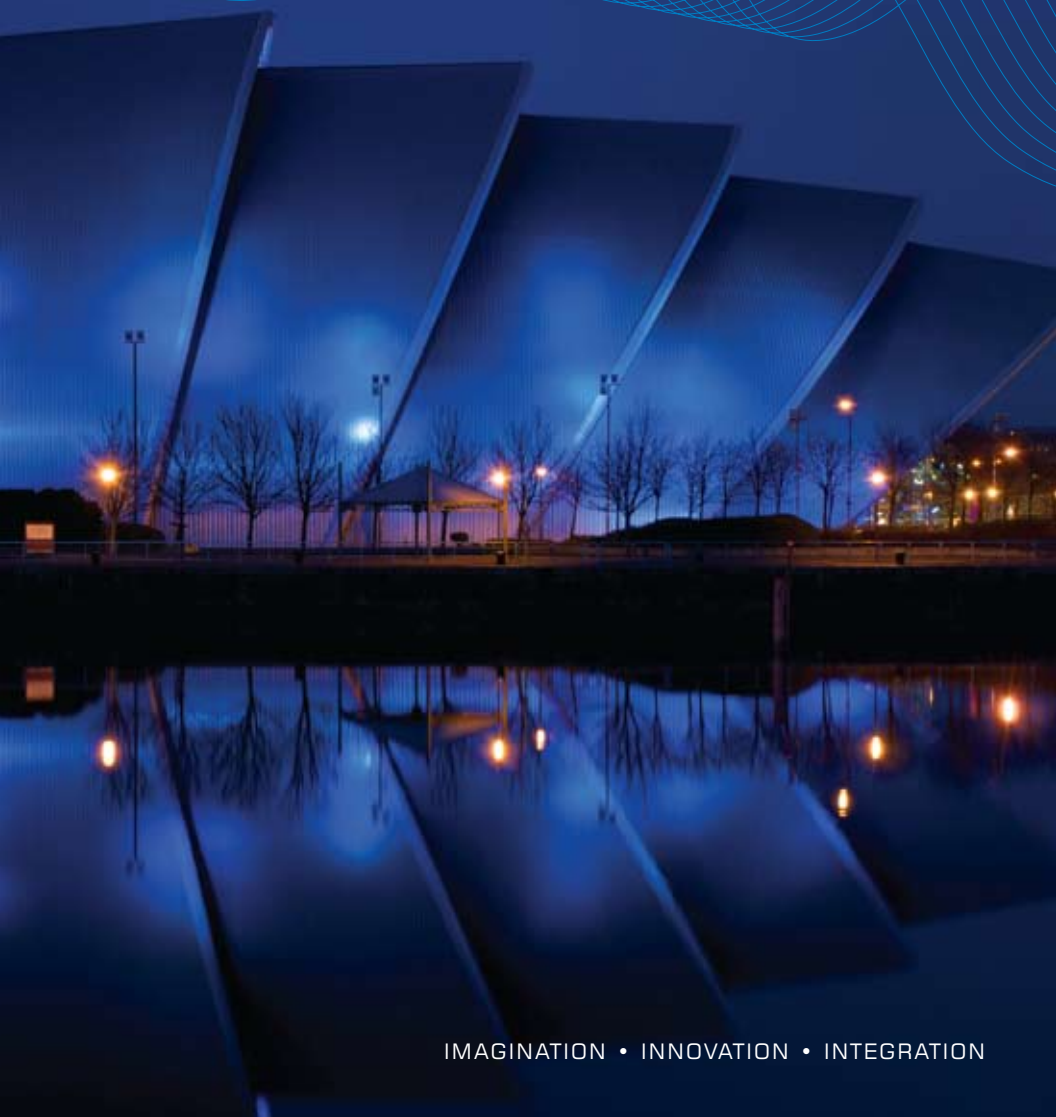
veracity

Transmission Products



IMAGINATION • INNOVATION • INTEGRATION

Contents

Introduction to Veracity

The Company

Veracity is a fast-growing technology company set up and managed by a team of industry veterans. We design, develop and market innovative transmission, storage and display products, primarily for network video surveillance applications.

Our main aim is to support the evolution and deployment of mega-pixel video surveillance, designing unique products which solve real-world IP Video problems.

With an ever-expanding product range, a global sales network, offices in the UK and the USA, partnered with some of the biggest names in the business and experiencing rapid growth as a result, we are the acknowledged market leader in our chosen specialist field.

Network Transmission Products

This catalog presents our range of IP connectivity products which enable the wider deployment of IP devices.

Our HIGHWIRE Ethernet-over-coax adaptors open up a segment of the market (coaxially-cabled installations) which would otherwise be closed to IP cameras.

Our OUTREACH LAN extenders and POE switches exploit the full flexibility of POE technology, whilst our unique IP installation tools such as PINPOINT and the all-new POINTSOURCE solve specific problems faced daily by integrators and installers.

This catalog covers both current and new products, with detailed technical information available on our website. Also look out for our new Storage Products Catalog, detailing our new surveillance storage product line.

Ethernet Over Coax Adaptors

HIGHWIRE

- Uses legacy coaxial cable
- Fast Ethernet up to 500m
- Supports all IP devices
- Simple to install

Product description

HIGHWIRE turns any analog video cable into a high-speed network connection. This allows the replacement of analog IP cameras with IP cameras without installation of any new cabling, which can save some 30-40% of the system cost. Universal connections for coax, network and power, with no user set-up required, make installation easy and very fast.

Applications

The main application for HIGHWIRE is straightforward replacement of analog cameras for IP cameras without re-wiring. HIGHWIRE will handle megapixel cameras and PTZ IP cameras without problems. Other applications include VOIP, long-range networking (500m) with RG11 cable, lifts and elevators (as coax bends and coils easily), and indeed anywhere there is coax !

Product Codes

VHW-HW	HIGHWIRE Ethernet over coax converter (2 required)
VHW-HWC	HIGHWIRE Connect pair (2 x VHW-HW)

Ethernet Over Coax Adaptors

HIGHWIRE POE

- Uses legacy coaxial cable
- Fast Ethernet up to 500m
- Provides POE to IP cameras
- Saves installation time

Product description

HIGHWIRE POE turns existing video infrastructure into a fast network connection, and converts legacy 12V-40V DC or 24V AC power into a universal Power over Ethernet (POE) supply for IP cameras and mega-pixel cameras. This saves the time and cost of replacing old analog cabling, with no need to install extra power for the new camera. Instant operation with no configuration required makes installation of HIGHWIRE POE simple and fast.

Applications

Use HIGHWIRE with POE out when installing IP cameras which MUST be powered by POE or where it is more convenient to power them this way. Note that this product is limited to powering up to Class 2 POE cameras (i.e. 7 watts or less).

Product Code

VHW-HWPO	HIGHWIRE Ethernet over coax converter with POE out

Ethernet Over Coax Adaptors

HIGHWIRE QUAD

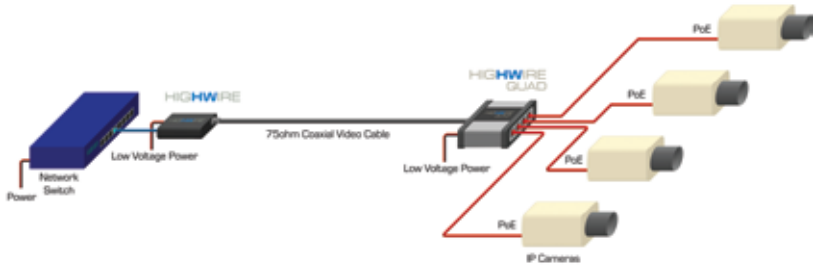
- Uses legacy coaxial cable
- 4 x IP devices over one coax
- Integrated 4-port POE switch
- Wall mountable

Product description

HIGHWIRE QUAD integrates Veracity's HIGHWIRE Ethernet over coaxial cable technology with a four-port POE switch. This means that up to four IP cameras can be installed in place of an old analog video camera. Legacy coax cabling can be used as the network connection, and an existing 12VDC or 24VAC supply can be converted into universal Power over Ethernet (POE) for the new IP cameras.

Applications

HIGHWIRE Quad can be used to expand the numbers of cameras in an installation without running new cables. Whilst most commonly used with IP cameras, HIGHWIRE Quad can be used for any networking application such as VOIP, IP access control, wireless access points, or any combination of these.



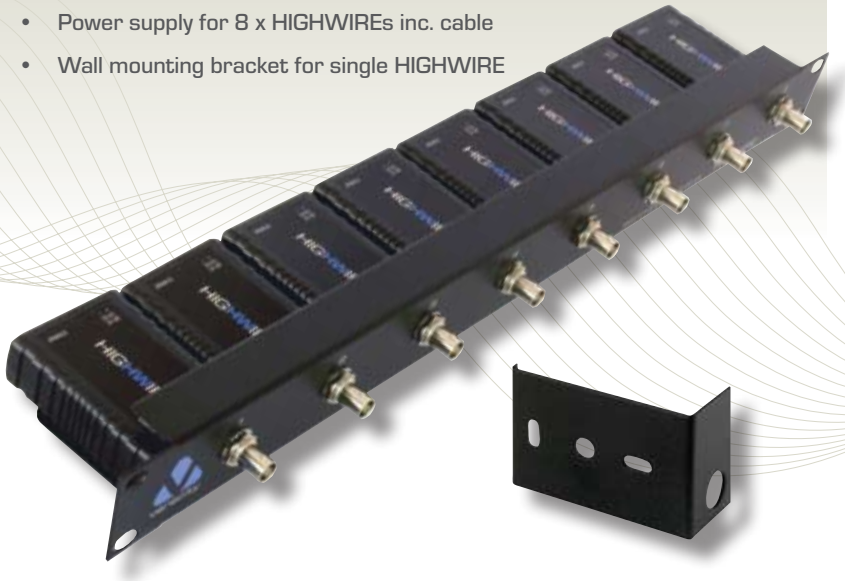
Product Codes

VHW-HWQ	HIGHWIRE Quad four-port POE Ethernet over coax adaptor
V-24V	24V DC power supply for Quad unit

Ethernet Over Coax Adaptors

HIGHWIRE ACCESSORIES

- 19" Rack plate for 8 x HIGHWIREs
- Power supply for 8 x HIGHWIREs inc. cable
- Wall mounting bracket for single HIGHWIRE



Product description

The HIGHWIRE accessory range includes a 19" 1U adapter plate which allows 8 standard HIGHWIRE units to be neatly rack-mounted in a control room. This is especially useful when installing many HIGHWIRE channels together.

Other accessories include a universal (USA-UK-EU) 12V DC power supply, a wall-mount bracket for a single HIGHWIRE (which can also be used to mount a HIGHWIRE to a camera body), and a 24V DC power supply for powering up to 8 HIGHWIREs in a rack mount unit (with 8-way wiring loop).

Product Codes

V-12V-U	12V DC power supply for HIGHWIRE and HIGHWIRE POE
VHW-1U	HIGHWIRE 1U 19" rack-mount plate for 8 x HIGHWIRE
VHW-RMPSU	24V DC power supply with wiring loop for 8 x HIGHWIRE
VHW-WMB	Wall mount bracket

LAN and POE Extenders

OUTREACH MAX

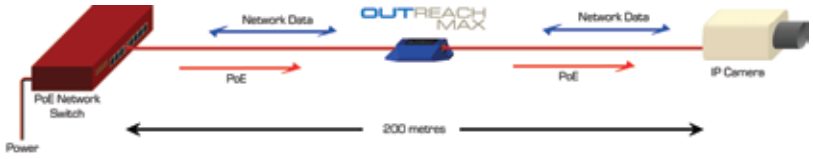
- POE-powered LAN extender
- Extends both LAN and POE
- IEEE 802.3af and 3at compliant
- Multiple units extend LAN to 1000m

Product description

OUTREACH Max lets network installers overcome the distance restrictions of wired Ethernet. OUTREACH is simply connected in-line with the Cat 5/6 cable, and restores the network signal, providing Ethernet extension and Power over Ethernet (POE) forwarding. OUTREACH Max replaces the earlier OUTREACH and OUTREACH Plus models. It is IEEE 802.3af and 802.3at compliant.

Applications

OUTREACH Max is ideal for IP camera deployment, enabling the connection and powering of these cameras at considerable distances, especially when used with Veracity's OUTSOURCE and OUTSOURCE Plus POE injectors. However, it can also allow optimum positioning of wireless access points and be used as a connection extender in general networking applications.



Product Codes

VOR-ORM	OUTREACH Max LAN and POE extender
VOR-OS	OUTSOURCE single port POE injector
VOR-OSP	OUTSOURCE Plus single port POE-Plus injector

LAN Extenders

OUTREACH LITE

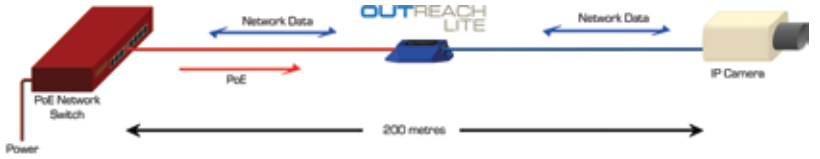
- POE-powered LAN extender
- Extends LAN to 200m
- Lower cost version of OUTREACH
- General-purpose IT use

Product description

OUTREACH Lite is a POE-powered LAN extender which allows Ethernet connections up to 200m. It is a simplified, lower-cost LAN extender which does not forward POE. OUTREACH Lite is designed for general networking applications, providing a wired network connection out to 200m, double the normal Ethernet limit.

Applications

OUTREACH Lite is used when POE is not required at the destination point, such as when an IP camera is externally powered, or for a simple network-to-network connection. It can be used at the end of a chain of one or more OUTREACH Max devices if distances longer than 200m are required.

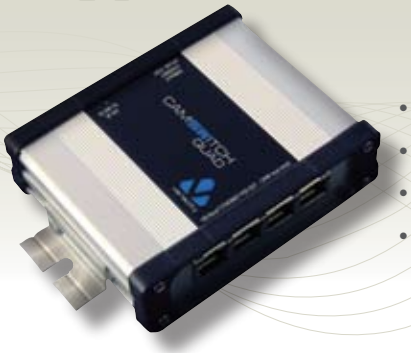


Product Codes

VOR-ORL	OUTREACH Max LAN and POE extender
VOR-OS	OUTSOURCE single port POE injector

POE Switches

CAMSWITCH QUAD



- 5-port network switch
- 4 x POE ports
- Supports 4 IP cameras
- Wall mountable

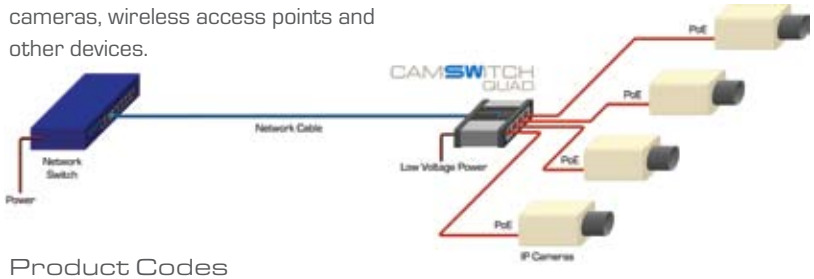
Product description

CAMSWITCH Quad is a 4+1 port Power over Ethernet (POE) switch especially designed for IP video applications. It delivers both the power supply and network connection required by up to four IP cameras from a single, easy to install unit.

Using the universally-compatible IEEE 802.3af POE standard means reliable power can be delivered to IP cameras, wireless access points and other devices.

Applications

CAMSWITCH Quad is aimed at edge-of-network applications for IP Video, ACS and other security applications, but is also ideal for installation in transport applications such as trains, buses, emergency services vehicles etc. where a small network is required. With a very flexible low-voltage requirement (10-40V DC or 24V AC), it is uniquely suited for specialised applications and very cost-effective for general POE switch requirements.



Product Codes

VCS-CSQ	CAMSWITCH Quad four-port POE Network Switch + link port
V-24V	24V DC power supply for Quad unit

Veracity network products :
simplifying IP connectivity

....making your life easier

POE-Powered Network Switches

OUTREACH QUAD

- POE-powered 5-port network switch
- 4 x POE ports with 25W total output
- No local power requirement
- Simplifies installation and saves cost

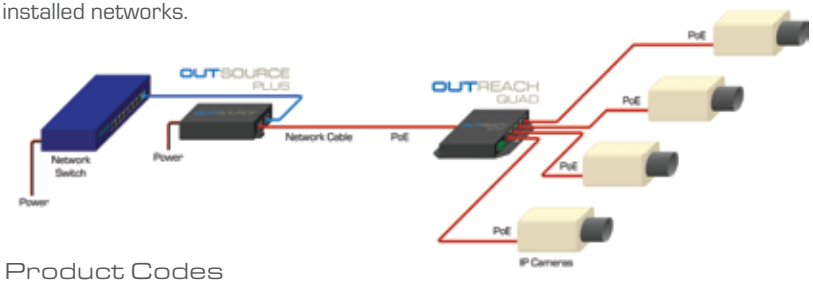
Product description

OUTREACH QUAD lets you expand your POE-enabled network and distribute network connections to multiple devices, such as IP cameras, at extended distances.

As a 10/100 edge switch with no local power source requirement, OUTREACH QUAD brings simplified cabling, flexible location and easy future expansion to installed networks.

Applications

OUTREACH QUAD is ideal for enabling the installation of multiple security devices from a single Ethernet cable run. It may also be used for adding wireless access points and for general edge-of-network requirements in IT applications.



Product Codes

VOR-ORQ	OUTREACH Quad POE Powered POE Switch
VOR-OS	OUTSOURCE single port POE injector
VOR-OSP	OUTSOURCE Plus single port POE-Plus injector

POE-Powered Network Switch

OUTREACH QUAD LITE

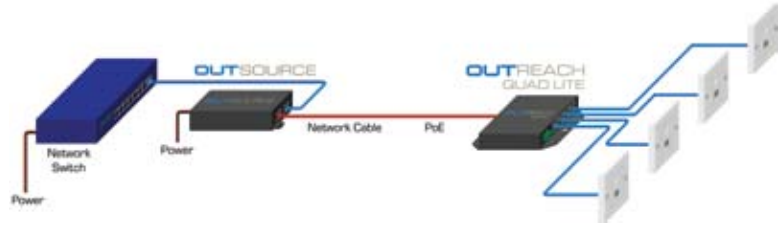
- POE-powered 5-port network switch
- Simple Ethernet port extender/multiplier
- No local power requirement
- Simplifies installation and saves cost

Product description

OUTREACH QUAD LITE lets you add Ethernet ports and extend network range to multiple devices easily. Because it receives its electrical power supply over a network cable using Power over Ethernet technology, OUTREACH QUAD LITE is not tethered to an electrical outlet, and can be located wherever it is needed most.

Applications

Simply connecting an OUTREACH QUAD LITE to a POE-enabled network outlet provides four 10/100 network connections for new devices instantly. For networks which do not have POE, combining OUTREACH QUAD LITE with Veracity's OUTSOURCE POE injector provides a simple solution for multiplying Ethernet ports distant from a power supply.



Product Codes

VOR-ORQ	OUTREACH Quad Lite POE Powered POE Switch
VOR-OS	OUTSOURCE single port POE injector
VOR-OSP	OUTSOURCE Plus single port POE-Plus injector

POE Injectors

OUTSOURCE

OUTSOURCE PLUS

- POE Midspan injectors
- Enhanced power for OUTREACH
- Ideal for Wireless APs & IP cameras
- IEEE 802.3af / 802.3at compliant

Product description

OUTSOURCE is a compact Power over Ethernet (POE) injector. It injects industry-standard IEEE 802.3af POE onto Cat 5 or similar network cabling to deliver reliable remote power to IP cameras, wireless access points and other devices.

OUTSOURCE Plus is the higher power IEEE 802.3at compatible version, delivering reliable remote power to PTZ IP cameras, 802.11n wireless access points (APs) and other high-power devices.

Applications

OUTSOURCE and OUTSOURCE Plus also deliver POE and enhanced POE Plus to OUTREACH Max for IP cameras, PTZ IP cameras, POE-enabled LED illumination, ACS devices, wireless access points and VOIP phones.

Product Codes

VOR-OS	OUTSOURCE POE Injector 802.3af compatible
VOR-OSP	OUTSOURCE Plus POE Injector 802.3at compatible

POE Splitters

OUTBREAK 12V

OUTBREAK 5V

- 5V and 12V POE splitters
- Allows powering of non-POE devices
- Simple to install
- IEEE 802.3af compliant

Product description

OUTBREAK is a POE splitter which divides the network and POE power into separate connections again. POE from the network cable is converted to a separate, lower voltage, 12V DC or 5V DC power connection.

Applications

OUTBREAK provides a convenient method of powering non-POE devices over a POE network. This includes non-POE IP camera, VOIP phones, access control devices, alarm panels and sensor devices.

Product Codes

VOR-OB5	OUTBREAK POE Splitter with 5V DC out
VOR-OB12	OUTBREAK POE Splitter with 12V DC out

POE Explained

This is a very brief summary of POE technology. See the back inside cover of this catalog for references to further information available on our website.

Power over Ethernet (POE) is a technology that lets network cables carry electrical power. For example, a digital security camera normally requires two connections to be made when it is installed:

- A network connection, in order to be able to communicate with video recording and display equipment
- A power connection, to deliver the electrical power the camera needs to operate

POE provides installation flexibility, saves time and cost, devices can be powered from a central, easily accessible source, and the extension and distribution of network power becomes simple and effective.

There are many devices which use POE power including IP cameras, VOIP phones, access-control devices, wireless access points, and many other specialised equipment which requires modest power. Even network switches themselves may be conveniently powered by POE (See OUTREACH Quad and Quad Lite).

POE Classes Table

There are two standards of POE set out by the IEEE. The first, known as standard POE, is IEEE 802.3af. This provides for POE power classes up to 15 Watts as illustrated in the table below :

POE Power Class	1	2	3
Source power available	4.0W	7.0W	15.4W
Max. device power	3.84W	6.49W	12.95W

POE Plus equipment has a power class of 4, and allows for power of up to 25 Watts. This is covered by the IEE 802.3at standard.

The differences between power delivered by the source and power received by the device being powered, accounts for power that is lost as heat in the cable. If a powered device does not display a Class signature, it is class 0 and must be allocated the maximum 12.95 watts.

More information including white papers are available on the Veracity website.

POE Class Adaptor

OUTCLASS

- Passive Class 2 adapter
- Corrects POE class signature
- Solves POE power budget issues
- For IP cameras, VOIP phones

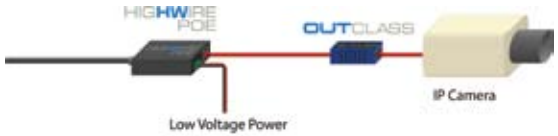
Product description

OUTCLASS is a simple passive adapter which corrects problems that are frequently found with Power over Ethernet powered devices. It gives low-power devices a Class 2 signature to solve power budgeting issues, and can be used to modify or upgrade legacy devices to meet the IEEE 802.3af standard.

Applications

Many POE-enabled IP cameras, VOIP phones and other devices which use 7 watts or less are either incorrectly classified or unclassified (Class 0).

(See Page 15 for information on POE classes). By inserting OUTCLASS into the network chain just before the device, it provides a simple way of converting the device to have a Class 2 signature. It is used when the POE sources operate correct POE Class management and have a limited POE power budget available.



Product Code

VAD-CL2	OUTCLASS POE Class 2 Power Correction Adapter

IP Camera Installation Tools

PINPOINT

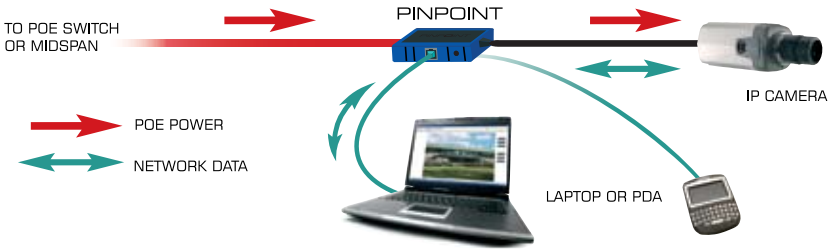
- Local viewing of IP cameras
- Uses network POE
- Rapid adjustment of focus
- Essential installation tool

Product description

PINPOINT is a simple, yet extremely useful installation tool for IP cameras. Temporarily inserted into the network connection, PINPOINT passes through POE from the network to the camera whilst diverting the network connection to a local connection for a laptop or netbook. Thus it allows the accurate positioning of the camera including fine-tuning of viewing angle and especially focus, which is critical for mega-pixel cameras.

Applications

Veracity's PINPOINT adapter solves a common problem. How do you view the image or configuration page of an IP camera locally, without disconnecting it from the network and losing POE power? By routing POE to the camera, and diverting it's network connection to your laptop or PDA, PINPOINT lets you get your camera focused and set-up quickly and accurately.



Product Code

VAD-PP	PINPOINT IP Camera Setup Adapter

IP Camera Installation Tools

POINTSOURCE

- Battery-powered POE injector
- 6-8 hours operation, rechargeable
- Integrated network connections
- For site work, site surveys and demos

Product description

POINTSOURCE is a rechargeable POE battery pack for in-field use, such as IP device installation or demonstration. Incorporating a similar functionality to PINPOINT, POINTSOURCE provides a local network port for convenient local access from a laptop/netbook directly to the IP device being installed or demonstrated, but in addition provides POE power from an internal rechargeable battery. It provides sufficient power for 6 to 8 hours of normal operation, depending upon the power consumption of the IP device.

Applications

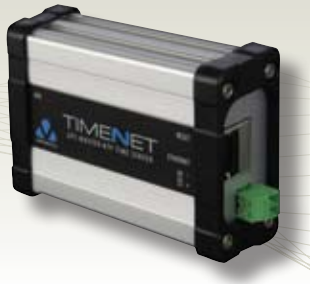
POINTSOURCE is ideal for IP camera installation work when there is no site power available, or where POE switches have yet to be installed or connected. It allows complete installation of IP cameras even before network cables are run! POINTSOURCE is also extremely convenient for field-demonstration and testing of IP cameras and other POE powered devices. It is especially useful for site surveys enabling capture of actual IP camera images for proposals and reports.

Product Code

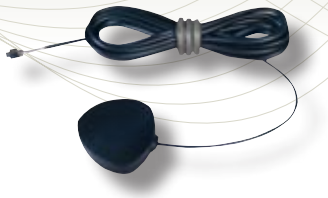
VAD-PS	POINTSOURCE Battery Powered POE Injector

NTP Time Servers

TIMENET TIMENET GPS



- Cost-effective NTP time-server
- Compact, wall mountable device
- Sync of DVRs, ACS & servers
- GPS position version available



Product description

TIMENET provides a low-cost solution to the problem of providing accurate reference time signals for CCTV recording equipment. TIMENET integrates a GPS receiver and master NTP (Network Time Protocol) clock server into a single highly compact device which can be directly connected to the network.

There are two models of TIMENET : The first provides standard NTP support for time and date synchronisation only.

The second also provides GPS position data for location identification. The position data must be managed by a client software application.

Applications

TIMENET supports all general NTP applications of synchronising IT servers, storage arrays, DVR and NVR systems, access control servers, building management system processors, fire-alarm systems, and indeed any operating system which supports NTP (such as Linux, Mac OS, Windows and many others).

TIMENET may be powered via POE using an OUTBREAK 12V POE splitter.

Product Codes

VTN-TN	TIMENET GPS-Based NTP Time Server (NTP only)
VTN-GPS	TIMENET NTP Time Server with GPS positional data output
VOR-OB12	POE Splitter with 12V DC Output

Time Servers Explained

"CCTV and digital video recorder (DVR) installations require accurate reference time signals for synchronisation of system clocks to ensure that they are always set at the precisely correct time."

It is crucial that all recordings are accurately time-stamped, especially for evidential purposes. Many DVR products, especially those which are PC-based, have inaccurate internal clocks which drift by many seconds per week.

The traditional solution to providing an accurate reference time has been to use an atomic clock radio receiver or GPS sensor linked to an expensive rack-mounted master clock server, typically with serial-only output.

TIMENET integrates the GPS receiver and master NTP clock server into a single device which can be directly connected to the network.

TIMENET is extremely compact, can be wall-mounted, uses very little power and is less than half the cost of competing solutions.

About UTC Time

Universal co-ordinated time is an official world-wide atomic clock standard for time, agreed by national standards around the world.

About NTP

NTP stands for Network Time Protocol and is a universal standard for time synchronisation of computers or other devices on a network. TIMENET is NTP-compatible and acts as a time server for any NTP-enabled client.

About GPS

GPS is a global satellite system used primarily for position location, using very accurate atomic clock references. GPS signals are far less prone to interference than traditional national radio clock signals. Thus TIMENET is a universal solution which can be used anywhere in the world.

About Time Zone

UTC is effectively a GMT reference time and TIMENET provides this via NTP as a universal reference. It is the task of the network client (i.e. DVR or other client device) to look after the local time zone setting for the country or zone location, including any local or national variations to daylight savings time or equivalent.

Intelligent Protocol Translators

CROSSPORT

- Protocol translator for security devices
- Simplifies integration tasks
- Ideal for DVR and ACS integration
- Web-based programmable interface

Product description

CROSSPORT is a specialised device for true system integrators. It is equipped with both serial and network ports, an alarm input channel and a single relay. The device can accept input (message protocols) from serial or network sources and can deliver translated output to one or multiple destinations via both serial and network connections. Input messages can trigger multiple outputs to multiple destinations if required, under full control of the user defined rules table. Thus CROSSPORT enables the integration of different manufacturer's systems in an extraordinarily cost-effective manner.

The value of CROSSPORT is that it simplifies integration tasks without expensive and time-consuming software development. The unit may be remotely managed via a standard web browser.

Applications

Typical applications include integration of any or all of the following: digital recording systems, access control, video analytics, intruder detection, vehicle license plate readers, building management systems, burglar and fire alarm panels, gate and turnstile systems, smoke detectors, motion detectors, audio event detectors.

Note : CROSSPORT requires some level of integration skill and knowledge of the protocols used by the third-party manufacturers, and understandably Veracity cannot provide support for such third-party equipment.

CROSSPORT may be powered via POE using an OUTBREAK 12V POE splitter.

Product Codes

VCP-CP	CROSSPORT Intelligent Network/Serial Protocol Translator
VOR-OB12	POE Splitter with 12V DC Output

Further Information

Further information on Veracity products may be obtained from the all-new Veracity website : www.veracityglobal.com

Here you will find :

- Technical data for each product
- Product documentation (user guides, manuals)
- Frequently-Asked Questions lists
- A & E specifications
- Software programs
- Application notes
- Complete product codes list
- Promotional materials (adverts, flyers)
- Technical articles and white papers

and also information on our Product Certification Program and a list of our Certified Partner Products.

veracity

use-IP

www.use-ip.co.uk
01304 827609

Check out the Veracity Transmission Products iPhone App, containing product information, IP camera compatibility lists and details of your nearest reseller.

Europe, Middle-East, Africa :

Veracity UK Ltd.
6 Barns Street
Ayr
KA7 1XA
UK

Tel : +44 1292 264967
Fax : +44 1292 263127

sales@veracityuk.com

Americas, Asia :

Veracity USA Inc.
Suite B,1310 Nance Street
Houston
TX 77002
USA

Tel/Fax : 1-800-679-1590

sales@veracityusa.com

For details of Veracity national and international distributors please visit :

www.veracityglobal.com