

OUTREACH PLUS

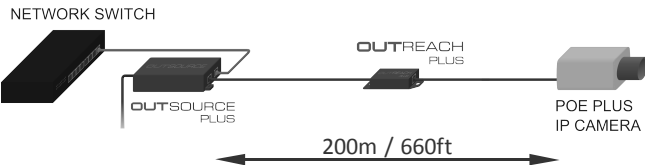
INSTALLATION GUIDE



Where to use OUTREACH PLUS™

Cables in an Ethernet network are limited in length to 100 metres (328 feet), however in some installations it is necessary to make a network connection and deliver high-level Power over Ethernet (PoE) over distances greater than this.

OUTREACH PLUS solves this problem: it allows high-power PoE, including IEEE 802.3at (PoE Plus), to be extended with an Ethernet data connection to up to 200 metres.



In the example above, a single OUTREACH PLUS allows a high-power networked camera to be installed up to 200 metres (656 feet) away from a network switch. The OUTREACH is connected in-line after the first 100 metres of cable have been laid, allowing a further length of up to 100 metres to be installed up to the camera.

As the camera is a PoE Plus device, OUTREACH PLUS (VOR-OSP) should always be used as the PoE source to ensure maximum range. OUTREACH PLUS draws its own power from the same PoE source as the powered device (which in this case is the OUTREACH PLUS), so it requires no local electricity supply.

LED indicators

Connector	LED	OFF	ON	FLASHING
POE IN	POWER GOOD	no power	power good	-
	LINK / ACTIVITY	no Ethernet link	Ethernet link good	network activity
POE OUT	LINK / ACTIVITY	no Ethernet link	Ethernet link good	network activity



EC Declaration of Conformity

In accordance with EN 45014:1998

We, Veracity UK Ltd. of 6 Barns Street, Ayr, KA7 1XA declare that the equipment "OUTREACH PLUS" Ethernet repeater model number VOR-ORP

conforms to the essential protection requirements of the EMC Directive 89/336/EEC as amended. The following EMC standards have been applied:

BS EN 55022:1998 Emissions (Class B Radiated)

BS EN 55024:1998 Immunity (BS EN 61000-4-2:1995 Immunity to ESD, BS EN 61000-4-3:2000 Immunity to Radiated RF Fields (3V/m))

I hereby declare that the equipment named above has been found to comply with the relevant sections of the above referenced specifications. The unit complies with all essential requirements of the EMC Directive.

Responsible Person *Alastair McLeod* Mr Alastair McLeod, Director
Issued 14th April 2009 at Ayr



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Installation



Quick installation sequence (for PoE Plus):

- Install an OUTREACH PLUS where power is available, to inject PoE Plus on the network cable (usually located close to a network switch port)
- Connect the POE IN connector to the OUTREACH PLUS
- Connect the POE OUT connector to a PoE Plus powered device (such as a PTZ network camera)
- Wait a few seconds for all devices to be enabled

Important notes

- OUTREACH PLUS will not power up (no LEDs) until the camera or other PoE device has been connected.
- The OUTREACH PLUS injector should always be used for guaranteed performance in PoE Plus applications. It can be used to upgrade an existing PoE Plus port if required.
- If the powered device is disconnected, its cable will still have a PoE voltage present on it, which can damage other equipment. Always disconnect the PoE power source at the same time so that power is removed from the OUTREACH PLUS.
- For conventional PoE (802.3af) or non-PoE applications, the standard model of OUTREACH (VOR-OR) should always be used. OUTREACH enables Ethernet extension up to 1000 metres (3280 feet).

Non-standard PoE

OUTREACH PLUS allows extension of many non-standard PoE connections. These include:

- "Always-on" or "dumb" PoE
- Extended-power PoE based on 802.3af
- PoE implementations using a non-802.3af signature

OUTREACH PLUS should not be used with "4-pair" PoE or with any devices that draw greater than the specified maximum power or current. Maximum range will depend on the PoE implementation used.

OUTREACH PLUS should only be used with non-standard PoE implementations that have been approved by Veracity. Please consult the relevant application notes or enquire with your Veracity representative before installation.

Technical specification

Power	Typical: 1 Watt, Maximum: 2.2 Watts
POE	Passed through: data/spare pair in, spare pair out 0.8 amp / 30 watt maximum to device
Ethernet	100BASE-TX Full Duplex only Auto-Negotiation and Auto-Crossover supported
Dimensions (WxDxH)	75x39x20mm / 3.0x1.6x0.8" 105x42x20mm / 4.2x1.7x 0.8" inc. screws and tabs
Mounting	Two 7mm / 0.28" dia holes, 89mm / 3.5" apart
Weight	110 g / 3.8 oz
Operating temp	-10 to 50°C / 14 to 122°F
Relative humidity	Up to 85%, non-condensing