

### Features and Benefits

- Extends Ethernet cable installations to beyond 100 metres
- Forwards Power Over Ethernet (POE) to remote devices
- No power cable installation required
- Fully transparent – no restriction to network traffic
- Simple to install – works instantly
- Robust, compact and wall-mountable
- Supports all network devices
- Compatible with universal IEEE 802.3af POE standard

Cables in an Ethernet network are limited to 100 metres in length, but frequently network equipment must be connected over greater distances. OUTREACH lets you overcome this restriction with a single, simple device. OUTREACH is fitted in-line with the cable and acts as a repeater. A single OUTREACH may be used to join two cables, each of up to 100 metres in length, to allow a network connection over up to 200 metres. OUTREACH is transparent to the link, allowing a full-duplex 100Base-T connection with no restrictions.

OUTREACH draws its power from the network cable using Power Over Ethernet, and requires no local power supply to be installed. It can also forward POE power on to other connected devices such as IP cameras, allowing the extension of both power and data to beyond 100 metres.

OUTREACH incorporates Power Promise™ technology (patent pending), enabling it to intelligently monitor power distribution across the entire network link, without requiring any interaction from other devices. Only Power Promise makes it possible for OUTREACH to decide whether POE power can safely be enabled to connected devices.



For installations that reach beyond 200 metres, it is possible to connect two or more OUTREACHes in a chain, with up to 100 metres of cable between each OUTREACH or device. Links may be extended up to 1000 metres in this way, depending on the power requirements of the connected POE devices, and other factors. Power Promise allows POE to be forwarded by a chain of OUTREACHes with no risk of an overloaded POE supply or an underpowered POE device.

OUTREACH requires no setting-up and its only connectors are for the two network cables it joins. The Ethernet and POE connections are established and configured automatically, and no external equipment, custom installation or modifications are required.

No network set-up is necessary as OUTREACH does not use a MAC or IP address and is undetectable to other network devices.

The Power Promise technology ensures only safe and reliable POE power is enabled. In the unlikely event of any problems, diagnostic LEDs help the installer to locate their source quickly.

Using OUTREACH in your installation brings the benefits of POE to the whole site. Most significantly, mains power installation is not required for remote switches or network devices such as IP cameras. Installation costs become more predictable, as OUTREACH offers a fast and low-cost solution to underestimated cable lengths or changes to equipment locations.

Centrally-sourced POE also reduces ongoing maintenance costs, as devices can be reliably powered by an Uninterruptible Power Supply, and remotely power-cycled if they need to be reset. Devices are not tethered to power points and can easily be relocated after installation, using an OUTREACH to provide the extra distance.

### Technical Specifications

#### ETHERNET

**Connector type:** RJ45 x 2  
**Cable type:** Straight through or cross-over, auto detected  
**Rates supported:** 100BASE-TX, full duplex only with auto-negotiation

#### POWER

**Maximum power:** 2.2 Watts (1 Watt typical)  
**POE in:** IEEE 802.3af Class 0 (max 12.95 Watts)  
**POE out:** IEEE 802.3af Class 1 or 2 (max 6.49 Watts), IEEE 802.3af Class 3 (max 12.95 Watts) using OUTSOURCE

#### LED INDICATORS

**Link/activity** On: 100BASE-T link good  
 Blinking: Network activity  
 Off: No network connection to port  
**POE in:** On: Power good  
 Blinking: Power good, approaching IEEE limits  
 Off: No power to OUTREACH unit  
**POE out:** On: POE enabled to connected device  
 Blinking: Insufficient power for device or POE fault  
 Off: POE not requested by connected device

#### MAXIMUM RANGE

<b>POE device class</b>	3	2	1	(no POE)
<b>Device power up to:</b>	12.95W	6.49Watts	3.84W	n/a

**Range with POE switch:** n/a 300m 400m 700m

**Range with OUTSOURCE:** 300m 500m 700m 1000m

Note: These distances are typical results when used with 24AWG Cat5, Cat5e or Cat6 cable.

#### ENVIRONMENTAL

**Operating temp:** -10°C to 50°C  
**Relative Humidity:** 85% non-condensing  
**Dimensions:** L 100mm (70mm excluding tabs) x W 37mm x H 20mm  
**Mounting:** 7mm holes on two tabs, 84mm apart  
**Weight:** 85g  
**Compliance:** CE, FCC, RoHS  
**OUTSOURCE**  
**Power input:** 100-240VAC, 47-63Hz  
**Dimensions:** L 140mm x W 65 mm x H 36mm  
**OUTBREAK**  
**Power output:** 12VDC, 1A  
**DC Connector:** 5.5mm barrel, pin 2.5mm, centre positive  
**Dimensions:** 100mm x W 56mm x H 28mm

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