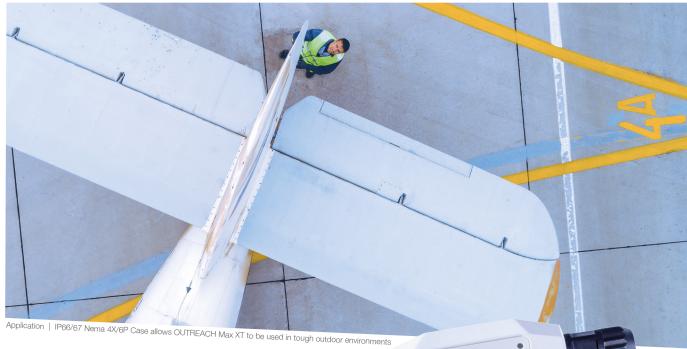
DATASHEET





I

Tough outdoor Power over Ethernet and network range extender

Reliably extend your network cable runs to POE-powered IP cameras, wireless access points and equipment which must be installed externally.

IP66/67 Nema 4X/6P tough enclosure for external installation

ETHEINET & POE EXTENDER

- Instantly doubles cable range to 200 metres
- Extend additional 100 metres per unit with multiple units
- Compatible with POE, POE Plus & custom POE to 90W
- Easy-to-fit cable seals for cables with existing RJ45 plugs
- Full unrestricted network bandwidth (Gigabit available)
- Secure wall mounting with detachable bracket





Applications | Tough IP66/67 Nema 4X/6P Case allows you to extend Ethernet to tough outdoor environments like bridges

OUTREACH Max XT overcomes the distance limits of standard Ethernet cable

Simply connecting an OUTREACH Max XT in line with the network cable instantly doubles the Ethernet range from 100 to 200 metres, and forwards POE to the connected devices.

Overcome restrictions

Cable lengths in Ethernet networks are limited to 100m (328ft), which is a serious restriction in many installations. OUTREACH Max XT enables installers to overcome this network limitation.

Simply connecting an OUTREACH Max XT in line with the network cable instantly doubles the Ethernet range from 100 to 200 metres (656ft).

Simple to install

Fitting OUTREACH Max XT is simple because no setup is required. The only connections are two RJ45 network ports, both of which immediately self configure for 10Base-T or 100Base-TX operation. POE power is automatically transferred between connected equipment.

Because OUTREACH Max XT is also POE-powered, no local power supply connection is needed.

OUTREACH Max XT can be located anywhere along the network cable,

as long as no single length of cable is greater than 100 metres. For example, to extend the network connection between a POE switch and an IP camera to 170 metres, an OUTREACH Max XT could be installed 90 metres from the switch. A further 80 metres of cable would run from the OUTREACH Max XT to the camera.

Max POE power

OUTREACH Max XT enables network range extension to all POE devices that are compatible with IEEE 802.3af, which is the universal POE standard for low power network devices such as fixed IP cameras.

In addition, OUTREACH Max XT is also compatible with high-power standards such as POE Plus (IEEE 802.3at), and even "4-pair" POE for devices of 90 watts or more. Note: OUTREACH Max XT is designed for connection to POE compatible equipment only. If POE power is not required, Veracity's OUTREACH Lite XT should be specified instead.

Go further

If POE and network extension beyond 200 metres (656ft) is required, more than one OUTREACH Max XT may be installed in series. For example, a 300 metre (984ft) connection between a POE switch and a 10 watt IP camera can be achieved by fitting two OUTREACH Max XT units at 100 metre intervals along the cable. However, for long extensions, Veracity recommends the LONGSPAN long distance point-to-point devices, which can achieve 100Base-TX connections with POE at up to 820m (2,690ft).

External application

OUTREACH Max XT is specifically designed for external installation with guaranteed operation over an extended temperature range. Its rugged and streamlined enclosure features IP67 Nema 4X/6P-rated connector covers, that assemble around conventionally terminated Cat5e and Cat6 cables.

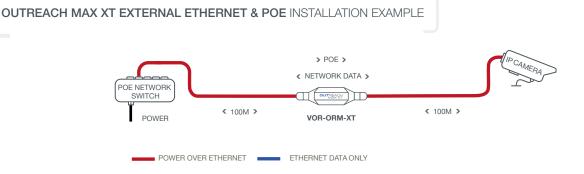
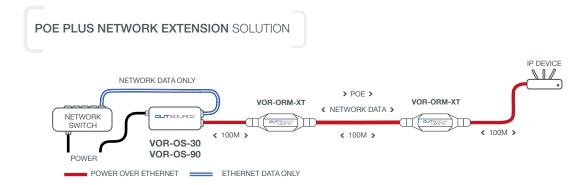


Diagram 1. A single OUTREACH Max XT doubles the cable range to a POE IP Camera. Each cable segment can be up to 100 metres.





Which type of **OUTREACH** do I need?

Choosing between OUTREACH models is straightforward using the information below.

ETHERNET ONLY

If Ethernet extension only is required, use **OUTREACH Lite** models. Lite models extend Ethernet only and do not forward POE.

If POE forwarding is also required, use **OUTREACH Max** models. Max models support all standards of POE forwarding.

POE FORWARDING

For outdoor Ethernet extension, use **OUTREACH XT** models with IP67/Nema 4X/6P standard enclosures

and connections.

EXTERNAL UNITS

GIGABIT OPTION

If Gigabit Ethernet extension is required, use **OUTREACH G** models as these support full Gigabit data rates.

| EXTENSION TYPE | APPLICATION | | |
|-----------------------------|-----------------|-------------------|---------------------|
| | INDOOR | OUTDOOR | NETWORK SPEED |
| Ethernet extension only | OUTREACH Lite | OUTREACH Lite XT | 100Base-TX Ethernet |
| Ethernet extension with POE | OUTREACH Max | OUTREACH Max XT | Toobase-TA Ethernet |
| Ethernet extension only | OUTREACH Lite G | OUTREACH Lite GXT | Gigabit Ethernet |
| Ethernet extension with POE | OUTREACH Max G | OUTREACH Max GXT | |

OUTREACH devices are ideal for Ethernet extension to 200m or 300m. The POE power source required will depend on the distance to the powered device (e.g. IP camera) and the power requirement of that device, as shown in this table.

| POE SOURCE | MAXIMUM POE POWER | | |
|--------------------|-------------------|---------|--|
| | at 200m | at 300m | |
| POE Switch (15W) | 12W | 9W | |
| POE Switch (30W) | 25W | 20W | |
| OUTSOURCE 30 (30W) | 25W | 20W | |
| OUTSOURCE 90 (90W) | 71W | 43W | |

The power levels quoted above assume the use of high quality Cat6 Ethernet cabling. Smaller gauges may result in higher losses and reduced power delivery.

Beyond 300m, it is possible to daisy-chain further OUTREACH devices to achieve distances up to 700m or beyond, but we recommend the use of Veracity's LONGSPAN long distance point-to-point solution for such applications. LONGSPAN can span up to 820m with full 100Base-TX data rates and 15W of POE delivery or 25W at 600m.

TECHNICAL SPECIFICATION



| POWER Power consumption | 1.3 watts via POE | | |
|---|---|---|--|
| POE POWER COMPATIBILITY | 90 watts max (full 802.3bt Class 8, 71 watts camera power) Maximum current 1.92 amps per pair at rated operating temperature | | |
| POE STANDARDS | IEEE 802.3af POE (15W) and IEEE 802.3at at POE Plus (2-event signature) (25-30W) IEEE 802.3bt POE (to 90W+, non-LLDP) Custom POE (incl. "always-on 48V" and "4-pair" POE) | | |
| ETHERNET INTERFACE | Two independently auto-configuring 10/100 ports (10Base-T/100Base-TX, half/full duplex) Patch or crossover cables supported | | |
| LEDs Status indicators | Green LED - shows POE Power good Yellow LED - shows Ethernet link/activity | | |
| PHYSICAL/ENVIRONMENTAL Dimensions Weight Mounting Operating temperature Relative humidity Compliance Environmental | L 183mm W 50mm H 30mm 104g [3.7oz], 126g [4.5oz] including plate 2/4 Bolt 7mm mounting holes. On 50/60mm centres -40°C to 70°C [-40°F to 158°F] Up to 85%, non-condensing CE, FCC, UKCA, UL, RoHS IP66/67, Nema 4X/6P | | |
| PRODUCT CODES VOR-ORM VOR-ORL VOR-ORM-XT VOR-ORL-XT VOR-ORM-G VOR-ORL-G VOR-ORM-GXT VOR-ORL-GXT VOR-OS-30 VOR-OS-90 | OUTREACH Max OUTREACH Lite OUTREACH Max XT OUTREACH Lite XT OUTREACH Max G OUTREACH Lite G OUTREACH Max GXT OUTREACH Lite GXT OUTREACH Lite GXT OUTSOURCE 30 OUTSOURCE 90 | Ethernet and POE extender Ethernet extender Outdoor Ethernet & POE extender Outdoor Ethernet extender Gigabit Ethernet and POE extender Gigabit Ethernet extender Outdoor gigabit Ethernet and POE extender Outdoor gigabit Ethernet extender 30W POE injector with UK, EU or US power cable 90W POE injector with UK, EU or US power cable | |

Surge Protection

All Veracity products have been independently tested to verify their resilience to the stringent immunity levels of international standards. Users should note that no electronic equipment can be guaranteed to be completely protected at levels beyond the defined standard; therefore product warranty cannot include damage to products which has been caused by surges exceeding those of the standards specified, for example lightning strike activity.

It is the user's responsibility to implement relevant surge protection measures, as appropriate to the installation. This may include the fitting of additional surge protection devices where required.



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