

OUTDOOR GIGABIT POE EXTENDER

**OUTREACH<sup>®</sup>**  
**MAX GXT**

Application | IP66/67 Nema 4X/6P Case allows OUTREACH Max GXT to be used in tough outdoor environments



## Tough outdoor Power over Ethernet and gigabit network range extender

Reliably extend your gigabit network cable runs to POE-powered IP cameras, wireless access points and other GigE devices which must be connected via external cabling.

- | IP66/67 Nema 4X/6P tough enclosure for external installation
- | Full unrestricted gigabit Ethernet network bandwidth
- | Instantly doubles gigabit cable range to 200 metres
- | Extend additional 100 metres per unit with multiple units
- | Compatible with POE, POE Plus and custom POE to 90W
- | Easy-to-fit cable seals for cables with existing RJ45 plugs
- | Secure wall mounting with detachable bracket



Application | Tough IP66/67 Nema 4X/6P case allows you to extend gigabit Ethernet and POE to tough outdoor environments

## OUTREACH Max GXT overcomes the distance limits of normal gigabit Ethernet

Simply connecting an OUTREACH Max GXT 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 (328 ft), which is a serious restriction in many installations. OUTREACH Max GXT enables installers to overcome this network limitation. Simply connecting an OUTREACH Max GXT in line with the network cable instantly doubles the gigabit Ethernet range from 100 to 200 metres (656 ft).

### Simple to install

Fitting OUTREACH Max GXT is simple because no set-up is required. The only connections are two RJ45 network ports, both of which immediately self configure for 10Base-T, 100Base-TX, or 1000Base-T operation. POE power is automatically transferred between connected equipment.

Because OUTREACH Max GXT is also POE-powered, no local power supply connection is needed. OUTREACH Max GXT 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 gigabit POE switch and an IP camera to 170 metres, an OUTREACH Max GXT could be installed 90 metres from the switch. A further 80 metres of cable would run from the OUTREACH Max GXT to the camera.

### Max POE power

OUTREACH Max GXT 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 GXT is also compatible with high-power standards such as POE Plus (IEEE 802.3at), and even “4-pair” POE for devices of 90 watts (IEEE 802.3bt).

Note: OUTREACH Max GXT is designed for connection to POE compatible equipment only. If POE power is not required, Veracity's OUTREACH Lite GXT should be specified instead.

### Go further

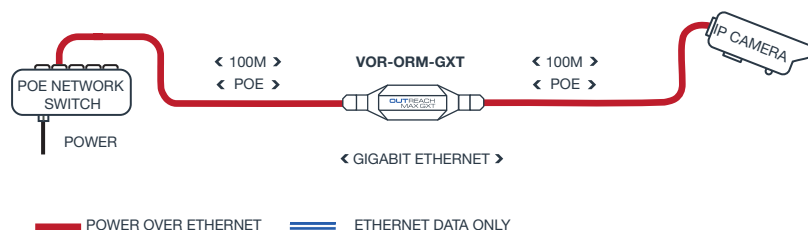
If POE and gigabit network extension beyond 200 metres (656 ft) is required, more than one OUTREACH Max GXT may be installed in series.

For example, a 300 metre (984 ft) connection between a POE switch and a 10 watt IP camera can be achieved by fitting two OUTREACH Max GXT units at 100 metre intervals along the cable. However, for long (100Base-TX) extensions, Veracity's LONGSPAN long distance point-to-point devices can achieve 100Base-TX connections with POE at up to 820m (2,690ft).

### External Application

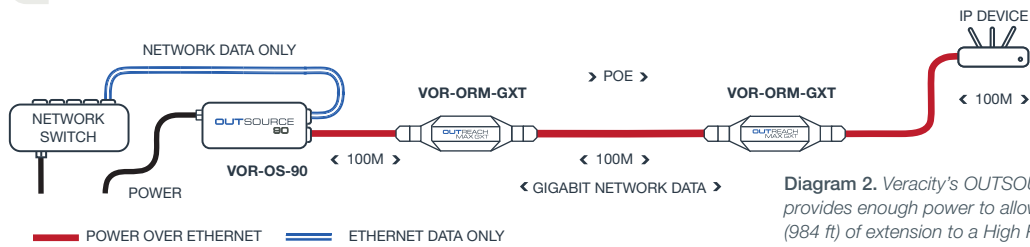
OUTREACH Max GXT is specifically designed for external installation with guaranteed operation over an extended temperature range. Its rugged and streamlined enclosure features IP67 Nema 4X/6P-rated connector covers that assemble around conventionally terminated Cat5e and Cat6 cables.

### OUTREACH MAX GXT EXTERNAL ETHERNET & POE INSTALLATION EXAMPLE



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

## POE PLUS NETWORK EXTENSION SOLUTION



**Diagram 2.** Veracity's OUTSOURCE 90 provides enough power to allow 300 metres (984 ft) of extension to a High POE gigabit wireless access point, using two OUTREACH Max GXT units located at 100 metre intervals.

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.

## POE FORWARDING

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

## EXTERNAL UNITS

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

## GIGABIT OPTION

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

EXTENSION TYPE	APPLICATION		NETWORK SPEED
	INDOOR	OUTDOOR	
Ethernet extension only	OUTREACH Lite	OUTREACH Lite XT	100Base-TX Ethernet
Ethernet extension with POE	OUTREACH Max	OUTREACH Max XT	
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

OUTREACH<sup>®</sup>  
MAX GXT

<b>POWER</b>	
Power consumption	1.3 watts via POE
<b>POE POWER COMPATIBILITY</b>	90 watts max (full 802.3bt Class 8, 71 watts camera power) Maximum current 1.92 amps per pair at rated operating temperature
<b>POE STANDARDS</b>	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)
<b>ETHERNET INTERFACE</b>	Two independently auto-configuring 10/100/1000 ports (10Base-T/100Base-TX/1000Base-T, half/full duplex) Patch or crossover cables supported
<b>LEDS</b>	Status Indicators  Green LED - shows POE Power good/speed Green LED Blink = Power Good Green LED Flash = 10Base-T/100-BaseTX Green LED On = 1000Base-T Yellow LED - shows Ethernet link/activity
<b>PHYSICAL/ENVIRONMENTAL</b>	Dimensions L 183mm W 50mm H 30mm Weight 104g [3.7oz], 126g [4.5oz] including plate Mounting 2/4 Bolt 7mm mounting holes. On 50/60mm centres Operating temperature -40°C to 70°C [-40°F to 158°F] Relative humidity Up to 85%, non-condensing Compliance CE, FCC, RoHS, UKCA, UL Environmental IP66/IP67, Nema 4X/6P
<b>PRODUCT CODES</b>	VOR-ORM OUTREACH Max Ethernet and POE extender VOR-ORL OUTREACH Lite Ethernet extender VOR-ORM-XT OUTREACH Max XT Outdoor Ethernet & POE extender VOR-ORL-XT OUTREACH Lite XT Outdoor Ethernet extender VOR-ORM-G OUTREACH Max G Gigabit Ethernet and POE extender VOR-ORL-G OUTREACH Lite G Gigabit Ethernet extender <b>VOR-ORM-GXT</b> <b>OUTREACH Max GXT</b> <b>Outdoor gigabit Ethernet and POE extender</b> VOR-ORL-GXT OUTREACH Lite GXT Outdoor gigabit Ethernet extender VOR-OS-30-UK/EU/US OUTSOURCE 30 30W POE injector with UK, EU or US power cable VOR-OS-90-UK/EU/US OUTSOURCE 90 90W POE injector with UK, EU or US power cable

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**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.



Veracity HQ  
Prestwick International Aerospace Park  
4 Dow Road  
Prestwick  
UK  
KA9 2TU  
Tel +44 (0) 1292 264967  
[www.veracityglobal.com](http://www.veracityglobal.com)  
[sales@veracityglobal.com](mailto:sales@veracityglobal.com)

See [www.veracityglobal.com](http://www.veracityglobal.com) website for country and region specific contacts.