

OUTDOOR GIGABIT POE EXTENDER
OUTREACH™
 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

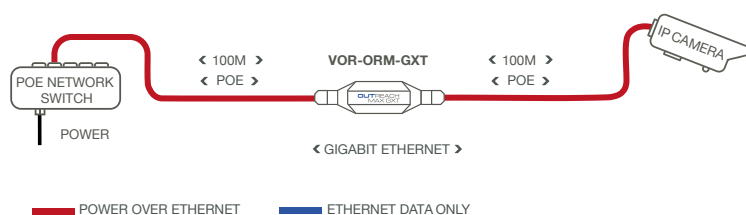


Diagram 1. A single OUTREACH Max GXT doubles the cable range to a POE IP Camera. Each cable segment can be up to 100 metres.

POE PLUS NETWORK EXTENSION SOLUTION

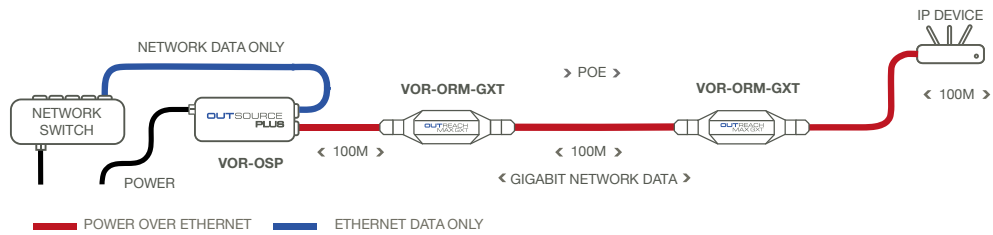


Diagram 2. Veracity's *OUTSOURCE Plus* provides enough power to allow 300 metres (984 ft) of extension to a POE Plus gigabit wireless access point, using two *OUTREACH Max GXT* units located at 100 metre intervals.

Which type of OUTREACH do I need?

Choosing between **OUTREACH** models is straightforward using the information below.

ETHERNET ONLY	POE FORWARDING	EXTERNAL UNITS	GIGABIT OPTION
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.	For outdoor Ethernet extension, use OUTREACH XT models with IP67 / Nema 4X/6P standard enclosures and connections.	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
OUTSOURCE (20W)	12W	12W
OUTSOURCE Plus (30W)	25W	20W
IEEE 802.3bt / Custom injector (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™
MAX GXT

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 10/100/1000 ports (10Base-T/100Base-TX/1000Base-T, half/full duplex) Patch or crossover cables supported	
LEDs		
Status indicators	Green LED - shows POE Power good/speed Yellow LED - shows Ethernet link/activity	
PHYSICAL/ENVIRONMENTAL		
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,	
Environmental	IP66/IP67, Nema 4X/6P	
PRODUCT CODES		
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
VOR-ORM-GXT	OUTREACH Max GXT	Outdoor gigabit Ethernet and POE extender
VOR-ORL-GXT	OUTREACH Lite GXT	Outdoor gigabit Ethernet extender
VOR-OS	OUTSOURCE	POE injector
VOR-OSP	OUTSOURCE Plus	POE Plus injector



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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.

See www.veracityglobal.com website for country and region specific contacts.

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