

EXTERNAL ETHERNET & POE EXTENDERS
OUTREACH™
MAX XT



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

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
- | Instantly doubles cable range to 200 metres
- | Extend additional 100 metres per unit with multiple units
- | Compatible with POE, POE Plus & custom POE to 75W
- | 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 (328 ft), 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 (656 ft).

Simple to install

Fitting OUTREACH Max XT 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 or 100Base-T 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 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 60 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 (656 ft) is required, more than one OUTREACH Max XT 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 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-T 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.

OUTREACH MAX XT EXTERNAL ETHERNET & POE INSTALLATION EXAMPLE

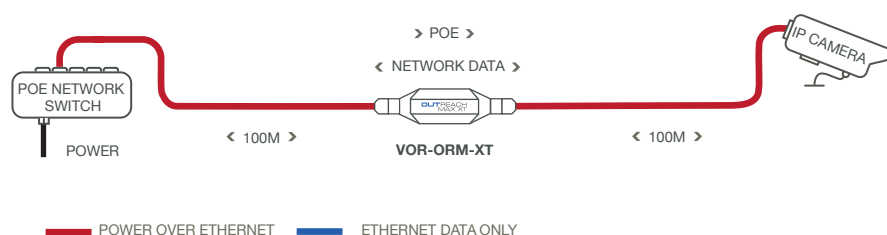


Diagram 1. A single OUTREACH Max XT doubles the cable range to a POE IP Camera. Each cable segment can be up to 100 metres.

POE PLUS NETWORK EXTENSION SOLUTION

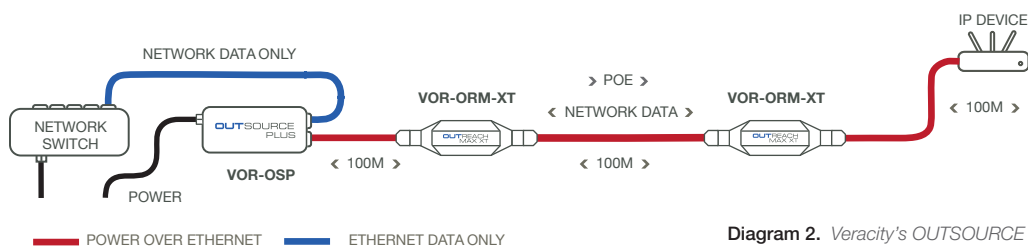


Diagram 2. Veracity's OUTSOURCE Plus provides enough power to allow 300 metres (984 ft) of extension to a POE Plus wireless access point, using two OUTREACH Max XT units located at 100 metre intervals.

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-T 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
OUTSOURCE BT (75W)	65W	58W

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-T data rates and 15W of POE delivery or 25W at 600m.

TECHNICAL SPECIFICATION

OUTREACH™
MAX XT

POWER		
Power consumption	1.3 watts via POE	
FORWARDED POE POWER		
	Up to 75 watts depending on standard Maximum current 0.7 amps on data pairs Maximum current 1.5 amps on spare pairs	
POE STANDARDS		
	IEEE 802.3af POE (15W) and IEEE 802.3at at POE Plus (2-event signature) (25-30W) IEEE 802.3bt POE (to 75W) 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	L 210mm W 50mm H 31mm	
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

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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