EXTERNAL ETHERNET EXTENDER

OUTREACH®
LITE XT

Application | Tough case allows Ethernet extenders to be used externally in transport hubs

EXTEND OUTDOORS

Tough outdoor Ethernet network range extender

OUTREACH Lite XT is designed to double the reach of external Ethernet network connections, without using a separately powered network switch.

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

| Instantly doubles cable range to 200 metres

| Extend an additional 100 metres per unit with multiple units

| Powered by POE (Power over Ethernet)

| Easy to fit cable seals for cables with existing RJ45 plugs

| Universal 10/100 compatibility (Gigabit available)

| Secure wall mounting with detachable bracket

veracity

OUTREACH Lite XT is a weather proof Ethernet extender for external use

An OUTREACH Lite XT is ideal for doubling the reach of outdoor wired Ethernet links to locally powered devices.

Ethernet is the ubiquitous technology for Local Area Network (LAN) installation, and the majority of networks in place use the 100Base-TX network standards. (A Gigabit version of OUTREACH Lite XT is also available).

However, many security installations demand network connections that exceed the maximum 100 metres (328 feet) distance limit for wired Ethernet.

OUTREACH Lite XT provides an instant solution to this restriction. Simply connect an OUTREACH Lite XT in line with the network cable – adding a Power over Ethernet (POE) injector if required – to double the available range to 200 metres (656ft).

Simple installation

OUTREACH Lite XT takes advantage of the universal 802.3af/at/bt POE standards, so it can draw its own power from the network connection. No local power is required, so OUTREACH Lite XT can be located

exactly where needed. If your network switch has POE, simply connect OUTREACH Lite XT up to 100 metres from the switch, and it will deliver another 100 metres reach over regular Cat5e or similar cable (Diagram 1).

If POE is not available, the link can easily be upgraded using a low-cost POE injector such as Veracity's OUTSOURCE (Diagram 2).

No set-up or network configuration is required, as OUTREACH Lite XT automatically sets up network speed, duplex and crossover on connection, and does not require an IP or MAC address.

Go further

If a network extension beyond 200 metres (656ft) is required, Veracity's OUTREACH Max XT may be installed to extend Ethernet and POE to OUTREACH Lite XT.
For example, a 300 metre (984ft)

connection between a POE switch and another network device can be achieved by fitting an OUTREACH Max XT at 100 metres along the cable, followed by 100m then an OUTREACH Lite XT, and up to 100m to the non POE networked end-point device.

For longer Ethernet runs, Veracity recommends LONGSPAN long distance point-to-point devices, which can achieve 100Base-TX connections with POE at up to 820m (2,690ft).

No restrictions

Because OUTREACH Max XT and OUTREACH Lite XT simply restore the network connection every 100 metres, the full (100Mbit/s) bandwidth of 100Base-TX Ethernet is maintained across the entire link. This maximises performance and transparency, with no risk of a reduced or unpredictable bandwidth, even at distances of several hundred metres or more.
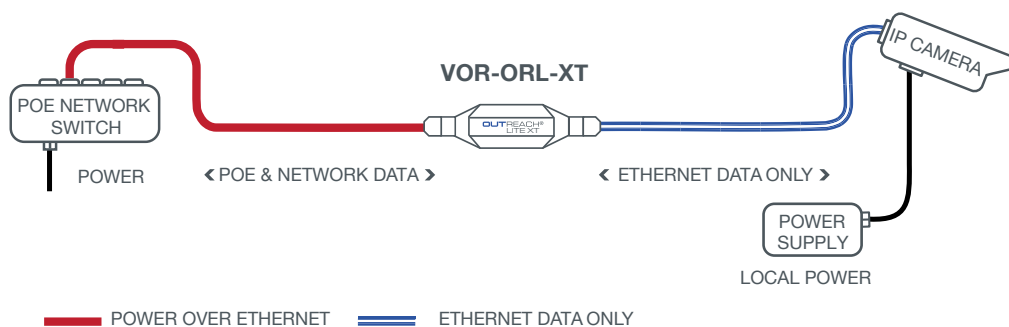
OUTREACH Lite XT APPLICATION DIAGRAMS

VOR-ORL-XT

POE NETWORK SWITCH

IP CAMERA

POWER

‹ POE & NETWORK DATA ›

‹ ETHERNET DATA ONLY ›

POWER SUPPLY

LOCAL POWER

━━━ POWER OVER ETHERNET ═══ ETHERNET DATA ONLY

Diagram 1. OUTREACH Lite XT is powered by POE, so it can double Ethernet range without requiring local power.

veracity

For more information, read Veracity's 'Long range Ethernet extension' white paper
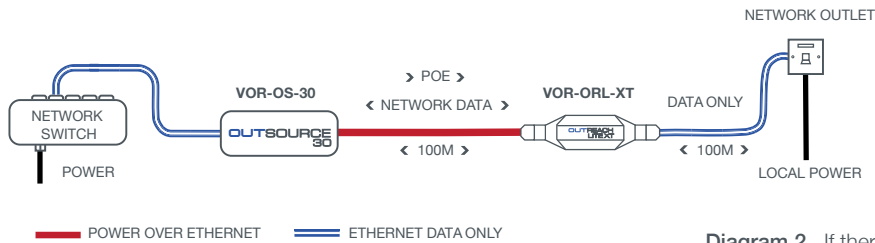

POWER OVER ETHERNET   ETHERNET DATA ONLY

Diagram 2. If there is no POE available, upgrade the link with Veracity's low cost POE injector OUTSOURCE 30.

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 IP66/67/ 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® LITE XT

POWER

Power consumption	1.3 watts via POE

POE STANDARDS

IEEE 802.3af POE (802.3at and 802.3bt compatible, but not required)
Class 2 powered device
No POE forwarding

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 183mm W 50mm H 30mm
Weight	104g [3.7oz], 126g [4.5oz] including plate
Mounting	2 or 4, 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, Ul, UKCA, RoHS
Environmental	IP66/67, 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-30	OUTSOURCE 30	30W POE injector with UK, EU or US power cable
VOR-OS-90	OUTSOURCE 90	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.