

EXTERNAL HI-POE ETHERNET EXTENDER  
**LONGSPAN®**  
 MAX XT



Application | LONGSPAN Max XT® provides LONGSPAN Max performance in an external weatherproof housing

## Maximum POE power and bandwidth over extreme distances for external IP cameras

LONGSPAN Max XT® camera provides maximum POE power and network distance capability in a robust external weatherproof housing

- | External version of LONGSPAN Max® camera
- | Long range point-to-point Ethernet over Cat5e or Cat6 cable
- | Unrestricted 100Base-TX with POE up to 820 metres
- | Delivers 60W at 250 metres, 40W at 390 metres
- | Sleek IP66/67/69 & Nema 4X/6 rated housing and cable glands
- | Smart POE power and diagnostic display for reliable installation
- | Includes wall or pole-mounting adaptor plate



# Robust weatherproof housing with integrated SAFEVIEW<sup>®</sup> diagnostics display

LONGSPAN Max XT camera provides long distance network connectivity with maximum POE to the IP camera in a simple-to-install package



The XT package includes three different compressible glands (black, green and red as above), for different network cable diameters, to ensure a tight seal.

## LONGSPAN Max for Maximum power

LONGSPAN Max<sup>®</sup> devices are high power versions of the successful LONGSPAN<sup>®</sup> long distance Ethernet transmission extenders. They support the 802.3bt standard which provides for the highest power permissible on standard network cable (90W). See the POE Reference Table opposite for classes and power levels.

Max versions deliver POE for even the most power-hungry external PTZ IP cameras at considerable distances.

## Unrivalled range

LONGSPAN products are designed to connect IP cameras at ranges of up to 820 metres (with Cat6 cable), supporting the 200Mbps aggregate bandwidth required for full-duplex 100Base-TX Ethernet. With its weatherproof housing, LONGSPAN Max Camera XT is designed to connect external IP cameras at long distances.

## Base and Camera Pairs

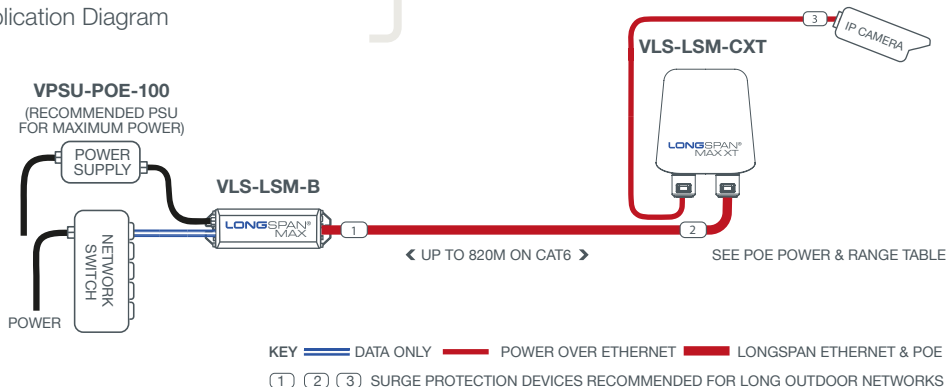
A LONGSPAN Max Base device is used with a LONGSPAN Max XT

camera device to achieve the LONGSPAN link and deliver POE to the IP camera itself (see Application Diagram below).

## External LONGSPAN

LONGSPAN Max XT has been designed to provide a reliable external housing solution at the camera end for any LONGSPAN connection and is compatible with any LONGSPAN Base unit. However, to achieve higher POE power delivery, it must be used with a LONGSPAN Max Base or Base 8 device.

## High Power POE over Cat5e or Cat6 Application Diagram



Any LONGSPAN Base unit (standard, Max or Base 8) may be used in conjunction with LONGSPAN Max XT camera. For maximum POE delivery, a LONGSPAN Max Base is recommended with a 100W PSU as shown.

As LONGSPAN Max XT is designed for external use, there is no direct DC power connection and it must be powered by POE through the network cable.



LONGSPAN MAX Base VLS-LSM-B

**LONGSPAN Max XT,  
camera external features**



*Hidden till lit 7 Segment LED Indicator shows power level and status*



*Rear Mounting Plate (removable for easy installation)*



*Cable Glands with Conduit Adaptor*



*Front View Installed Orientation*

**Designed for installers**

LONGSPAN devices self-configure for the best performance every time they are connected. No user setup, no DIP switch settings, and no system pairings are required.

Veracity's SAFEVIEW® smart LED display indicators display provides instant, visible confirmation of link status, power availability, and useful diagnostic information, from each device at either end of the cable.

In addition to Ethernet, POE and link status LEDs, LONGSPAN Max XT incorporates a seven-segment LED indicator for available POE power level and connection error codes.

The rear mounting plate has holes for wall-mounting and slots for pole-mounting with a band clamp. The Max XT housing slots onto the plate and can be fastened securely in place. Three sizes of cable gland sealing grommets are included, to cover network cable diameters of 4.7mm to 9mm.

The cable gland ends incorporate cleverly-designed conduit adaptors, so both metric and imperial sizes of flexible conduit can be fitted directly into the gland, protecting the cable and seal. It is compatible with various types, including spiral, liquid tight and plastic corrugated conduit with an outer diameter ranging from 20mm - 21.5mm

**Surge protection**

LONGSPAN devices have built-in surge protection, although for long external runs additional surge protection is strongly recommended.

**LONGSPAN Max XT POE Range Table**

POE DEVICE POWER	Cat6	Cat5e
71 WATTS	200m (656ft)	150m (492ft)
62 WATTS	235m (770ft)	180m (590ft)
51 WATTS	290m (950ft)	230m (754ft)
40 WATTS	390m (1,279ft)	310m (1,017ft)
25 WATTS	570m (1,870ft)	450m (1,476ft)

**POE Reference Table**

POE CLASS	IEEE STANDARD	POE POWER AT PSE	POE POWER AT PD
0	802.3af	15.4W	12.95W
1	802.3af	4W	3.84W
2	802.3af	7W	6.49W
3	802.3af	15.4W	12.95W
4	802.3at	30W	25.5W
5	802.3bt	45W	40W
6	802.3bt	60W	51W
7	802.3bt	75W	62W
8	802.3bt	90W	71.3W

PSE = Power Sourcing Equipment PD = Powered Device

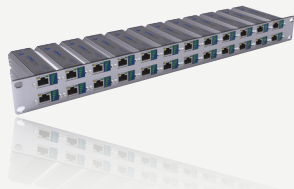
**LONGSPAN Max XT Data Range Table**

CABLE TYPE	Cat6	Cat5e
DATA RANGE	820m (2,690ft)	690m (2,263ft)

## TECHNICAL SPECIFICATION

LONGSPAN®  
MAX XT

<b>POWER</b>	
Device Power Consumption POE In (from Base)	Up to 2W (under maximum POE load) Maximum POE delivered over LONGSPAN link depends on Base output, cable distance and cable quality
POE Out (to Camera)	IEEE 802.3bt output
<b>LONGSPAN INTERFACE</b>	
Connector	RJ45 in a weatherproof gland
Cable	Cat6, Cat5e (3 sizes of grommet included for 4.7mm - 9mm cable diameter) Patch wiring recommended, other wiring auto-corrected
Rate	200Mbps (100Mbps full-duplex) up to 820 metres [2,690ft] (Cat6)
<b>ETHERNET INTERFACE</b>	
Connector	RJ45 in a weatherproof gland
Cable	Cat6, Cat5e (3 sizes of grommet included for 4.7mm - 9mm cable diameter) Patch or crossover, auto-detected
Rate	100Base-TX full-duplex with auto-negotiation
<b>LED INDICATORS</b>	
Ethernet RJ45	Yellow: Link/activity, Green: power good
LONGSPAN Link RJ45	Yellow: Link/activity, Green: 10/100Mbps
POE Power Level	P1 to P8 display code (indicating 5W to 70W POE available)
Error Status	E1 to E8 error code display (indicating as below)
	E1 POE power draw exceeded
	E2 POE too low, disabled
	E3 POE to Camera overload
	E4 POE to Camera short-circuit
	E5 POE Camera signature error
	E6 POE OK, no LONGSPAN link
	E7 Cable wiring error
	E8 Poor kit (connection refused)
<b>PHYSICAL/ENVIRONMENTAL</b>	
Dimensions	W 113mm, H 144mm (inc glands), D 69mm (incl. bracket) [ W 4.45in, H 5.67in (inc glands), D 2.72in (incl. bracket) ]
Weight	350g [ 12.35oz ] incl. mounting bracket
Operating Temperature	-40°C to 70°C [ -40°F to 158°F ]
Relative Humidity	85% non-condensing
Compliance	FCC, CE, RoHS, UKCA, IP66, 67, 69K, NEMA 4X, 6, BS EN 50121-4 (rail + metro)
<b>PRODUCT CODES</b>	
<b>VLS-LSM-CXT</b>	<b>LONGSPAN Max XT Camera device with external housing high power POE</b>
VLS-LSM-B	LONGSPAN Max Base device with high power POE
VLS-1P-B	LONGSPAN Base device with POE
VLS-LS-B8	LONGSPAN Base 8 device with 8 integrated LONGSPAN Base channels
VPSU-POE-100-UK/EU/US	100W 57V DC power supply with power cable for UK, EU or US



Up to 24 LONGSPAN Max Base devices can be mounted in a 1U rack space. Ask for VLS-1U.

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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.



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