LONGSPAN

LONG RANGE ETHERNET & POE

INSTALLATION MANUAL

veracity

FURTHER INFORMATION

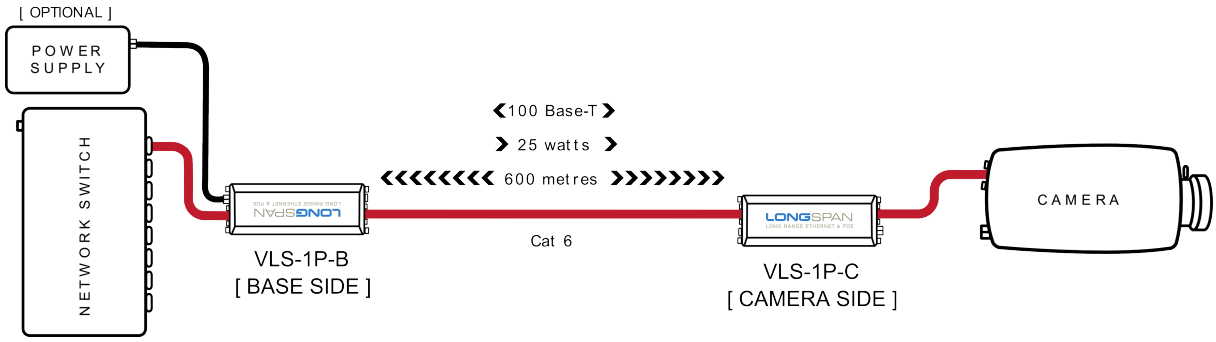
For more information including:

- Detailed range vs power and data rate tables
- Versatile rack-mounting and power supply options
- 1-pair, 2-pair and Ethernet over Coax applications

Please see the product datasheets and application notes at:

www.veracityglobal.com

APPLICATION DIAGRAM



A typical installation is shown above. LONGSPAN can deliver an unrestricted full-duplex 100Base-T connection and up to full-power POE Plus over 690m of regular Cat 5e cable or 820m of Cat 6, or a 10Base-T connection up to 1050m

An optional 57V DC power supply may be connected at the base end for maximum power and range, or as a simple alternative to a POE switch. It may also be connected at the camera side for local power sourcing and full POE Plus budget

For cables that are over 600m or have four or more joins (couplers, outlets, patch panels etc), on-site testing is recommended

LONGSPAN is full self-configuring, and features remote diagnostic LEDs and an extended temperature rating (-40C to 70C)

CONNECTIONS

LONGSPAN

Standard Cat 5e or Cat 6 cable and RJ45 connectors may be used

Patch (straight-through) wiring is recommended

Link setup and configuration is fully automatic

See application notes for 1or 2-pair installations

SAFEVIEW™

The maximum POE power available for connected devices is detected and displayed automatically

Diagnostic codes alert of any local or remote problems

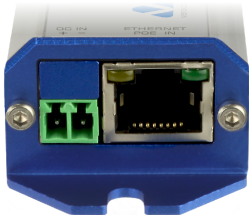
See overleaf for all LED details

POWER INPUT (optional)

Connect to a Veracity 57 volt DC power supply if required, observing the correct polarity

Rack-mount and individual supplies are available

POE power inputs are automatically disabled if DC power is connected



NETWORK and POE

Connect to any 10 or 100Base-T Ethernet compatible equipment

Supports patch and crossover cables

VLS-1P-B supports POE in if available

VLS-1P-C supports POE out if required

Both units are IEEE 802.3at/at compliant

DECLARATION OF CONFORMITY

FC

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE

We, Veracity UK Ltd, of Prestwick International Aerospace Park, 4 Dow Road, Prestwick, KA9 2TU, UK declare under our sole responsibility that the products:

VLS-1P-B (LONGSPAN base side unit) and VLS-1P-C (LONGSPAN camera side unit)

are in conformity with the essential requirements and other relevant requirements of the EMC Directive (2004/108/EC)

The products are in conformity with the following standards:

EN 55022:2006 including Amendment 1:2007 incorporating corrigendum No. 1
EN 55024:1998 including Amendment 1:2001 and Amendment 2:2003

Responsible person: Alastair McLeod, Managing Director

Issued: 3rd September 2012, Prestwick

LEDS

Please note that SafeView™ warning and error codes are very rarely displayed in typical installations, but they are made available to assist you to quickly resolve any installation issues that may occasionally arise

Ethernet RJ45 LEDs

 ON = Power good	 ON = Link FLASH = Activity

LONGSPAN RJ45 LEDs

 ON = 100Mbps FLASH = 10Mbps BLINK = No link	 ON = Link FLASH = Activity

The green LONGSPAN LED may blink quickly while connecting (for extremely long runs, it may take a few seconds to optimise the link)

SafeView™ POE Status (Green)

In normal operation, the SafeView™ LEDs will display the power available in flashing or steady green:

 5 10 15 20 25	POE power available for camera (or other POE-compliant device) in watts ON = POE enabled to camera FLASH = POE not enabled, no compliant device detected

The power level is displayed after the camera-side unit has powered up. Available power depends on the cable length, cable gauge, and the POE source used. If the displayed power is less than your camera requires, consider fitting a Veracity 57V power supply

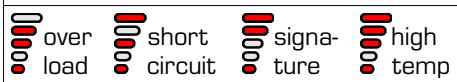
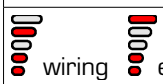
SafeView™ Warning Codes (Orange)

These codes are to alert you to unusual configurations or marginal performance issues that are acceptable for operation but may not have been intended. Most only flash for a few seconds on detection:

 5 10 15 20 25	POE power draw is approaching limit. Upgrade of power source is recommended
	Less than 5 watts is available for the camera. POE out will be refused
 Base Camera	Link speed has been downgraded as the device at the indicated end is 10Base-T only
	Link is operating in 1-pair or coax mode
 Base Camera Lite	POE over LONGSPAN not possible due to incompatible device as indicated
	Available power is insufficient to meet the camera's POE power class level
	POE has been enabled to connected device but no Ethernet link has been established
	Link performance may be <100% due to cable length, quality or conditon

SafeView™ Error Codes (Red)

If LONGSPAN detects an error or fault, a diagnostic code will flash red on the SafeView™ display:

 5 10 15 20 25	POE power draw has exceeded limit. Power supply must be upgraded
	Voltage too low, POE disabled. Check voltage and polarity of power supply
 over load short circuit signa-ture high temp	POE to camera refused or disconnected due to error as indicated
 over load short circuit signa-ture high temp	POE over LONGSPAN refused or disconnected due to error as indicated
	POE over LONGSPAN enabled but no link. Check cable length, wiring, and equipment
 wiring equipment	Cable wiring error / inferior equipment detected, connection refused