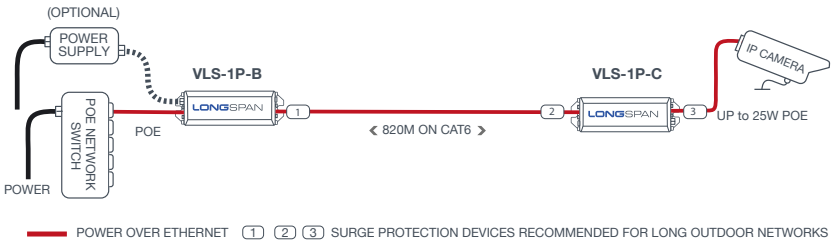
VLS-1P-B, VLS-1P-C

QUICKSTART GUIDE

LONG RANGE ETHERNET & POE
LONGSPAN®

veracity

LONG RANGE ETHERNET & POE



- LONGSPAN can deliver an unrestricted full-duplex 100Base-TX connection over 820m of Cat6 or over 600m of Cat5e network cable.
- On Cat6 cable, 25W of POE can be delivered at 600m or 15W at 800m.
- A 10Base-T connection can be achieved up to 1050m on Cat6. See LONGSPAN datasheet for details.
- LONGSPAN is fully self-configuring, featuring remote diagnostic LEDs and extended temperature rating -40ºC to 70ºC.

SURGE PROTECTION

- Any LONGSPAN network design for outdoor or external sections must incorporate the appropriate level of surge protection to avoid invalidation of warranty due to electrical storm damage. It is the responsibility of the system installer to ensure the correct level of surge protection.
  See also surge protection statement below and LONGSPAN Application Notes.

POWER INPUT

- The Base device (VLS-1P-B) may be powered by either POE-in or by an external Veracity 57V DC Power Supply (VPSU-57V-800).
- POE-in is provided by a POE network switch or by a POE injector.
- When using the external 57V DC PSU, it is essential to observe the correct polarity on the green 2-pin screw terminal connector. The correct polarity is shown on the product top label. Note that LONGSPAN will automatically disable the POE-in function when an external PSU is connected.
- Optionally, the Veracity 57V DC PSU may be used to locally power LONGSPAN at the camera end in order to provide maximum POE Plus power output to the camera whatever the LONGSPAN connection distance.

POE POWER BUDGET

- The Veracity 57V DC PSU will provide maximum range and POE power budget at the camera end.
- POE-in is not applicable as a power source when higher-power POE cameras are installed, i.e. 802.3at (POE Plus) 25 watt devices. In these cases, the Veracity 57V DC PSU should be used.

LARGER SYSTEMS

- For high channel count or high-density applications, LONGSPAN Base devices may be rackmounted in the VLS-1U fascia plate to support up to 24 devices in 1U. (See LONGSPAN datasheet)
- Veracity 57V DC Rackmount Power Supplies are available for larger installations with multiple base devices.

INSTALLATION NOTES

- Standard Cat5e or Cat6 cable and RJ45 connectors should be used.
- LONGSPAN supports both patch and crossover cables. Patch wiring (straight through connection) is recommended.
- LONGSPAN extended network link set-up and configuration is fully automatic.
- LONGSPAN Ethernet ports should be connected to 100Base-TX or 10Base-T Ethernet compatible equipment.
- LONGSPAN extended network ports should only be connected to other LONGSPAN extended network ports. Devices are always used in pairs.
- VLS-1P-B supports POE-in (unless powered externally). VLS-1P-C supports POE out (to compatible devices).
- LONGSPAN may also be used with other twisted pair cables* as follows:

  4-pair cable: 10Base-T /100Base-TX with POE with standard Cat5e / Cat6 pin-out.

  2-pair cable: 100Base-TX performance can be achieved with POE on 2 pairs, where pins 1 & 2 are used for data and pins 7 & 8 are used for POE.

  1-pair cable: 10Base-T/100Base-TX performance can be achieved on 1pair, where pins 1 & 2 are not crossed-over.
- When connecting LONGSPAN on cables over 600m or over cables with four or more joins (couplers, outlets, patch panels) on-site testing is recommended.

  **Stated performance will be achieved where twists/metre and cable length permits, otherwise LONGSPAN will default to 10Base-T performance.*
- Please refer to your regional Veracity Technical Support team for help & advice.

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 their own expense.

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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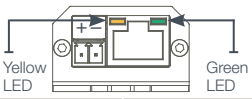
Veracity's Authorised Representative in the EU (as required by EU law for CE marked goods) is: Comply Express Unipessoal Limitada, StartUp Madeira, EV141, Campus da Penteada, 9020 105 Funchal, Portugal.

ETHERNET AND LONGSPAN LEDS

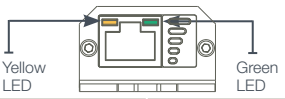
- The tables below show the Ethernet and LONGSPAN interface ports LED status on both Base and Camera devices.
- The green LONGSPAN LED may blink quickly while connecting.
- For extremely long runs, it may take a few seconds to optimise the link.
- For more detailed connection information please refer to the current LONGSPAN datasheet on **www.veracityglobal.com**

ETHERNET SIDE



ETHERNET LEDS	FUNCTION
RJ45 Green	**Power**
On	Power Good
RJ45 Yellow	**Link / Activity**
On	Link Established
Flash	Network Activity

LONGSPAN SIDE



LONGSPAN LEDS	FUNCTION
RJ45 Green	**Power**
On	100Mbps
Flash	10Mbps
Blink	No link
RJ45 Yellow	**Link / Activity**
On	Link Established
Flash	Network Activity

SAFEVIEW™ LEDS

- SAFEVIEW™ warning and error codes are very rarely displayed in typical installations.
- However, they can assist you to quickly resolve any installation issues that may occasionally arise.
- The maximum POE power available for connected devices is detected and displayed automatically.
- SAFEVIEW™ LEDs display status and diagnostic information for both the local and remote device.

SAFEVIEW™ GREEN POE STATUS LEDS

Green LEDs show POE power available for camera (or other POE-compliant device) in watts. The power level is displayed after the camera side device has powered up.

In normal operation, the SAFEVIEW™ LEDs display power available in flashing or steady green.

ON = POE enabled to camera.

FLASH = POE available but not enabled, no compliant device detected.

Consider fitting a Veracity 57V DC Power Supply if the power displayed is less than your camera requires.

SAFEVIEW™ RED ERROR CODE LEDS

If LONGSPAN detects an error or fault, a diagnostic code will flash red on SAFEVIEW™

POE power draw has exceeded limit. Power source must be upgraded.

Voltage too low, POE disabled. Check voltage and polarity of power supply.

POE to camera refused or disconnected due to error as indicated.

POE over LONGSPAN refused or disconnected due to error as indicated.

POE over LONGSPAN enabled but no link. Check cable length, wiring, and equipment.

Cable wiring error / inferior equipment detected, connection refused.

LONGSPAN DIMENSIONS