QUICKSTART GUIDE

veracity

ETHERNET TO FIBRE MEDIA CONVERTER
LIGHTSPAN® SC100

APPLICATION DIAGRAM ETHERNET TO FIBRE

VPSU-12V-U (LOW POWER)

POWER SUPPLY

NETWORK SWITCH

POWER

DATA

VLT-1N-SC100

◀ 2000M (1.24 MILES) ON FIBRE ▶

OPTICAL FIBRE CABLE
100BASE-FX FULL DUPLEX
125Mbps 1310nm

VLT-1N-SC100

IP CAMERA

POWER SUPPLY

VPSU-12V-U
(or share PSU with camera)

FIBRE   ETHERNET DATA ONLY
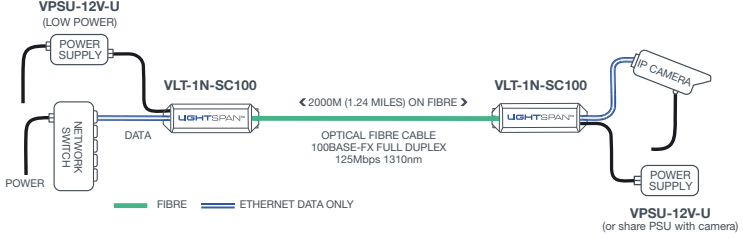
LIGHTSPAN can also be used in a 1U rack using VLS-1U. Ask Veracity for details of power supplies.

CONNECT LIGHTSPAN

| Connect the Fibre cable to the LIGHTSPAN at the Camera end.

| Connect an Ethernet cable from the LIGHTSPAN to the RJ45 port on the Camera.

| Connect the LIGHTSPAN to the Power Supply at the Camera end.

| Connect the Fibre cable to the LIGHTSPAN at the Switch end.

| Connect an Ethernet cable from the Switch to the RJ45 port on the LIGHTSPAN at the Switch end.

| Connect the LIGHTSPAN to the Power Supply at the Base end.

PRODUCT DIMENSIONS

23 mm

123 mm

36 mm
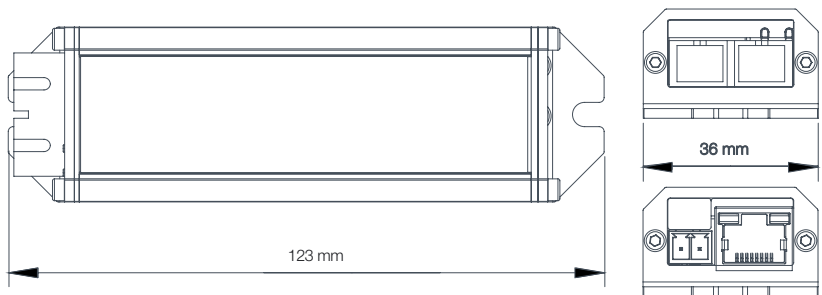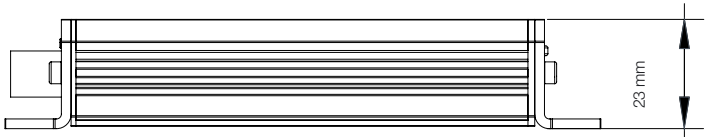
TECHNICAL SPECIFICATIONS

POWER

Connector	Detachable screw terminal
Supply voltage	8-57 volts DC or 20-28 volts AC
Supply current	100mA (12V), 50mA (24V)

FIBRE INTERFACE

Socket	SC Duplex
Cable	Multimode optical fibre (OM1 etc.)
Rate	125Mbps 100Base-FX
Wavelength	1310nm
Range	up to 2,000m [1.24miles]

ETHERNET INTERFACE

Connector	RJ45 copper Ethernet connector
Cable	Patch or crossover, auto-detected
Rate	100Base-TX full-duplex only

PHYSICAL | ENVIRONMENTAL

Dimensions (mm)	**L**123, **W**36, **H**23 (inc brackets)
Weight	100g / 3.52oz]
Compliance	FCC, CE, RoHS, UKCA, BS EN 50121-4 (rail)
Operating temperature	-10°C to 70°C [14 °F to 158°F]
Relative humidity	85% non-condensing
Mounting	Wall mounting brackets inc. 24 units/1U rackmount optional.

Power Connector (accepts 8-57V DC or 20-28V AC)

1. Yellow LED 2. Green LED
RJ45 Ethernet 10/100Base-TX
100Base-TX full-duplex only
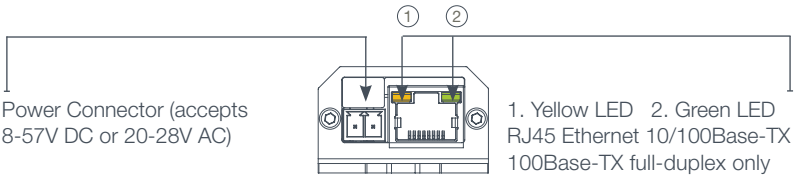
ETHERNET LEDS

RJ45 LED	FUNCTION
RJ45 Green	On = Power good
RJ45 Yellow	On = 100Base-TX link established

FIBRE LEDS & CONNECTIONS

Fibre Link LED - Green

Fibre Status LED - Yellow

SC Connector
(for connection to
Multimode optical fibre,
e.g. OM1)
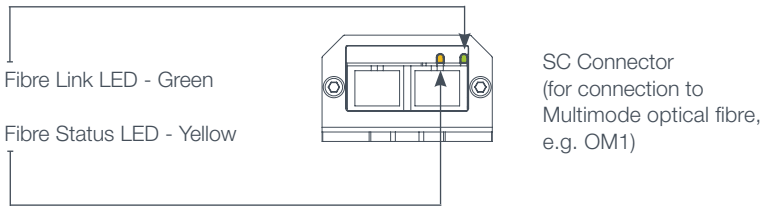
FIBRE LED	FUNCTION	GREEN	YELLOW	RED
STATUS LED	Status of Fibre connection	On = Power good	n/a	Fibre fault detected
LINK LED	Link status	n/a	On = 100Base-FX link established Flash = Network activity on fibre link	n/a

The transceiver is a Class 1 Laser device - which is safe under all normal operating conditions.

LIGHTSPAN SC100 view from above

Fibre end of LIGHTSPAN SC100
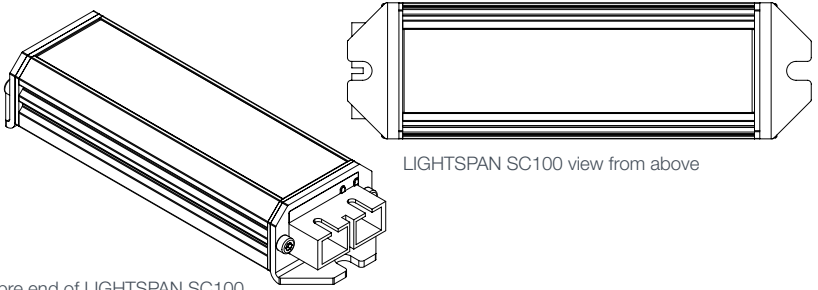
This Device Complies with Part 15 of the FCC Rules.

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 B 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.