

## ETH-LLAN Long Distance Ethernet Module

### Features

- 5.7-15 Mbps over single pair copper cable
- SHDSL and SHDSL.bis, 3 km or more
- Channel bonding for up to 2 pairs
- Point-to-Point, Point-to-Multipoint, Add/Drop, Ring applications
- Integrated 2 port Ethernet switch
- Robust metal housing



### Outline

The ETH-LLAN utilizes the SHDSL technology which allows data transmission at speeds up to 15 Mbps over a single pair of copper wire. In addition, ETH-LLAN supports DSL channel bonding for up to 2 copper pairs in order to achieve speeds to 30 Mbps.

An integrated 2 port 10/100BaseT Ethernet managed switch with enables the use of your distributed networked devices over simple, cost efficient, and site friendly copper cabling.

ETH-LLAN design is based on high grade industrial components and it is manufactured according to highest quality standards.

Combination of this quality with comprehensive functions providing maximum flexibility makes the ETH-LLAN the most efficient long distance cable link solution between any GeoSIG instrument or computer.

## Specifications ETH-LLAN

#### SHDSL

Standards	ITU-T G.991.2, G and G.bis
Line Code	TC-PAM16/32, Optional 4/8/64/128
Transmit Power	13.5 (An.A)/14.5 (An.B) dBm @ 135Ω
Number of Pairs	2, supporting channel bonding
Data Rate	upto 5.7 Mbps, Optional upto 15 Mbps
Overvoltage Protection	ITU-T Rec. K.20/K.21
Matching Cable	AWG 16-26, 0.14–1.5 mm <sup>2</sup>

#### Ethernet

Standards	IEEE-802.3, VLAN/QoS IEEE-802.1q/p
Number of Interfaces	2
Data Rate	10/100BaseT, Full/Half Duplex
Protocols	Data, Telnet, SNMP, WEB with MDI/MDI-X Auto Crossover, Auto Negotiation
Connector	RJ45 Female, 8 pin

#### Terminal

Standards	USB V2.0 full and low speed
Data Rate	12Mbit/s
Protocol	Master/Slave
Connector	USB Type Mini-B female connector

#### Power

Voltage	9-18 or 18-72 VDC or 90-260 VAC
Matching cable	AWG 12-24, Area 0.2–2.5 mm <sup>2</sup>
Consumption	Typically 4 W

#### Environment/Housing

Size	143 x 87 x 37 mm, Optional 153 x 87 x 37 with DIN rail mount
Weight	<500 g
Operating Temperature	-25°C to +70°C
Storage Temperature	-25°C to +55°C
Index of Protection	IP 51, Optional in IP65 external housing

