

Link

Ethernet

www.innova.no

The Innova Link Ethernet media converter is a flexible solution for integration of multiple high-speed Ethernet devices to any remotely operated system.

The system is designed to provide up to 4 channels of 100/1000 Base-T Ethernet, fully transparent. The system provides physical layer (L1) Ethernet, with no package management or switch functionality. This allows the system to be used with any Ethernet device, including high-speed devices such as multi beam sonars, which stream data directly on the physical layer.

The board provide a transparent Ethernet link; one device can be connected to each channel. Multiple devices can be added to each channel via a separate Ethernet switch.

Key features

The design is based on Innova's long experience with remotely operated vehicle systems and provides a wide range of features, including:

- 4 individual channels of 100/1000 Base-T Ethernet (physical layer), two fibre channels required per Ethernet channel
- Individual selection of 100 or 1000 Mbit Ethernet for each channel
- Single mode and multi mode fibre options
- Self test and diagnostics functionality (distributed to the AV board)
- Can be combined with other boards in the Link Family over single fibre with the use of CWDM optical multiplexers

BIDIRECTIONAL L1 ETHERNET FIBRE EXTENDER

4 ch. 100/1000 Base-T

One SFP per used channel

Speed is selected individually, by switch, per channel

Fully transparent (no L2, MAC etc.)

INPUT BOARD

Four SFP cages

100/1000 Base-T connection – RJ45

Board size: 100 mm x 100 mm

Voltage: 6 – 12 V

Typical idle power consumption: 660 mA @ 12 V
(4 ch. active)

Operating temperature range: -20 °C to 70 °C
*SFP temp. range may be different

OUTPUT BOARD

Four SFP cages

100/1000 Base-T connection – RJ45

Board size: 100 mm x 160 mm

Voltage: 6 – 12 V

Typical idle power consumption: 660 mA @ 12 V
(4 ch. active)

Operating temperature range: -20 °C to 70 °C
*SFP temp. range may be different

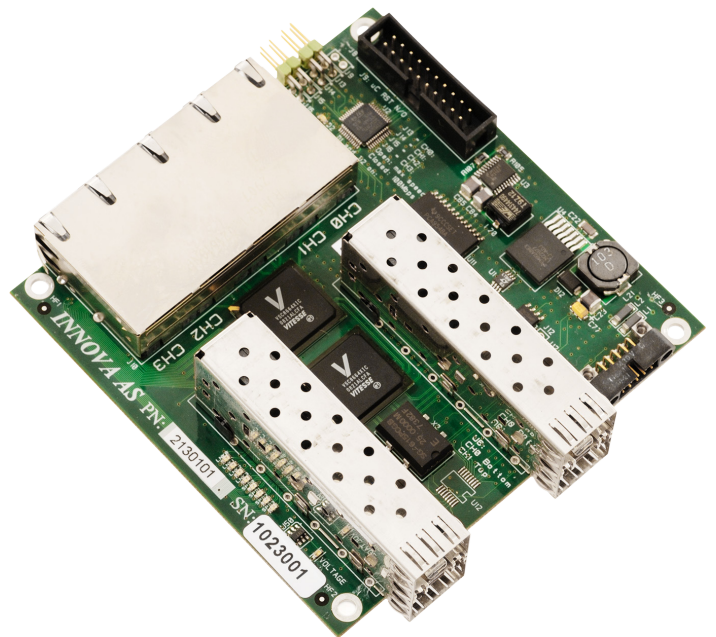
PART NO.

21 30 101 Ethernet Base-T 4 ch. Input, Standard

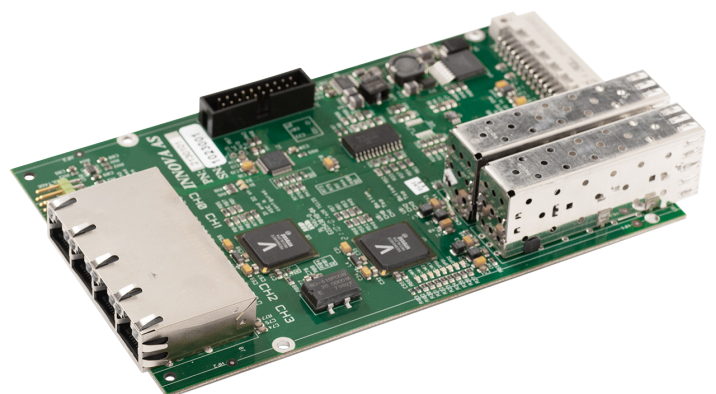
21 30 301 Ethernet Base-T 4 ch. Output

All the boards in the Link family are designed to be mounted into a rack where boards can be removed separately. A backplane distributes power and diagnostics signal to all boards in the rack.

The output boards can be mounted into a topside rack, including backplane, power supply, and user interface.



Ethernet Base-T₄ ch. Input



Ethernet Base-T₄ ch. Output