



# LINK™

## Ethernet

[innova.no](http://innova.no)

Part number: 2130101 Ethernet Base-T 4 ch. Input, Standard  
2130301 Ethernet Base-T 4 ch. Output

**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

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-T 4 ch. Output*