

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 100/1000Base-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 multibeam sonars, which stream data directly on the physical layer.

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 100/1000Base-T Ethernet (physical layer). Two fibre channels required per Ethernet channel
- Individual selection of 100 or 1000 Mbit Ethernet for each channel

- Pressure tolerant electronics and optics option
- 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 with the use of CWDM optical multiplexers

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.

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.

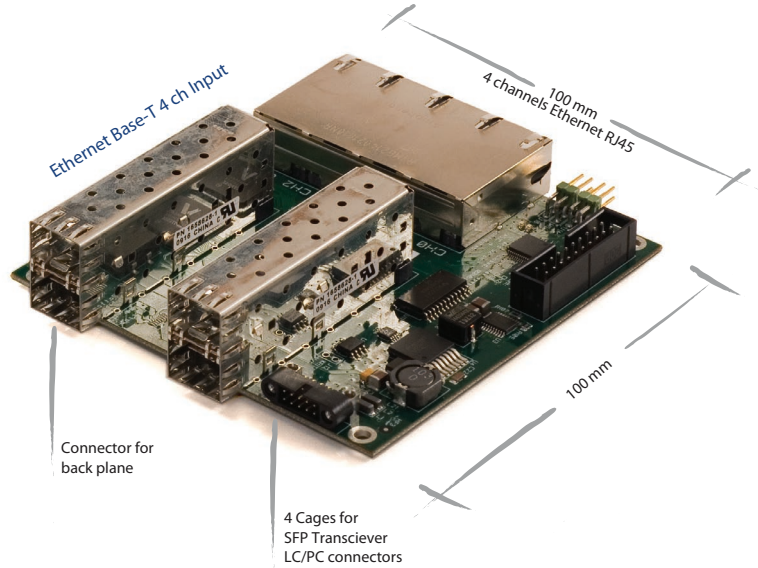
A version of the boards and optics are available for operation in oil-filled, pressure compensated environments. Typical applications for this version are for use in sub-sea systems or in other harsh environments.

Bidirectional L1 Ethernet fibre extender

- 4ch of 100/1000Base-T
- One SFP per used channel
- Speed is selected individually, by switch, per channel
- Fully transparent (no L2, MAC etc)

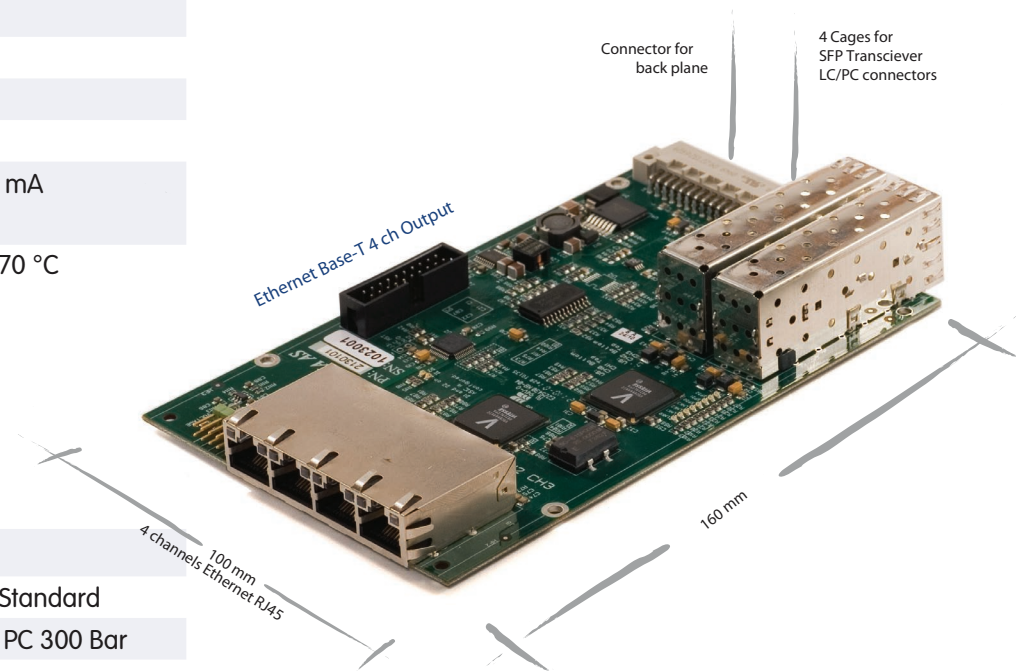
Input Board

- Four SFP cages
- 100/1000Base-T connection – RJ45
- Board size: 100mm x 100mm
- Voltage: 6 – 12 V
- Typical idle power consumption: 660 mA @ 12V, 4 ch active
- Operating temperature range: -20 – 70 °C
*SFP temp range may be different
- Two versions of Input boards:
 - Standard
 - Pressure compensated oil (PC) 300 Bar



Output Board

- Four SFP cages
- 100/1000Base-T connection – RJ45
- Board size: 100mm x 160mm
- Voltage: 6 -12 V
- Typical idle power consumption: 660 mA @ 12V, 4ch active
- Operating temperature range: -20 – 70 °C
*SFP temp range may be different



Part no

- 21 30 101 Ethernet Base-T 4 ch Input, Standard
- 21 30 201 Ethernet Base-T 4 ch Input, PC 300 Bar
- 21 30 301 Ethernet Base-T 4 ch Output