LINK™

AV and Serial Communication MK II

innova.no

Part number: 2110102 (Input) & 2110302 (Output)

The Innova Link AV video and serial multiplexer is the core system in Innova's fibre optic product family. The system provides video and serial lines over a single fibre, as well as diagnostics interface for the other products in the Link family.

The flexible and modular design aims to meet the requirements of all types of remotely operated systems, from small observation vehicles to full survey spreads. This flexibility also makes it easy to upgrade older systems to increase capacity and bandwidth in a cost-efficient manner.

The system consists of a motherboard with video, optics and diagnostics interface, and extension boards for additional video and serial data channels. All video and serial data are transmitted over a pair of wavelengths.

The AV board has 6 on board analogue video channels and extension connectors for up to 4 extension boards with additional video and data channels.

Key features

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

- Up to 8 channels of high-quality analogue video

- Up to 36 channel of serial data channels

- Serial channels can be galvanic isolated by using an Extension Board

- All video channels are fully AC coupled

- Extended diagnostics data and activity indicators

- Single mode and multi-mode fibre options

- Can be combined with other boards in the Link Family over single fibre with the use of CWDM optical multiplexers

Preliminary version No. 02

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Note: We accept no liability for any printing errors or changes in specification.

ANALOGUE VIDEO & SERIAL COMM. SYSTEM

- 6 Ch NTSC or PAL on Input- and Output board
- Four extension board connectors (1x Video and 3x Serial)
- Diagnostic available for all boards
- Sampling at 12.5 MHz, BW 5 MHz, 10 bit
- Latency < 10µS

The output board is designed to be mounted into a rack where it can be removed separately. A backplane distributes power and diagnostics signal to all boards in the rack.

The input board can be mounted into a rack as well, but not into a standard rail system.

INPUT BOARD   (P/N: 2110102)

- One SFP cage
- Video connection: Radial MCX
- Board size: 100 mm x 100 mm
- Voltage: 6 – 30 VDC
- Typical idle power consumption: 530 mA @ 12 VDC
                                    (Excl. Ext. boards)
- Operating temperature range: -20 °C to 70 °C
  *SFP temp. range may be different

AV 6 ch. Input

OUTPUT BOARD   (P/N: 2110302)

- One SFP cage
- Video connection: Radial MCX
- Board size: 100 mm x 160 mm
- Voltage: 6 – 30 VDC
- Typical idle power consumption: 750 mA @ 12 VDC
- Operating temperature range: -20 °C to 70 °C
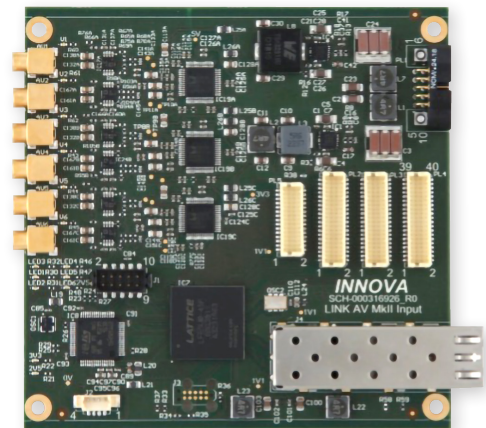 *SFP temp. range may be different

EXTENSION BOARDS

Currently, extension boards are available with:

- 2 additional channels of AV
- 12 isolated channels of RS-232, 115 kbps
- 2 isolated channels of RS-485 Half duplex, 115 kbps
- 5 channels RS232, 2 channels RS232/RS485 and 1 Trigger. All isolated.
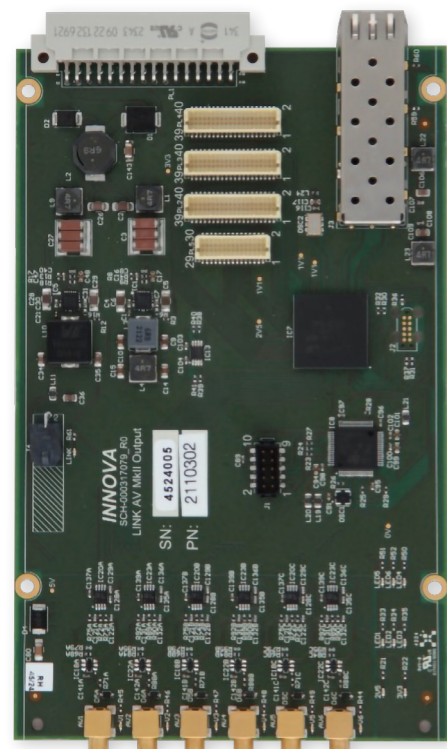
In addition, custom extension boards can be developed.

AV 6 ch. Output

Preliminary version No. 02

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