

Signal Isolation Module - 8 Ch V1

innova.no

Part number: 3809101

The Innova Signal Isolation Module - 8 Ch provides the possibility to galvanically isolate signals and power outputs without affecting the signal integrity. It is designed to operate in pressurized environments to 4000 msw.

The main function is to provide a larger system the functionality to galvanically isolate channels individually and effectively. The design allows the unit to be installed in pressurized environment in oil filled enclosures.

The board enhances fault-finding capabilities during subsea operations with this unique I/O channel isolation feature. This invaluable functionality allows users to swiftly identify and address ground faults in external I/O units, ensuring seamless maintenance and optimal system performance.

Key features

- 8x Isolated channels
- Short circuit detection
- Input protection
- Load voltage range 12 to 24 VDC

Remote control is possible via Modbus RTU (RS485 or RS232).

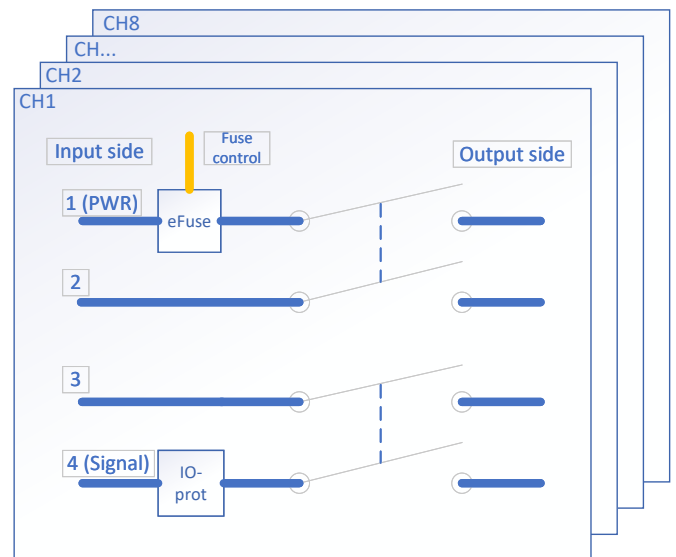
Several units can be controlled over a single RS485 network by daisy chaining feature.

This version of the board offers reduced wiring by sharing input power for both relay channels and onboard electronics.

TECHNICAL DATA

8x Relay channel/port

- Each channel has 4 poles
- (1) PWR: One lane is protected with an electronic fuse.
 - Maximum input/output voltage: 28 VDC
 - Current limit: 0.5 A
- (4) One lane with input protection, intended for analogue signals. (Maximum current 30 mA)
- (2 & 3) Two lanes without any protection. (Rated current 2 A)
- Each channel will detect faults from protection circuits.
- Each channel can be disabled and isolated individually.
- Each channel will automatically isolate if a short or fault is detected.
- Improved protection on inputs and outputs.
- Continues 70 mA reverse current on each power output.



SIZE AND MOUNTING INTERFACE

- Size (L x W x H): 136 mm x 86 mm x 15 mm
- Mounting: 6 x M3 holes

ENVIRONMENTAL

- Pressure: 4000 msw
- Temperature: - 20°C to + 50°C

TERMINALS / CONNECTORS

- Main power input: 43025-0200
- Backup power input: Molex 43025-0400
- RS232: Molex 206461-0800
- RS485: Molex 206461-0800
- 4x Relay output channels: Molex 206461-0800
- 4x Relay input channels: Molex 206461-0400

SUPPLY

- Voltage: 24 VDC (10 to 30 VDC)
- Idle current: 20 mA @ 24 VDC
- Supply monitoring
 - Input voltage
 - Short circuit detection for each channel.

COMMUNICATION

- 1x RS232
- 1x RS485
- Protocol for both interfaces: Modbus RTU