



# 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).

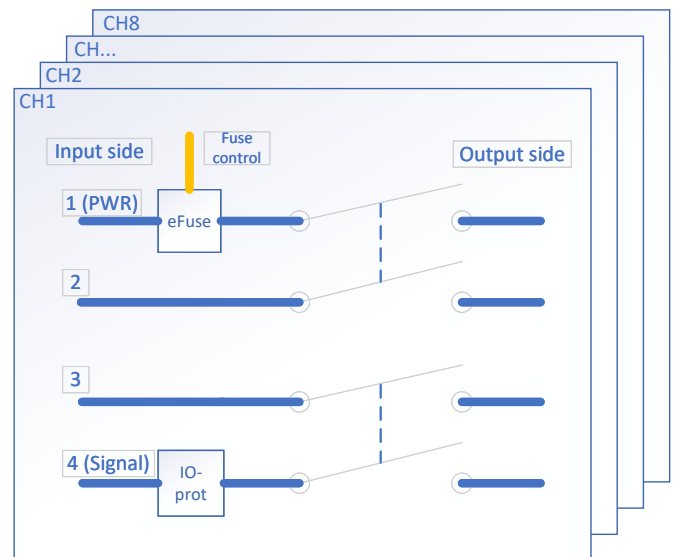
Several units can be controlled over a single RS485 network by daisy chaining feature.

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.

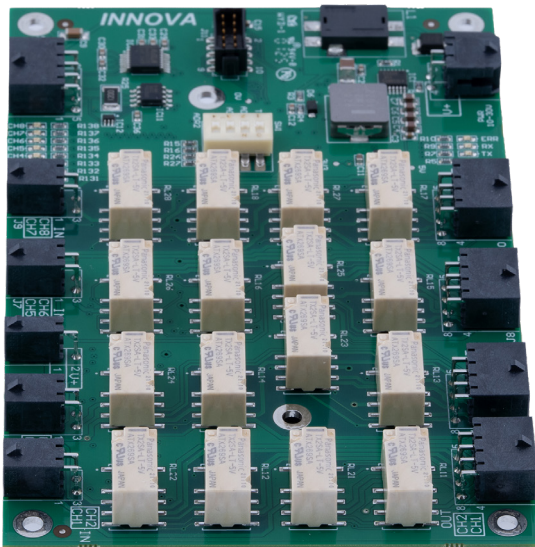


## SIZE AND MOUNTING INTERFACE

- 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