



Remote IO Module

innova.no

Part number: 5000909

The subsea remote IO module is a plug-and-play communications hub for interfacing sensors and measurement devices to a subsea network. It represents an ideal way to build a robust, high capacity sensor/device network, subsea.

The IO module is a compact, oil-filled pressure compensated unit containing embedded IO electronics with multiple high-speed high resolution data channels for interfacing to subsea sensors and measurement devices.

The unit reads digital and analogue signals and presents measurement data to a host or client system via Modbus over Ethernet or RS485 serial line. The unit also distributes 24 VDC power to the external sensors and devices.

Key features

- 16 analogue input channels, 16-bit resolution
- 4 digital input channels with pulse counter
- 16 connectors for external devices
- Ethernet expansion port
- Modbus RTU expansion port
- Ethernet and RS485 serial uplink to client system (Modbus TCP and RTU)
- Water ingress sensor
- Designed for 3000 m water depth

ENVIRONMENTAL DATA

- Design life (maintainable): 20 years
- Continuous submerged operation: Minimum 6 weeks
- Design temperature range: -18 °C to 40 °C
- Operation temperature range: -18 °C to 40 °C
- Storage temperature range: -18 °C to 50 °C (storage temperature above 0 °C is preferred)
- Water depth rating: 3000 msw
- Supply voltage: 24 VDC +/- 10 %

ELECTRICAL

- Compensator: External
- Oil volume: Approx. 3,7 liters
- Relief valve pressure: 1,0 bar
- Charge volume: 66 %
- Oil grade: Mobil DTE 10 Excel 32 (recommended)
- Interface: 3/8" Parker medium pressure
- Relief valve interface: G 3/8"
- Air bleed / drain & fill interface: G 3/8"

DIMENSIONS AND WEIGHT

- Diameter: 365 mm
- Length (incl. electrical connectors): 166 mm
- Weight in air (oil filled): 25 kg
- Weight in water (oil filled): 20 kg

