



# Remote IO Module

[www.innova.no](http://www.innova.no)

**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: (storage temperature above 0 °C is preferred)	-18 °C to 50 °C
Water depth rating:	3000 msw
Supply voltage:	24 VDC +/- 10 %

## 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

## COMPENSATION SYSTEM

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

