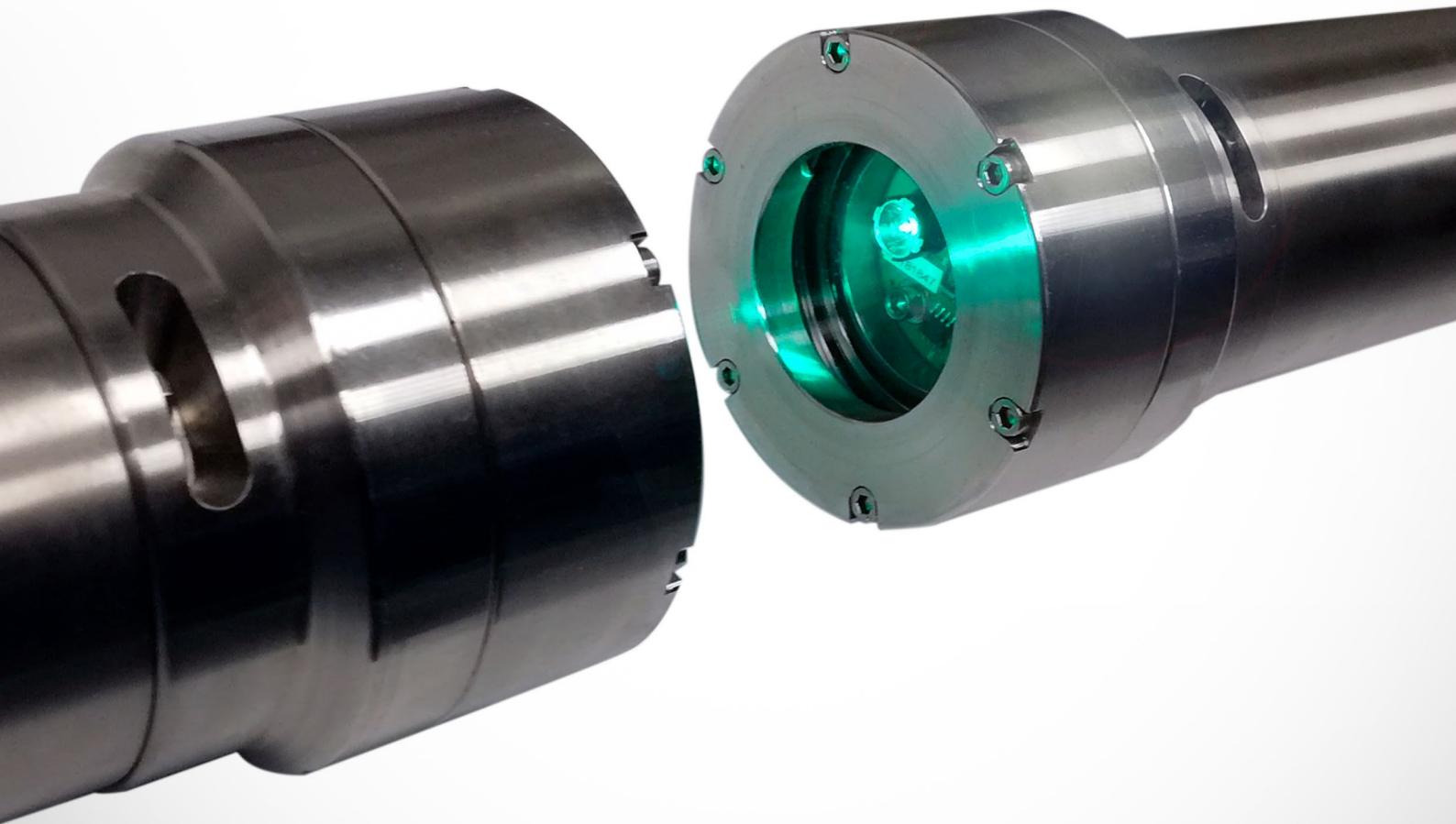


Subsea Optical Modem

AQUAmodem[®] Op2

The AQUAmodem[®] Op2 creates a wireless optical link to subsea instruments, allowing operators to communicate with deployed equipment without recovering it to the surface. Used as a paired system, one modem remains connected to the subsea instrument while the ROV brings the second unit into alignment, giving operators a transparent RS232 link for monitoring, control and data download.

Using cyan visible light, the AQUAmodem[®] Op2 provides a focused, high-speed communication path for subsea data access. The system manages link maintenance and error handling automatically, giving operators cable-like control of compatible instruments for status checks, data retrieval and operating mode changes while the equipment remains subsea.



KEY FEATURES

- Wireless optical link to deployed subsea instruments
- Interrogation, control and data download
- Transparent RS232 link for cable-replacement operation
- Automatic link management and error handling
- High-speed wireless data transfer
- RS232 serial interface compatibility
- 3,500 m depth rating

APPLICATIONS

- Hydrotest monitoring
- Real-time subsea data viewing
- Subsea instrument status checks
- Data download without instrument recovery
- Subsea instrument interrogation and control

TECHNICAL SPECIFICATIONS

Interface	RS232 (RS485 optional)
Protocol	Transparent link, with cable replacement functionality
Baud rate	115,200 baud
Transmission type	Digitally coded telemetry with error detection
Data throughput*	10.2 kBytes/s
Light band	Cyan visible light
Operating range	Typically 1 m to 2 m, depending on environment
Maximum depth	3,500 m
Temperature	Operating: -5°C to 40°C Storage: -40°C to 65°C
External power	ROV unit: 9 VDC to 36 VDC Subsea unit: 6.5 VDC to 32 VDC
Serial wake-up	ROV unit as standard, optional on subsea unit
Optical wake-up	ROV unit Subsea unit
Dimensions	285 mm length x 72 mm maximum diameter 60 mm main housing diameter
Weight	4 kg in air 3 kg in water
Material	316 stainless steel with Perspex window
ACCESSORIES	
ROV cable	5 m unterminated ROV-to-modem cable
Test cable	Optical modem, power and communication cable
ROV handle	Fishtail handle for ROV manipulator, with cable strain relief

*Measured by transmitting 2,000-byte packets at 250 ms intervals. Data throughput is calculated as an average of 100 transmissions.

ALSO AVAILABLE



HYDROskid™
Standalone hydrotest monitoring system



SURFACE TESTER
Optical communications tester for deck use



AQUAmodem® Op2L
Neutrally buoyant model for divers or small ROV's - 500 m depth rating