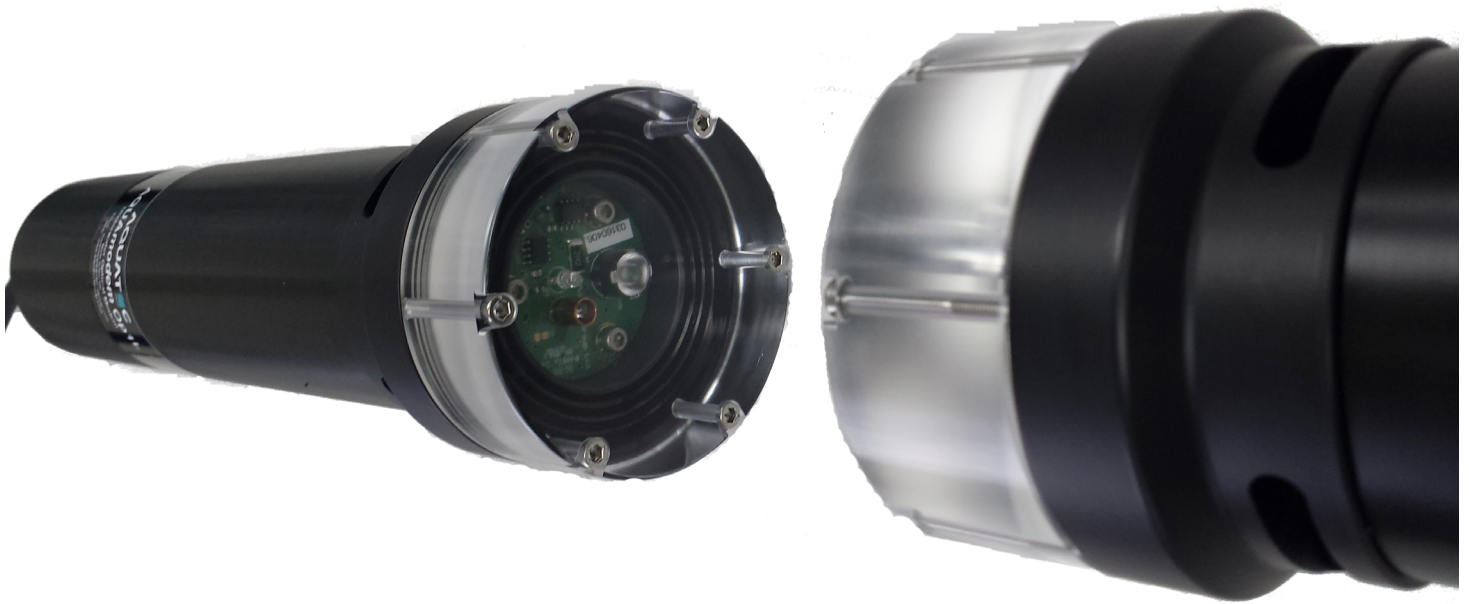**DATASHEET**

AQUA*modem*™ Op2L

Lightweight subsea optical modem

KEY FEATURES

- Short range interrogation, commanding and data download from subsea instruments
- Create a wireless serial data link
- Compatible with instruments with RS232 serial interfaces (RS485 compatibility optional)
- Depth rated to 500 m

- New higher speed data transfer
- Ideal for small ROVs and divers

- Compatible with the AQUA*logger* 310TY advanced turbidity logger and AQUA*logger* 310PT temperature and depth logger

APPLICATIONS

- Ocean observation and monitoring
- Real time data view
- Instrument status checks
- Subsea data download
- Redeploying instruments subsea

MODEM PACKAGES

- Complete modem set - including modem pair, subsea battery pack, and ROV, surface & subsea cable sets
- ROV side modem set - including ROV and test cables
- Subsea modem set - including subsea cable set and battery

Technical specification

Environmental	Operating Depth	500 m
	Temperature	Operating: -5°C to 40°C Storage: -40°C to 65°C
Telemetry	Light band	Cyan visible light
	Operating Range	Typically 1 m depending on environment
	Transmission type	Digitally coded telemetry with error detection
	Typical Maximum Data Throughput*	10.2 kBytes/s
	Addressing	Up to 3 unique addresses, plus a universal / broadcast address
Mechanical	Dimensions	285 mm long by 72 mm max diameter; main housing diameter 60 mm
	Weight	~1 kg in air, ~0 kg in water
	Material	Acetal with Perspex window
Power	External Power	ROV unit 9 – 36 Vdc Subsea unit 6.5 - 32 Vdc
Wake up	Serial Wake Up	On receipt of RS232 serial data for subsea unit Optional on receipt of RS232 serial data for ROV unit
	Optical Wake Up	On receipt of optical interrogation
Interface	Electrical	RS232 levels
	Protocol	Any format – transparent link (link deals with the communication protocol)
	Baud rate	115200 baud

* Measured by transmitting packets of 2000 bytes, sending a packet every 250 ms. An average of 100 transmissions was used to calculate the speed.

Options

AQUA*modem* Op2L - complete package	Pair of optical modems, including external battery pack, cables – Y cable, ROV cable, test cable
AQUA*modem* Op2L - ROV side package	Single optical modem, including ROV cable, test cable
AQUA*modem* Op2L - Subsea package	Single optical modem, including external battery pack, Y cable

Individual modems and accessories also available

Compatible with

AQUA*logger* 310TY

Also available

AQUA*modem* Op2