

ROV-based Data acquisition unit AQUAlogger®110



The AQUAlogger® 110, central to Aquatec's LEAKlog® system, offers dual-channel precision for real-time leak monitoring. It streamlines subsea leak detection with versatile ROV/computer connectivity, independent sensor controls, and compatibility with diverse sensors. Packaged in robust housing, it requires only an external 24V power supply, ensuring efficient and accurate data transmission to surface PCs via AQUAtalk™ software.

Specifications

Product	ROV-based Data Acquisition unit, AQUAlogger®110
Country of origin	UK
Manufacturer	Aquatec Group Ltd.

Key features

- Dual-mode: absolute and gradient temperature
- High sensitivity to millidegree changes
- Depth rating to 3,000 m
- Real-time data via AQUAtalk™ software
- ROV deployment compatibility

Applications

- Leak detection in subsea pipelines
- Monitoring thermal plumes in oceanography
- Temperature gradient analysis for engineering studies

Specifications

Material	Anodised aluminium
Depth rating	3.000 meter
Communications	RS232 and RS485
Supply voltage	-+24 Vdc
Dimensions	76 mm (2.99 in) diameter x 268 mm (10.55 in) length
Weight	1.9 kg (4.18 lbs)

Optimised connectivity and precision

Efficient interface and power supply

The AQUAlogger® 110 simplifies connectivity, interfacing directly with ROVs and surface computers to ensure a streamlined operation. Powered by a +24 Vdc input, with a tolerance for 19-36V to accommodate typical ROV power supplies, it supports both RS485 communication for long cables and non-multiplexed ROVs, and RS232 for shorter cables or when integrated with an ROV multiplexer. This versatility ensures compatibility across a wide range of operational scenarios.

Dual-Channel Flexibility

Equipped with two independent analogue acquisition channels (0 – 5 Vdc), the AQUAlogger® can connect to a variety of sensors, allowing simultaneous monitoring of two different data streams. Each channel is complemented by sensor power (12 Vdc) and dual Sensor Gain or Mode controls, providing the operator with precise control over sensor sensitivity and data acquisition parameters.

Streamlined Design and Operation

Housed in a robust single enclosure, the AQUAlogger® features an 8-way connector for power and communications and two 6-way connectors for seamless connection to fluorometer cables or other sensors. Designed for real-time monitoring, each channel is equipped with independent gain control, enabling adjustment across four gain modes for optimal sensor performance.