BLACK BOX

Aquaprobe data converter

The Aquaread BlackBox is a data converter that allows any model of Aquaread water quality probe to be interfaced directly to a third party processing, control or logging device. With a choice of industry standard digital and analogue interfaces, the BlackBox offers a versatile and cost effective data conversion solution utilising the advanced range of Aquaread multiparameter probes.

Features

- Compatible with all ten Aquaprobes and the AquaPlus Optical DO Probe
- Integral barometric pressure sensor for depth and DO correction
- Outputs Depth, Turbidity, pH, ORP, EC, RES, DO, TDS, SAL, SSG, Temperature, Barometric Pressure along with all ISE and optical auxiliary electrodes[†]
- SDI-12 Digital Interface
- Modbus (RS485) Digital Interface
- Programmable 4-20mA current loop output
- Low current consumption
- Wide operating voltage range
- Rugged aluminium construction with strong fixing flange
- LED status indicator
- Sealed to IP67
- Suitable for long term unattended deployment

Specification

Input Voltage	14V – 28V DC
Input Current	28mA (includes current drawn by attached Probe)
Protection Class	Ip67 (must not be submerged due to barometric pressure sensor)
Dimensions	140mm x 65mm x 30mm (5.5" x 2.6" x 1.2")
Weight	400g (14oz)
Connections	Waterproof Probe socket & 2x1M (3ft) screened power/data cables**
Fixing	Aluminium flange with four 5mm (3/16") mounting holes
Digital Interface	User selectable between SDI-12 and Modbus (RS485)[‡]
Analogue interface	Eight programmable voltage outputs and one 4-20mA current loop*
Update rate	All data is refreshed every 2 seconds

Aquaread reserves the right to alter specifications without notice.
[†] Dependent upon specification of Aquaprobe selected.
[‡] SDI-12 and Modbus interfaces do not support probe calibration protocols. Probes must be calibrated using an Aquaread Aquameter prior to use with the BlackBox.
** Custom cable lengths up to 100M (300ft) are available at the time of order.