

MIDAS BathyPack



The MIDAS BathyPack is one of Valeport's premier MIDAS products, using state of the art sensors to generate precision Sound Velocity and Density profiles for highly accurate depth and height data. The simple top-end PC software, BathyLog, also allows all profile data to be used to monitor and correct multiple miniIPS pressure sensors, giving you the complete picture with one integrated sensor suite.

Specifications

Product	MIDAS BathyPack
Country of origin	UK
Manufacturer	Valeport Limited

Sensors

Conductivity

Robust, accurate inductive cell. Digital sampling technique means no more field calibrations

Range	0 - 80 mS/cm
Accuracy	±0.01 mS/cm
Resolution	0.002 mS/cm

Temperature

Fast response PRT with guard

Range	-5 to +35 °C
Accuracy	±0.005 °C
Resolution	0.002 °C

Pressure

Revolutionary temperature compensated piezo-resistive sensor; all the performance of a resonant quartz sensor but with long term stability and better durability. No more oil!

Range	10, 30, 100, 300 or 600Bar
Accuracy	±0.01% range
Resolution	0.001% range

Sound Velocity

Valeport's digital time of flight sensor - the most accurate SV sensor in the world.

Range	1375 - 1900 m/s
Accuracy	±0.02 m/s
Resolution	0.001 m/s

Calculations

Density	EOS-80 Equation of State of Seawater
Salinity	PSS78 Practical Salinity Scale
Depth	UNESCO Pressure/Depth Relationship or Simplified "Mean Density" Correction

Altimeter

BathyPack accepts a variety of industry standard devices. Typical specification

Frequency	500kHz
Range	0 - 50 m (6000m depth rating)
Resolution	1mm

Data Acquisition

Data Sampling	2Hz
Lookup Table	6000 points (1m res. @ max depth)
Sampling Sequence	Synchronous

Communications

The instrument will operate by direct communications with PC before and after deployment. It also operates in real time, with a choice of communication protocols for a variety of cable lengths, all fitted as standard and selected by pin choice on the output connector:

Standard RS232 RS485	Up to 200m cable, direct to serial port via USB adaptor Up to 1000m cable, addressable half duplex comms
Baud Rate	2400 - 115200
Protocol	8 data bits, 1 stop bit, No parity, No flow control

Electrical

External power	12 - 30VDC
Power	Nominal 4W max
Connector	Subconn MCBH10F

Physical

Materials	Titanium housing, polyurethane, composite and polycarbonate sensor components
Depth rating	6000m (may be limited by pressure sensor)
Instrument size	88mmØ x 425mm long
Weight	6kg
Shipping	74 x 35 x 27cm, 13kg

Software

System is supplied with BathyLog Windows based PC software, for instrument setup and data display. BathyLog is licence free.

Ordering 0608002	MIDAS BathyPack in titanium housing with BathyLog software, 0.5m altimeter input pigtail, 3m interface lead, manual and transit case.
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Specify

Required pressure range
Altimeter requirements

Associated Products

0760001 miniIPS Pressure Sensor