



MIDAS BathyPack



The 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.

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: $\pm 0.01\%$ 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

Altimeter

BathyPack accepts a variety of industry standard devices. Typical specification:

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

Calculations

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

Electronic

Data Acquisition

Data Sampling: 2Hz
Lookup table: 6000 points (1m res. @ max depth)
Sampling sequence: Synchronous

Data Output

Protocol: RS232, RS485 & RS422 fitted as standard
Baud Rate: 2400 - 115200 (8,1,N)

Power Requirements

Voltage: 12 - 30vDC
Power: nominal 4W max

Physical

Materials: Titanium housing, polyurethane, composite and polycarbonate sensor components

Depth Rating: 6000m max (may be limited by pressure sensor)
Dimensions: 88mmØ (90mm max) x 425mm
Weight: 6kg
Shipping: 74 x 61 x 37cm, 14kg

Ordering

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

Specify:

- Required pressure range
- Altimeter requirements

Associated Products

0760001 miniIPS Pressure Sensor
0608003 19" Rack Mount data display (touch screen)
0608007 8 channel USB/serial interface unit