miniIPS - Intelligent Pressure Sensor

The Valeport miniIPS is a precision underwater pressure sensor; 0.01% accuracy, a titanium housing and a choice of pressure ranges make it a cost effective solution for offshore engineers, vehicle pilots, and other operators who require highly accurate depth information in real time.

The miniIPS is also compatible with Valeport's MIDAS BathyPack and BathyLog software, allowing the depth data to be continually updated for Density variations in the water column.

Sensor

The pressure sensor fitted to the miniIPS is a revolutionary temperature compensated piezo-resistive sensor, which delivers the performance previously only available from a resonant quartz sensor at a more cost-effective price.

It also brings the added advantages of long term stability, allowing longer intervals between calibration, and a smaller and more robust construction; complex and vulnerable arrangements of diaphragms and oil filled capillaries & reservoirs are therefore no longer necessary.

Type:	Temperature compensated piezo-resistive
Range:	10, 30, 100, 300 or 600 bar
Accuracy:	±0,01%FS
Resolution:	0,001% FS

Data Acquisition

Sampling:	Continuous, burst average or data on demand.
Data Rate:	1, 2, 4 or 8Hz continuous, down to 1 sample per day bursting
Units:	Secondary calibration function allows conversion of dBar pressure units into metres or feet, or other required units.
Tare:	Tare Function allows correction for atmospheric offset.

Physical

Housing:	Titanium (6,000 m Rated)
Size:	40mmØ x 185mm (including connector)
Weight:	<1 kg (air)
Connector:	Subconn MCBH6F (titanium)

Communications

Output:	RS282 & RS485 fitted as standard
Protocol:	4800 to 115200 baud (8,1,N)
Format:	ASCII text Data format compatible with Valeport`s BathyLog software, allowing real time depth correction using Density Profiles

Power Requirements

Input:	9 – 30vDC
Power:	less than 0,4W

Available for special customer requirements on request

- miniIPS fitted with 0.01% piezo-resistive sensor (specify range). Supplied with BathyLog software, interface lead, operating manual and transit case. (0760001)

- Calibration adapter to allow users to perform their own calibration against a deadweight tester. (0760002)