



miniIPS2

Intelligent Pressure Sensor

RS232 & RS485

The miniIPS2 is a precision underwater pressure sensor with an accuracy of 0.01%FS and can provide a data rate of up-to 100Hz. Key to this design is the unique interchangeable pressure module that allows customers to change pressure transducers for maximising operationally specific depth requirements. This innovative pressure module, with integral calibration, can be changed in a couple of minutes without opening the instrument and is available in 0.01% accuracy, available in 10, 20, 30, 50, 100, 200, 300, 400 and 600 BAR variants.

This is a cost-effective solution for offshore engineers, vehicle pilots, and other operators who require highly accurate depth information in real time, combined with the knowledge that testing to the standard ISO 13628-6:2006 (Q2 Levels) for vibration and shock has been attained. The miniIPS2 is compatible with Valeport's MIDAS BathyPack and BathyLog software, allowing the depth data to be continually updated for Density variations in the water column.

DATA SHEET

Product Details



BATHYMETRY



CONFIGURE
SOFTWARE



STANDARD RS232/485

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Interchangeable Pressure Sensor Module

The pressure sensor module fitted to the miniIPS2 is a temperature compensated piezo-resistive sensor, which delivers the performance previously only available from a resonant quartz sensor. 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, 20, 30, 50, 100, 200, 300, 400 or 600 BAR |
| Accuracy | ±0.01% FS |
| Resolution | 0.001% FS |

Data Acquisition

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|------------------|--|
| Sampling | Continuous, burst average or data on demand |
| Data Rate | 1, 2, 4, 8, 16, 32, 64 or 100Hz in continuous mode and as low as 1 sample per day in burst mode |
| Units | Secondary calibration function allows conversion of dBAR pressure to the required units, such as BAR, metres or feet |
| Tare | Tare function allows correction for atmospheric pressure |

Physical

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|------------------------------|---|
| Housing | Titanium (6000m rated) |
| Size | 40mmØ x 196.5mm (including connector) |
| Vibration & Shock | Tested to ISO 13628-6:2006 (Q2 Levels) |
| Weight | 0.75kg (air) |
| Connector | SubConn type MCBH6F (titanium) (other connectors available on request, but subject to lead times) |
| Shipping | 42 x 32 x 22cm, 3kg |

Communications

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|-----------------|--|
| Output | RS232 & RS485 fitted as standard |
| Protocol | 4800 to 115200 baud, (8,1,N) |
| Format | ASCII text Data format compatible with Valeport's DataLog X2 and BathyLog software, allowing real time depth correction using Density Profiles |

Power Requirements

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|--------------|-----------------------|
| Input | 9 – 28V DC (isolated) |
| Power | < 0.25W (12V x 25mA) |

Software

Valeport Configure has been introduced to simplify the configuration of instruments prior to deployment. It can be used instead of DataLog X2.

Ordering

| | |
|--------------------|--|
| 0760012-XXX | (where XXX is the pressure rating of transducer in BAR) miniIPS2 Fitted with: <ul style="list-style-type: none">• 0.01% piezo-resistive sensor Supplied with: <ul style="list-style-type: none">• Interface lead• Operating manual and transit case (standard transit case will also hold up to three extra pressure modules) |
| PTSA-XXX | Additional interchangeable pressure modules |
| Note | XXX denotes pressure transducer range. Select from 10, 20, 30, 50, 100, 200, 300, 400 or 600 BAR |