



# miniIPS1

The miniIPS1 is an evolutionary upgrade over the miniIPS, presenting industry proven functionality that is equally reliable and trusted. The miniIPS1 now benefits from improved power consumption, isolated power and comms.

The miniIPS1 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 supplied as an OEM for sensor integration to other manufacturers.

The miniIPS1 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



ECHO SOUNDERS  
AND BATHYMETRY



BATHYLOG & DATALOG  
X2 SOFTWARE

### Pressure Sensor

The pressure sensor fitted to the miniIPSI is a 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.

The miniIPSI can be re-calibrated by customers using a Class A deadweight tester.

<b>Type</b>	Temperature compensated piezo-resistive
<b>Range</b>	10, 20, 30, 50, 100, 200, 300, 400 or 600 Bar
<b>Accuracy</b>	±0.01% FS
<b>Resolution</b>	0.001% FS

### Data Acquisition

<b>Sampling</b>	Continuous, burst average or data on demand
<b>Data Rate</b>	1, 2, 4, 8 or 16Hz continuous, down to 1 sample per day bursting
<b>Units</b>	Secondary calibration function allows conversion of dBar pressure units into metres or feet, or other required units
<b>Tare</b>	Tare Function allows correction for atmospheric offset

### Physical

<b>Housing</b>	Titanium (6000m rated)
<b>Size</b>	40mmØ x 185mm (including connector)
<b>Weight</b>	<1kg (air)
<b>Connector</b>	SubConn MCBH6F (titanium) (other connector available on request)
<b>Shipping</b>	36 x 29 x 16cm, 2kg

### Communications

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

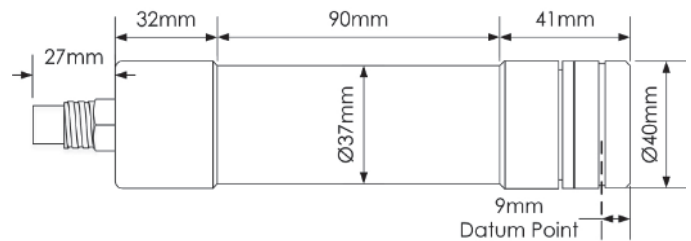
### Power Requirements

<b>Input</b>	9 – 28V DC (isolated)
<b>Power</b>	less than 0.4W (40mA @ 12V DC)

### Ordering

<b>0760023-XX</b>	miniIPSI Fitted with: <ul style="list-style-type: none"><li>• 0.01% piezo-resistive sensor</li></ul> Supplied with: <ul style="list-style-type: none"><li>• Interface lead</li><li>• Operating manual and transit case</li></ul>
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**Note** XX denotes pressure transducer range. Select from 10, 20, 30, 50, 100, 200, 300, 400 or 600 Bar



### Datasheet Reference: miniIPSI | July 2023

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