



MODUS IPS



The MODUS IPS is a precision underwater pressure sensor, developed to provide offshore engineers and vehicle pilots with highly accurate depth information in real time. Fitted with industry standard resonant quartz pressure sensors, the MODUS IPS has a choice of RS232 and RS485 outputs to allow easy interface, and the software provided will display and log absolute and differential depths. The MODUS IPS 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.

Sensors

Pressure (standard)

Type: Resonant Quartz (Digiquartz or Quartzonix)
Range: 65, 100, 200 or 500 psi
Accuracy: $\pm 0.01\%$ FS
Resolution: 0.001% frequency. Note that frequency resolution does NOT equal pressure resolution, which depends on sample rate:

| Frequency | 1Hz | 2Hz | 4Hz | 8Hz |
|---------------------|--------|---------|-------|--------|
| Pressure Resolution | 0.001% | 0.0015% | 0.05% | 0.015% |

Pressure (option)

Type: Strain Gauge Type
Range: 100, 200, or 1000 dBar
Accuracy: $\pm 0.04\%$ FS
Resolution: 0.005% FS

Temperature (option)

Range: -5°C to $+35^{\circ}\text{C}$
Accuracy: $\pm 0.005^{\circ}\text{C}$
Resolution: 0.001°C

Physical

Housing: Acetal (1000m rated)
Size: 88mm \varnothing x 275mm (Quartz Type)
 88mm \varnothing x 210mm (Strain Gauge Type)
Weight: 1.5kg (air), 0.1kg (water)

Communications

Output: RS232, RS422, RS485 fitted as standard
Protocol: 2400 to 115200 baud, (8,1,N)
Units: dBar, metres or feet

Data Acquisition

Sampling: Continuous, burst, profile or data on demand.
Output Rate: 1, 2, 4 or 8Hz continuous, down to 1 sample per day bursting

Power Requirements

Input: 9 - 30VDC
Power: less than 0.6W

Ordering

- 0440001** Modus IPS fitted with 0.01% resonant quartz sensor (specify range). Supplied with DataLog 400 software, interface lead, operating manual and transit case
- 0440002** Modus IPS fitted with 0.04% strain gauge sensor (specify range). Supplied with DataLog 400 software, interface lead, operating manual and transit case
- 0440003** Optional Temperature Sensor