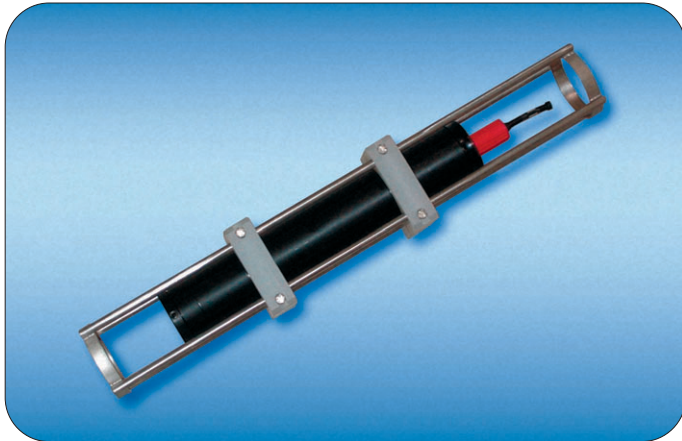




MIDAS WLR



The MIDAS WLR is a precision water level recorder, designed for use in both autonomous or real time deployments. Fitted with an industry standard resonant quartz pressure sensor and accurate PRT temperature sensor, the MIDAS WLR features a variety of operating modes from rapid 8Hz continuous sampling to power saving burst modes for long term monitoring. The instrument is available in both shallow water acetal or deep water titanium versions, and is suitable for fixed or in-line mooring, with a variety of communications options built in.

Sensors

The MIDAS WLR comes with a choice of pressure sensors to suit the depth requirement and budget of the operator, including the industry standard Quartzonix and Digiquartz types.

Low Pressure (Quartzonix)

Ranges: 65, 100, 200 or 500psi

Accuracy: $\pm 0.01\%FS$

High Pressure (Digiquartz)

Ranges: 1,000 to 10,000psi

Accuracy: $\pm 0.01\%FS$

Strain Gauge Pressure Option

Ranges: 20 - 6000dBar

Accuracy: $\pm 0.04\%FS$

Temperature

Range: $-5^{\circ}C$ to $+35^{\circ}C$

Accuracy: $\pm 0.005^{\circ}C$

Data Acquisition

The MIDAS WLR has a wide choice of sampling regimes and rates. The user may choose to sample at 1, 2, 4 or 8 Hz, and may choose to log/output data continuously, on demand through external instrumentation, or most commonly in a burst pattern, where data will be measured for a short period of time before the instrument enters sleep mode. This mode conserves both battery power and memory capacity. Additionally, and in common with all Valeport "400 series" instruments, the MIDAS WLR features a conditional sampling mode, whereby the output from a chosen sensor is monitored regularly, but logging does not occur until the data values pass a customer set trigger level. All measured data may be averaged on board, together with standard deviation values.

Memory

Standard memory is 8Mbyte FLASH, which is capable of storing approximately 1.4million records. The memory is non-volatile, so data and configuration are retained in the event of power failure.

Power

Nominal power consumption at 12v is 55mA during sampling, dropping to less than 0.1mA during sleep mode. A typical regime of 40 second sampling every 10 minutes will allow a life in excess of 90 days with alkaline cells, extending to over 200 days with Lithium cells. External power input is 9 - 30VDC.

Communications

All Valeport "400 series" instruments are fitted with RS232, RS485 and RS422 communications as standard, chosen by pin selection on the output connector. Baud rate is selectable from 2400 to 460,800 (PC serial port permitting). RS232 comms are suitable for cable lengths up to 200m, extending to 1000m for RS485/RS422. FSK modem comms are optionally available for real time data output over 6km cable. A USB to RS232 adaptor is also optionally available, further enhancing the possible communications options.

Software

Instrument is supplied with DataLog 400 PC software, which is used to setup the instrument, upload memory and display data in tabular and graphical formats. The secondary calibration function allows data to be given in pressure units, metres or feet, or any other user programmed units.

Ordering

- 0730033** MIDAS WLR in acetal housing with resonant quartz (0.01%) pressure sensor (specify range up to 500psi). Supplied with mooring cage, 3m RS232 comms lead, transit case, software and manual.
- 0730034** MIDAS WLR in titanium housing with resonant quartz (0.01%) pressure sensor (specify range up to 10,000psi). Supplied with mooring cage, 3m RS232 comms lead, transit case, software and manual.
- 0730035** Strain gauge pressure option for either of above units (0.04%, specify range up to 6,000dBar).
- 0400005** FSK communications option, for use with up to 6000m cable.
- 0400050** USB to RS232 adaptor

As part of our policy of continuing development, we reserve the right to alter at any time, without notice, all specifications, designs, prices and conditions of supply of all equipment.

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