

Portable Tide Gauge/ Water Level Recorder

Model 740



FEATURES

- Over 2 years capacity
- User setable sampling
- Delay start feature
- Easy to install
- Radio data telemetry option
- Robust titanium transducer housing
- PC setup software
- Spreadsheet compatible data
- Small, compact unit

DESCRIPTION


The Model 740 is a small, cost effective Tide Gauge / Water Level Recorder, specifically designed for applications where the user simply requires an accurate record of water height, rather than the more sophisticated capabilities of the larger Model 710 system.

Comprising a corrosion resistant Titanium housed vented pressure transducer, connected via a 20m cable to an above surface battery powered logger, the Model 740 is simple to install in temporary and permanent sites, and requires minimal maintenance.

The logger is powered by 4 "D" type cells, which, together with the 128kbyte memory allows operation

for over 900 days at a 20 minute cycle with 10 second bursts.

The burst length, cycle time, delay start time and site information is set using the PC software package supplied. This simple program also allows the battery voltage to be checked, the time and date to be set, and the recorded data to be extracted in a spreadsheet compatible format.

The Model 740 is also available with a UHF radio telemetry link, to provide data in real time, and to allow full instrument setup and data extraction from a remote PC, using the above mentioned  software.

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SPECIFICATION

TRANSDUCER

Type:

Vented strain gauge, with stainless steel mounting bracket.

Range:

Standard 10dBar (approx 10m), with 20m cable. Other ranges and lengths available.

Accuracy:

±0.1% Full Scale.

Calibration:

Held within logging unit.

Dimensions:

18mm diameter x 80mm.

LOGGING UNIT

Housing:

Black anodised aluminium. Waterproof to IP67 (0.5m for 30 secs), but transducer connector includes vent to atmosphere. The electronics are sealed from vent.

Power:

4 "D" cells within housing. Alkaline cells provide power for over 900 days at 20 minute sampling with burst length of 10 secs.

Memory:

128kbyte solid state, allowing over 65,000 data points. Equivalent to over 900 days at 20 minute sampling. New data file created every time unit is switched on by user.

Sampling:

Raw data sampled at 4 Hz and data logged as average over burst. Burst length selectable between 1 and 60 seconds in 1 second steps. Time between burst starts [cycle time] selectable between 5 and 1440 minutes (24 hours) in 5 minute steps.

Switching:

Delay start time set by PC. Switch on by fitting waterproof plug or comms lead to comms port.

Resolution:

Data logged to 1mm resolution. Raw data sampled at 14 bit (1:16384) resolution.

Comms:

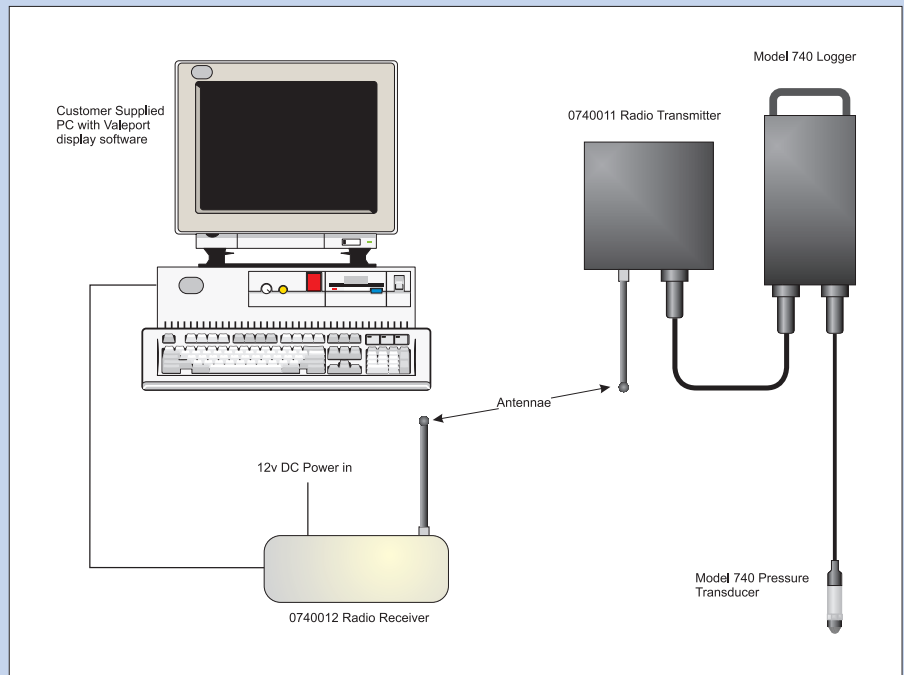
RS232 via 3m cable to PC, or via 1m cable to radio unit.

Dimensions:

Housing 47mm x 110mm x 235 mm.

Weight:

1.7kgf (approx) including batteries.



RADIO

Frequency:

Standard single frequency transceiver in UK unlicensed band (458.525 - 458.925 MHz). Optional synthesised transceiver with selectable frequency within above band.

Power output: 500mW.

RS232 output: 4800 baud, 8,1,N.

Aerials:

Standard: Transmitter ¼ wave 'rubber duck'. Receiver 3dB omni-directional.

Optional: Transmitter 3dB omni-directional.

Power input:

Receiver: 12vDC input, 120mA receive, 410mA transmit.

Transmitter: takes power from Model 740, or from external 12vDC supply. 0.04mA quiescent, 120mA receive, 410mA transmit.

Receiver:

Desktop style anodised aluminium box.

Size: 200mm x 180mm x 90mm.

Connectors: to antenna, 12vDC input & RS232 output.

Transmitter:

IP67 Black anodised aluminium box.

Size: 200mm x 200mm x 70mm.

Connectors: to antenna, Model 740 & external power supply.

ORDERING

0740006:

Portable water level recorder set c/w 1 Bar Titanium vented transducer, wall mounting bracket and 20m cable, electronics/logger in rugged anodised aluminium housing with batteries. Supplied with DOS based VLRLog™ software and operating/instruction manual.

0740011:

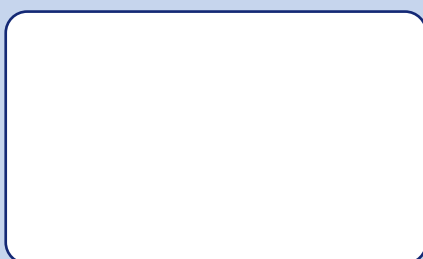
Single frequency UHF radio transceiver (remote station) in IP67 housing. Supplied with 'rubber duck' antenna and comms lead to Model 740.

0740012:

Single frequency UHF radio transceiver (base station) in desktop housing. Supplied with 3dB omni-directional antenna, 10m cable, 12vDC input lead and RS232 output lead (9 way D type).

0740013:

Selectable frequency synthesised radio transceivers (one required for each station).



Valeport manufactures a wide range of oceanographic and hydrometric instruments including self-recording and direct reading multi-parameter current meters, CTD probes, electromagnetic current meters, tide gauges, open channel flow meters, optical instruments, water and plankton samplers, winches, sinker weights, connectors and accessories.

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