

## MultiLog 2

### Multi-channel Data Logger

MultiLog 2 is our multi-channel data logger for water network and environmental monitoring applications.

Ideal for a wide variety of specialised applications including monitoring flow and pressure at critical sites on the network such as PRV's, DMA meters, and pumping stations, MultiLog 2 is supplied with up to 4 channels and switch output options to drive third party devices.

MultiLog 2's metal housing provides robustness and IP68 protection, whilst an external battery connector is included as standard, allowing HWM Global battery packs to be added for more frequent dial-in regimes. Additional features include secondary, pseudo and fast (25Hz) logging capabilities, a full range of alarms (Hi/Lo, Profile, Rate of Change) and multiple telemetry capabilities.



### Applications

Typical applications in Clean water include logging commercial meters, DMA meter logging, network pressure logging, PRV Logging (2 pressure and 1 flow), and multi input 4-20ma, mv and digital requirements.

Multiple 4-20ma, voltage, status (input/output) and serial inputs make Multilog the ideal choice for logging and triggering 3rd party sensors.

Multilog is also available with Wits 1.3 protocol.

### Key Features

- **Telemetry:** Multilog 2 includes the full range of latest generation cellular based telemetry solutions. 5G/LTE-M or NBIoT or 4G/LTE Cat-1.
- **Serial input option:** for connection to digital meters, SonicSens 3 level sensor, Modbus, SDI12, RS232, Badger/Sensus/Neptune serial meter interfaces.
- **4 channel logging:** 8 or 16 channels available on request.
- **Fast logging:** primary logging to 1 second as standard - 25hz for transient events.
- **Alarm:** full alarm functionality.
- **Robust:** rugged die cast aluminium case.
- **True readings:** true max and min flow and investigation of pressure spikes.
- **Pulse interval timing:** smooths reading of infrequent pulses.
- **External antennas:** support improved signal strength (contact HWM Global for more information).
- **Local data download:** 10 pin military plug connected to laptop or desktop PC.
- **Fully waterproof:** the IP68 rating has been tested at 10m depth over a 24 hour period.
- **Long-term monitoring:** 5 year battery life.
- **Optional outputs:** replicate inputs or trigger on alarm, allows operation of third party sensors, e.g. water samplers.
- **WITS 1.3 protocol:** support for WITS 1.3 delivering direct integration with WITS SCADA systems.



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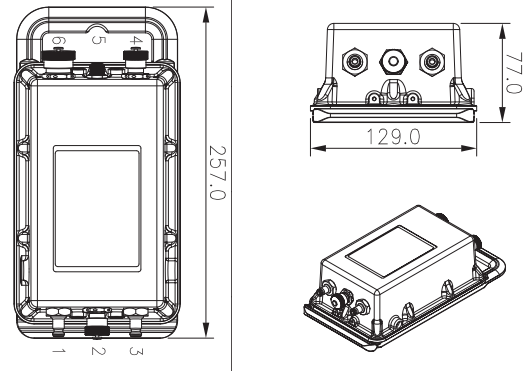
## Multi-channel Data Logger

### Input Options

- Digital:** Uni- or bi-directional pulse  
Up to 64 pulses per second.
- Analogue:** Internal Pressure Transducer.  
External pressure.  
4-20mA (optional).  
0-20 bar / 0-200 meters head / 0-300psig, 0.1% repeatability / please note that the logger is calibrated to 10 bar as standard.  
(20 bar calibration must be specified at time of order if required).  
Leak noise, 0-10V, 0-1V, temperature or 4-20 mA variants.
- Serial Input:** Proprietary serial interface for SonicSens/RadarSens level monitors and third party devices such as Serial Meters using Modbus, SDI12 and RS232.

### Communication

- Local:** Hi-speed USB for connection to hand held devices, Windows tablets, laptop or desktop PC.
- Internal Cellular Modem:** Cellular modem supporting 5G/NB IoT or 4G/LTE Cat-1.
- Accelerated Dial-in:** Dial-in rate is increased if alarm situation is triggered. Logger can accelerate dial-in at alarm level for multiple applications - including Level, Flow, Pressure and other alarmed sensors.



### Specifications

- Logging Frequency:** Variable logger sample rate from 1s to 24hrs.
- Logger/ Site ID:** 7 alphanumeric characters. Readable factory set serial number in firmware.
- Dimensions:** 257H x 129W x 77D (mm) - 10.1" x 5.0" x 3.0"
- Construction:** Die-cast aluminium enclosure, powder-coat spray painted.
- Weight:** 1.6kg (3.5lb).
- Operating Temp:** -20 to +60°C (-5 to +140°F).
- Ingress Protection:** IP68 submersible.
- Power:** Typical 5 years (depending on settings and signal condition). External power connection for battery box and third-party devices.
- Memory:** Standard recording: 2 million readings (optional up to 64 million readings and expandable HC SD card).
- Fast Logging (secondary channel):** Secondary, fast channel supports sampling up to 25 Hz and record average, minimum, maximum, standard deviation or time interval between pulses (for data smoothing).
- Pulse Interval Timing:** Count and Event logging modes independent for both channels. Pulse Interval Timing helps to smooth readings (e.g. leakage) in low flows by counting the time between each pulse (event mode).  
This is available in addition to totalling the pulses (count mode).
- Alarms:** Multiple alarm options including Rate of Change, Profile, Minimum Night Flow and Threshold. 16 alarms per logger. Can be programmed to auto dial up to 8 telephone numbers on alarm. Over 16 alarms per logger depending on channel configuration.