CLEAN WATER

MultiLog LX2
Data Logger

Fcs
Fluid Conservation Systems

LX2 is a the highly versatile battery powered telemetry data logger with remote SMS/GPRS telemetry. Benefitting from the new 'unilog' platform and processing capability the LX2 has many powerful features.

New features include a convenient serial input enables the LX to be connected easily to a wide range of sensors and meters, including the SonicSens ultrasonic level sensor, Permalog+ leak noise loggers and Modbus compatible sensors and meters.

Key Features and Benefits

- **Pulse interval timing:** smooths reading set times of infrequent pulses e.g. minimum night flow

- **Low cost:** Frequent transmission at low cost. Up to 2 x digital flow inputs and 1 x analogue input (internal pressure, external pressure or 4-20ma)

- **Flexible:** Optional 25Hz & window logging

- **Fast logging:** Logging to 1 second – as standard

- **Multiple recordings:** Can record mixture of min, max, average or spot values in each sample interval

- **Detailed readings:** True max and min flow and investigation of pressure spikes as standard

- **Serial input:** For connection to digital meter, SonicSens level sensor, P+ leak noise logger and Modbus sensors

- **Long term monitoring:** 5 year battery life

- **Intenal and external antenna:** Options to optimise signal

- **Fully waterproof:** The IP68 rating has been tested at 10m depth over a 24 hour period

Applications

Designed to fit inside very shallow Atplas box installations, the logger is ideal for many applications, including monitoring flow and/or pressure in a district or zone to assess demand, leakage and pressure conformance; logging key customers.

The logger utilises the latest advances in GPRS technology to provide rapid transmission at low cost, enabling data to be retrieved more frequently for analysis and response.

MONITORING ASSETS, DELIVERING DATA, BRINGING CONTROL

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Sensor Input options

Digital	One bi-directional pulse input for Flow. Two single-directional pulse inputs for Flow logging. Up to 64 pulses per second.
Analogue	Internal Pressure Transducer. External pressure. 4-20 ma (optional). 0-20 bar / 0-200 metres head / 0-300 psig, 0.1% repeatability / Please note that the logger is calibrated to 10bar as standard. 20bar calibration must be specified at time of order if required.
Serial Input	Proprietary serial interface for SonicSens ultrasonic level monitors, Permalog+ leak noise loggers, Serial meters etc. Modbus for third party devices.

Communication

Local	Infra-Red reading head for connection to PDA hand held programming and data collection unit, laptop, or desktop PC.
Internal Cellular modem (Optional)	GPRS to HWM DataGate or customer specific server. SMS Back Up* SMS to HWM DataGate or customer modem. Multiple messages per day.
	Quad band modem supplying 850/900/1800/1900MHz bands. GPRS can send data down to every 15 mins, with appropriate battery pack 3G Compatible modem supporting 850 900 AWS 1700, 1900, 2100.
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 SonicSens, Flow, Pressure and other alarmed sensors.

Logger Features

Frequency	Variable logger sample rate from 1s to 24hrs (This may affect battery life and communications cost).
Logger/Site ID	Up to 7 alphanumeric characters. Also readable factory set serial number in firmware.
Dimensions	110H x 150W x 105D mm (4.3"H x 5.9"W x 4.1"D).
Construction	Tough ABS plastic enclosure.
Weight	590g (1.3 lb).
Operating Temp	-20 to +70°C (-5 to +160°F).
Ingress protection	IP68 submersible.
Power	Lithium Thionyl-Chloride cell operational for 5 years under standard operating conditions, complete with low battery alarm. External power connection for battery box & 3rd party devices.
Memory	Primary recording 500,000 readings (non-volatile memory).
Fast Logging	Can be programmed to record either fast data, average minimum, average maximum or time interval between pulses (for data smoothing). Standard to 1 second. Optional 25MHz and window stop / start.
Pulse Interval Timing	Count and Event logging modes independent for both recordings. 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. Each alarm out comment field 16 characters. Can be programmed to auto dial up to 16 telephone numbers on alarm (i.e. 1 per alarm).

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