



NEMOS LQ

GPRS datalogger for flowmeters



The Nemos LQ is a flow data acquisition systems with GPRS communications capability.

It has specifically been designed to be installed in manholes as well as in high degree of humidity environments (IP67 protection grade).

It is provided with two flowmeters inputs and, as an option, it can also have a pressure sensor built in. Every flowmeter input can not only measure the flow count, but some additional inputs may sign the direction of the liquid flow and another input can be used to transmit any alarm condition originated in the flowmeter, such as low battery, fraud, etc.

Thanks to its low current drain and to the high capacity integrated lithium batteries, 5 years of autonomy can be expected, without any need for external power supply under standard operation; i.e. flow register every 5 minutes and data transmission once per day.

Great care has been paid to the ease of installation and diagnosis of the system. By doing so, the most important status parameters of the device can be checked through the status leds that show GSM/GPRS signal field intensity and all possible detected errors.

All that can be achieved without any special instrument. It has to be remarked its small size and the use of high quality IP68 connectors for all interfacing signals.

This bunch of features make the Nemos LQ particularly suited for minimum night flow control applications in water supply networks.

Characteristics

- 6 digital inputs, 2 counting inputs, 2 direction inputs, 2 alarms inputs.
- Integrated pressure sensor as an option.
- Historic download by GSM or GPRS.
- IP67 enclosure, watertight connectors for interface signals.
- Greater than 40,000 historic registers depth.
- Highly accurate real time clock(+/- 5 second per month) and automatic GSM network time synchronization function.
- Historic register generation triggered by time, by event (alarm triggered) or a logic combination of different signals.
- Flow calculation in inputs by pulses.
- Capability for sending automatic reports.
- There is available a free soft application for alarm reception and historic download (Zeus).

- Friendly configuration by software under Windows®, in local as well as remotely by a GSM data call.
- Five years autonomy is typical (registering flow every 5 minutes and transmitting once per day).
- Remote firmware updating.
- Three years warranty.

Uses

- Minimum night flow control in water supply networks.
- Telereading of water meters.

Technical specifications

Characteristics

Power supply By 7,2 volts 14 Ah battery pack
 Idle current drain 30 uA
 Main procesor ARM7
 Secondary procesor PIC
 Program memory 256 KB flash
 Data memory 64 KB
 FRAM memory 8 KB
 Real time clock 2 ppm high accuracy (5 sec per month)
 Firmware Watch dog protected multitask
 GSM modem Siemens MC55i
 Range of operation -20°C +80° Celsius

Historic

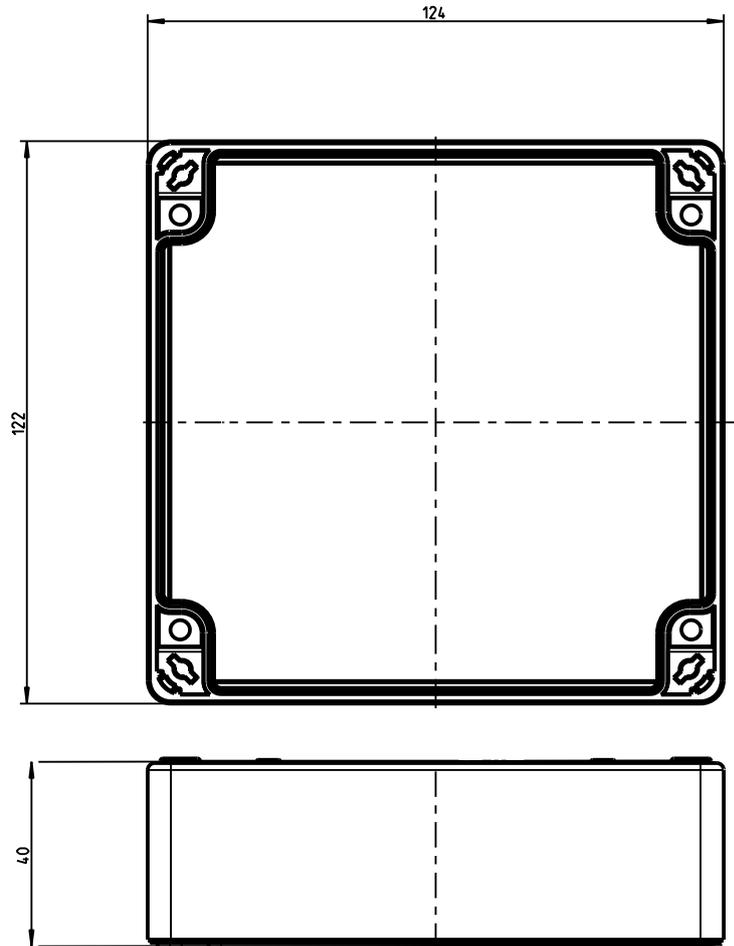
Historic depth More than 40,000 registers
 Historic memory 512 KB flash
 Digital inputs counters 32 bits totalizar counter plus
 a partial 16 bits counter
 (configurable flowmeter)

Inputs

Digital inputs Two inputs by counter
 Two alarm inputs
 Two flow direction

Integrated pressure sensor Range: 0-10 bars
 (optional) Accuracy: 1.5%
 Quick "Push to lock" connection
 for 1/8" hose.

Dimensions



Accessories

Reference	Name	Description	Characteristics
MC000073	Flowmeter cable	Cable with watertight connector for flowmeter	Length: 2 meters
MC000072	Diagnosis cable	USB computer connection cable	Length: 2 meters
MC000074	Connection box	Watertight connection box	IP68
MC000071	Integrated antenna	Antenna to screw down	Gain: 0dBd
MC000075	Directive antenna	Yagui directive antenna for oole mounting	Cable length: 10m. Gain: 8dBd.
MC000076	Colineal antenna	Omnidirectional high gain antenna, magnetic base	Cable length: 2,5 m. Gain: 5dBd.
MC000077	Magnetic base antenna	Omnidirectional magnetic base antenna	Cable length: 2,5 m. Gain: 0dBd.

