

SOFREL NEO

Data loggers 4G M2M for drinking water networks monitoring



NEO Large Consumer (LC)

NEO District Metering Area (DMA)

NEO Clear Water Telemetry (CWT)

COMMUNICATION	NEO LC	NEO DMA	NEO CWT
DATA TRANSMISSION			
- Sending of data to 1 or 2 SCADA Central Stations	IP	IP	IP
- Communication medium	2G/4G M2M	2G/4G M2M	2G/4G M2M
- External antenna	✓	✓	✓
- Temporary exceptions	✓	✓	✓
ALERT			
- Instant detection via a specific DI	✓	✓	
- Sensor fault detection		✓	✓
CENTRALISATION			
- SOFREL WEB LS (cloud hosting of data sent by LACROIX Sofrel data loggers)	✓	✓	✓
- SOFREL PCWin2 (SCADA Central Station for SOFREL devices)	✓	✓	✓
- Open to third-party applications (Web services and FTP)	✓	✓	✓
- Analysis and exploitation of data on PC, tablet or smartphone	✓	✓	✓
- Open to other SCADA systems		Contact us	
INTER-SITES			
- Periodic or event-driven communications (change of DI status or threshold exceedance) to RTU's for remote site control	✓	✓	✓
I/O MANAGEMENT			
NUMBER OF INPUTS / OUTPUTS			
- Digital Inputs (DI)	2	2	0
- Analogue Inputs (AI)	0	2	2
TYPES OF INPUTS / OUTPUTS			
- Pulses	✓	✓	
- Dry contact	✓	✓	
- Remote power feeding to third-party sensors		✓	✓
SENSORS, ETC.			
- Flowmeter (pulse metering)	✓	✓	
- SOFREL CPR / CNPR Pressure sensors		✓	✓
TREATMENT			
CALCULATIONS			
- Daily district metering balance (night flow, max flow, min flow and daily volume)	✓	✓	
ARCHIVING			
- Daily balances and archiving of meters and flows	✓	✓	

Technical characteristics

GENERAL FEATURES

General characteristics	Screwless opening system for easy access by the user to the SIM card and battery
Dimensions	H 193 x W 155 mm
Weight	800 g
Operating temperature	-20°C to +55°C
Storage temperature	-25°C to +70°C
Watertightness	IP68
Power supply	Power supply by: - Internal lithium battery - Photovoltaic cell, mains power, micro-turbine or battery kit - Input voltage : 5-30VDC - Required power : 3W – Inrush current : 3A - Battery life: 5 years (depending on configuration)
Connector types	Waterproof connectors

DATA LOGGER INPUTS

DI (Digital Inputs)	2 Digital Inputs for standard and bidirectional metering and signalling Maximum frequency: 250 Hz Minimum pulse time: 2 ms Polarisation voltage: 3.3V max Polarisation current: 15µA max
AI (Analog Inputs)	2 Analog Inputs for measuring pressure or level Remote power feeding to third-party sensors via 4-20mA loop in 12V or 20V

COMMUNICATIONS

Quadriband 2G/4G M2M	4G LTE-M : B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B85 4G NB-IoT : B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28/B66/B71/B85 Quad-band GSM/GPRS/EDGE (850 MHz, 900 MHz, 1800 MHz, 1900 MHz)
SIM cards supported	Standard SIM cards (Nano and Micro SIM cards can be installed via adapter)
Antenna	External (cable length 1.5m), IP68
Configuration of the Data Logger	Daily synchronisation of the Data Logger with SCADA
Communication to 1 or 2 PCs	Periodic, programmed or event-based

CONFIGURATION AND COMMISSIONING

Bluetooth	Data logger configuration via Bluetooth connection
Assistance with commissioning	4G M2M and 2G signal reception measurement LED for visual diagnosis

LOCAL DATA ARCHIVING

Archiving capacities	100,000 data points
----------------------	---------------------

