

SOFREL LS10

REMOTE READING OF METERS



USES & BENEFITS

- **Remote reading of “major consumers” meters**
 - Monitor consumption levels
 - Detect consumption anomalies
 - Billing contribution

PRODUCT FEATURES

- Enhanced IP68 waterproof rating
- Battery powered
- Integrated high performance 2G/4G M2M antenna
- Access to the SIM card and battery on site
- 3-year manufacturer guarantee

EASE OF USE

- On-site communication and exploitation via Bluetooth link
- Open to supervisory control software and third-party applications of major water operators
- Specific communication protocol guaranteeing data availability
- Simplified data exploitation via the SOFREL WEB LS IoT platform

MAIN FEATURES:



Communication



Simplicity



Waterproof



Battery life



Guarantee

Technical and functional characteristics

GENERAL FEATURES:	
Mechanical design	Screwless opening system for easy access to the SIM card and battery
Dimensions	H 261 x W 155 mm
Weight	1,1 kg
Operating temperature	-20°C to +55°C
Storage temperature	-25°C to +70°C
Watertightness	Enhanced IP68 certification (30 days under 4 meters of water)
Power supply	Powered by an internal lithium battery
Connector types	Military-grade hermetic connector
DATA LOGGER INPUT:	
DI (Digital Input)	1 digital input for standard metering, signalling Maximum frequency: 250 Hz Minimum pulse time: 2 ms Maximum polarisation voltage: 3.3 V Maximum polarisation current: 15 µA
COMMUNICATION:	
2G/4G M2M quad-band modem	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)
Supported SIM cards	Standard SIM cards (Nano and Micro SIM cards can be installed via adapter)
Automatic data logger synchronisation	Communication over IP with the SCADA: Daily synchronisation of the DL4W via the SCADA
Communication with 1 or 2 PCs	Periodic, programmed or event-based
Inter-sites communication to S500, S4W, YDRIX or AS	Periodic or event-driven (change of DI status or threshold exceedance)
Alert transmitted to mobile via SMS*	Upon change in DI state, exceeded threshold, sensor fault...
CONFIGURATION AND COMMISSIONING:	
Bluetooth	Data logger configuration via Bluetooth link
Assistance with commissioning	4G M2M and 2G reception level measurement LEDs for visual diagnosis of operation and 4G M2M/2G signal
Assistance with maintenance	Remaining battery life calculator
ARCHIVING:	
Local archiving capacity	100,000 data points
PROCESSING:	
District metering	Calculation of average flows Calculation of night flows Calculation of daily volumes, daily minimum and maximum flows
CERTIFICATIONS:	
CE Certification	2014/53/UE "Radio equipment" 2014/30/UE "Electromagnetic compatibility" 2014/35/UE "Low voltage"
Enhanced IP68 certification	Extended immersion test (30 days under 4 meters of water) performed by an independent laboratory
Cybersecurity	hEN 18031-1 "RED-DA"
STANDARD BATTERY LIFE:	
2 counts and 1 pressure measurement every 15 minutes, processing and daily transmission to the SCADA	10 years

* Depending on the activation of the telecom operator