

SOFREL LS10

REMOTE READING OF METERS AND DISTRICT METERING



USES AND BENEFITS

- Remote reading of "major consumers" meters
 - Monitor consumption levels
 - Detect consumption anomalies
 - Billing contribution

PRODUCT FEATURE

- Enhanced IP68 waterproof rating
- Battery powered
- Integrated high performance 2G/3G antenna
- Automatic reception testing for best 2G/3G operator
- 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*

*Available for IP version data loggers

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 (100 days under 1 meter of water)
Power supply	Powered by a standard or high capacity internal lithium battery
Connector types	Military-grade hermetic connector

DATA LOGGER INPUTS:

DI (Digital Inputs)	1 Digital inputs for standard metering, signalling Maximum frequency: 250 Hz Minimum pulse time: 2 ms Maximum polarisation voltage: 3.3 V Maximum polarisation current: 15 µA
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COMMUNICATION :

2G/3G quad-band chipset	Quad-band GSM/GPRS/EDGE (850 MHz, 900 MHz, 1800 MHz, 1900 MHz) Hexa-band UMTS WCDMA FDD (800 MHz (B19), 850 MHz (B5/B6), 900 MHz (B8), 1900 MHz (B2), 2100 MHz (B1))
Supported SIM cards	Mini SIM cards (Nano and Micro SIM cards can be inserted using an adapter)
Automatic data logger synchronisation	Communication via SMS with the SCADA: weekly synchronisation of the LS via the mobile network Communication over IP with the SCADA: Daily synchronisation of the LS via the SCADA
Communication with 1 or 2 PCs	Periodic, programmed or event-basede
Inter-sites communication to S500, S4W or AS	Periodic or event-driven (change of DI status or threshold exceedance)*
Alert transmitted to mobile via SMS	Uponchange in DI state, exceeded threshold, sensor fault...

CONFIGURATION AND COMMISSIONING:

Bluetooth	Data logger configuration via Bluetooth link
Assistance with commissioning	3G and 2G reception level measurement Best 3G and 2G operator test LEDs for visual diagnosis of operation and 3G/2G signal
Assistance with maintenance	Remaining battery life calculator

ARCHIVING:

Local archiving capacity	50,000 data points
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PROCESSING:

district metering	Calculation of average flows Calculation of night flows Calculation of volumes, flow rates and daily max flows
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CERTIFICATIONS:

CE Certification	2014/53/UE "Radio equipment" 2014/30/UE "Electromagnetic compatibility" 2014/35/UE "Low voltage"
Enhanced IP68 certification	Extended immersion test (100 days under 1 meter of water) performed by an independent laboratory

STANDARD BATTERY LIFE:

Height measurement every 15 minutes	10 years (Daily communication with the SCADA)
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*Available for IP version data loggers