SOFREL LS42

REMOTE READING OF METERS AND PRESSURE MEASUREMENT

SOFREL
LS42

USES AND BENEFITS

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

• Remote reading of interconnection meters
- Inter-network transfer monitoring

• District Metering
- Leaking sectors detections
- Pressure and flow monitoring
- Immediate alarm in case of an upstream or downstream pipe breakage
- Improved network performance

PRODUCT FEATURE

- **Enhanced IP68 waterproof rating**
- **Battery powered or external power supply*: (Photovoltaic cell, mains power, micro-turbine or battery kit)**
- **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**

* Only flex version

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

Watertightness	Battery life
IP68	10 years

Communication	Antenna FLEX
2G 3G	

Guarantee	Simplicity
3 year	

External power supply*

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SOFREL LS42 IoT DATA LOGGER

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 an internal lithium battery or by an external source* (photovoltaic cell, main power, micro turbine, or battery kit - Input voltage : 5-30VDC - Required power : 3W – Inrush current : 3A)
Connector types	Military-grade hermetic connector

DATA LOGGER INPUTS:

DI (Digital Inputs)	4 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
AI (Analog Inputs)	2 analog inputs for SOFREL pressure sensors or remote powering of third-party sensors Remote powering of third-party sensors via 4-20 mA loop, 12 V or 20 V

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
Versatile antenna (FLEX version)	4-meters, IP68-certified external antenna
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-based
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

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 (100 days under 1 meter of water) performed by an independent laboratory	

STANDARD BATTERY LIFE:

2 counts and 1 pressure measurement every 15 minutes, processing and daily transmission to the SCADA	10 years

Only flex version

**Available for IP version data loggers

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