

SOFREL ChlorIN

Monitoring of drinking water quality
by measuring free chlorine



USES & BENEFITS

• Measurement of chlorine

- Real-time monitoring of free chlorine values
- Detection of any breach of high and low thresholds and immediate alarm
- End-of-network monitoring, critical or strategic points and interconnection points

• Optimisation of network performance

- Pressure monitoring via a sensor (optional) controlled and remotely powered by the data logger
- Service quality level measurement
- Monitoring of flows and volumes
- Intrusion or overflow alarms

ADVANTAGES OF THE SOLUTION

- Complete measurement kit: chlorine sensor, mounting device, data logger and pressure sensor (optional)
- Simplified in-pipe installation without service interruption
- Complete stand-alone solution for hydraulic control
- Integrated high-capacity antenna or optional use of an external antenna (FLEX version)
- Measurements with a resolution of 0.01 ppm
- Sampling valve for chlorine sensor calibration
- Health certification ACS*

EASE OF USE

- Chlorine sensor insertion system on pipe without pressure drop
- Flanges suitable for pipes from DN60 to 300
- Graphical configuration of data logger and sensor from Softools software

MAIN CHARACTERISTICS:



Reinforced sealing



Battery life



Quality parameters



Communication



Simplicity

*Consult your sales engineer for more details

Technical and functional characteristics

CHLORINE MEASUREMENT SENSOR:

Type of measurement	Free chlorine
Measurement range	0.03-5 ppm
Measurement resolution	Resolution of 0.01 ppm
Material	PVC-U
Pressure measurement	Range between 0 and 8 bars
pH measurement	pH indicators between 5 and 9
Temperature range	Between 0°C and 50°C - integrated thermal compensation
Flow	Minimum flow rate 0.05 m/s
Calibration	DPD-1
No disinfectant	24 hours maximum
Analogue signal	4-20 mA
Power supply	12 V remote power supply via the lithium battery of the LS42 data logger
Response time	50 s supplied by the data logger for the measurement

MOUNTING KIT:

Nominal diameter	From DN60 to DN300
Sensor support	Suitable for the insertion of the chlorine sensor
Compatible pipe types	Steel, fibre cement, cast iron, PE and PVC-O
Installation	Sensor insertion system on full pipe - No service interruption
Sampling	Sampling valve for sensor calibration
Pressure sensor connector	1 ¼" connector for CPR pressure sensor (optional)
Sealing	IP68 for all kit accessories

SOFREL LS42 DATA LOGGER:

Mechanical design	Screw-free opening system for easy user access to SIM card and battery
Dimensions	H 261 x L 155mm
Weight	1.1kg
Operating temperature	-20°C to +55°C
Sealing	Enhanced IP68 certification (200 days under 2 metres of water)
Power supply	Long-lasting internal lithium battery power supply
Battery life	3.5 years with 1 measurement per hour and 1 daily communication 2 years with 2 measurements per hour and 1 daily communication
Configuration and diagnosis	On site by Bluetooth link via the Softools software or remotely via the SOFREL WEB LS application 2G/3G signal reception measurement and best operator test
DI (Digital Inputs)	4 logic inputs for standard metering, signalling
AI (Analog Inputs)	2 analogue inputs for SOFREL sensor or third-party pressure sensors Remote power supply of pressure sensors via 4-20 mA loop in 12 V or 20 V
2G/3G communication	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))
Versatile antenna (FLEX version)	4 metre-long external antenna, IP68 certified
Communication to 1 or 2 PCs	Periodic, scheduled or event-based
Inter-site communication to S500 or S4 W	Periodic or event-based (DI status change or threshold violation)
Sending of SMS alerts to mobile phones	On change of DI status or threshold breach