

SOFREL LogUp

Cybersecure and scalable data logger solution for monitoring drinking water and wastewater networks

LX CONNECT
remote management platform



Mobile application
My SOFREL LogUp

4G LPWAN Data Logger
SOFREL LogUp

USES AND BENEFITS

- Monitoring of networks and isolated sites
- Extended battery autonomy helping reduce field visits
- A single hardware model and scalable functionalities to adapt to future needs
- Maximum protection of data and equipment through a natively cybersecure architecture

CHARACTERISTICS OF THE EQUIPMENT

- A data logger integrated within a complete solution:
 - SOFREL LogUp data logger
 - My SOFREL LogUp mobile application
 - LX CONNECT centralization and fleet management platform
- Robust, compact and eco-designed data logger
- Enhanced IP68 sealing for maximum resistance in harsh environments
- Compatibility with all water sensors through Modbus and 4–20 mA inputs
- Quick connectors featuring an easy locking / unlocking mechanism
- Simplified on-site maintenance with quick access to the battery and SIM card
- Intuitive local configuration via the My SOFREL LogUp mobile application
- Remote firmware and business function upgrades through Device Management

ADVANTAGES

- Secure monitoring of all types of hydraulic assets
- Reduced maintenance costs
- Future-proof investment
- Native cybersecurity: the first water industry data logger certified IEC 62443-3-3

MAIN FEATURES:


Cost
optimization


Simplicity


IEC 62443-3-3
certified


Scalability


3-year
warranty


Reduced carbon
footprint

Architecture



Technical and functional characteristics

DATA LOGGER:

Mechanical

Mechanical design	Patented screwless quick-opening system guarantees watertight seal
Dimensions (mm)	Data logger only: H 190 x W 185 x D 126 – With the bracket: H 255 x W 185 x D 126
Weight	900g with battery – Bracket 200g
Operating temperature	-20°C à +70°C
Powered	by a high-capacity internal lithium battery
Sealing	Certification (4m - 30d & 2m - 100d) IP68 enhanced

Communication

Supported Technologies	4G LPWAN: LTE-M & NB-IoT - Global Coverage
Supported SIM card	Nano SIM card (4FF)
Antennas	Internal and external via connector (enabled by default)
Bluetooth	Cybersecure connection for commissioning, configuration, and diagnostics via the My SOFREL LogUp application

SOFREL LogUp SOLUTION:

Application pack coding (Identification of the number of activated inputs of the data logger)	M DI AI DC Modbus: 0 to 8 sensors (up to 14 registers) Number of digital inputs (DI) - counting and/or dry contact: from 0 to 2 Number of analog inputs (AI): from 0 to 2 Number of digital inputs (DI) - dry contact: from 0 to 2
Available application packs	101 – 202 – 222 – M101 & M222
Evolution option (Remote update of already installed SOFREL LogUp data loggers)	Upgrade from 101 to 202 or 222 Modbus activation on 101 and 222 Upgrade from M101 to M222
Contents of the solution	Unique LogUp data logger hardware + mounting bracket + high-capacity internal battery Android mobile application My SOFREL LogUp Application pack according to needs LX Connect connectivity platform: - Centralized management of equipment and users - Management of automatic certificate renewals with Microsoft PKI and cybersecurity - 1 data sharing with a supervision application (REST API)

CERTIFICATIONS:

Cybersecurity	SOFREL LogUp solution: IEC 62443-3-3 hEN 18031-1 & hEN 18031-2 "RED-DA"
Certification CE	2014/53/EU "Radio Equipment" 2014/30/EU "Electromagnetic Compatibility" 2014/35/EU "Low Voltage"

Data ownership and specifications

DATA GENERATED BY THE DATA LOGGER

Data generated by SOFREL LogUp data loggers is specified in the SOFREL LogUp Data Logger Data Properties and Specifications document, available at: <https://lacroix-group.com/T&C/documentation>.

Data collection and generation frequency:

- Data collected by the SOFREL LogUp data logger: from every minute up to every 24 hours, excluding exception cases and spontaneous calls. Configurable by the user
- Data generated by the SOFREL LogUp data logger is synchronized with the frequency of collected data.

Estimated data volume:

- Depends on usage and configuration: from 1 to 65,635 KiB per day per data logger.

Data storage:

- Local data storage in the data logger (maximum 65,635 KiB).
- Remote storage in LX CONNECT.

Data retention period:

- In the data logger: until transmission to LX CONNECT.

Data access and export procedures:

- Local consultation through the My SOFREL LogUp mobile application under the conditions available at: <https://lacroix-group.com/T&C>
- Data consultation through the LX CONNECT user interface under the conditions available at: <https://lacroix-group.com/T&C/sales>.