

SOFREL LogUp

A simple, optimal, and cyber-secure solution for water network monitoring



SOFREL LogUp, a response to your challenges in an increasingly constrained environment



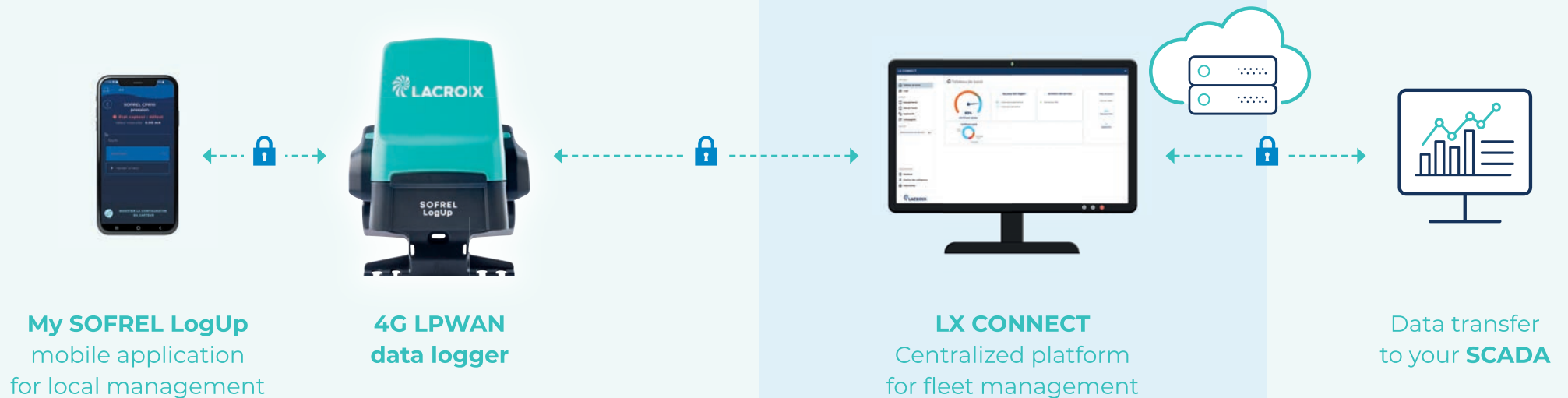
SOFREL LogUp, the **new LACROIX solution for monitoring water networks and isolated sites**, consists of a data logger, a mobile application, and the LX CONNECT platform

This solution has been designed to meet your expectations in terms of **economic optimization, security, and ease of use**, covering all aspects of daily use, maintenance, and operation of data loggers

The SOFREL LogUp solution is based on an architecture and features designed to help you address your challenges, while complying with the **requirements of the IEC 62443 standard for cybersecurity**



SOFREL LogUp, MORE THAN A DATA LOGGER, AN OPTIMIZED SOLUTION TO SIMPLIFY WATER NETWORK OPERATIONS



The advantages of the SOFREL LogUp solution



Reduce your operating and intervention costs by minimizing travel and on-site presence



Configure your data loggers before receiving them and **simplify** their deployment



Secure your data and its exchanges

SOFREL LogUp, AN INNOVATIVE, ROBUST, COMPACT, AND SCALABLE DATA LOGGER



Optimized costs

- Quick installation and field implementation
- Robust, waterproof, and designed to last for many years
- Embedded energy management optimizing autonomy



For more simplicity

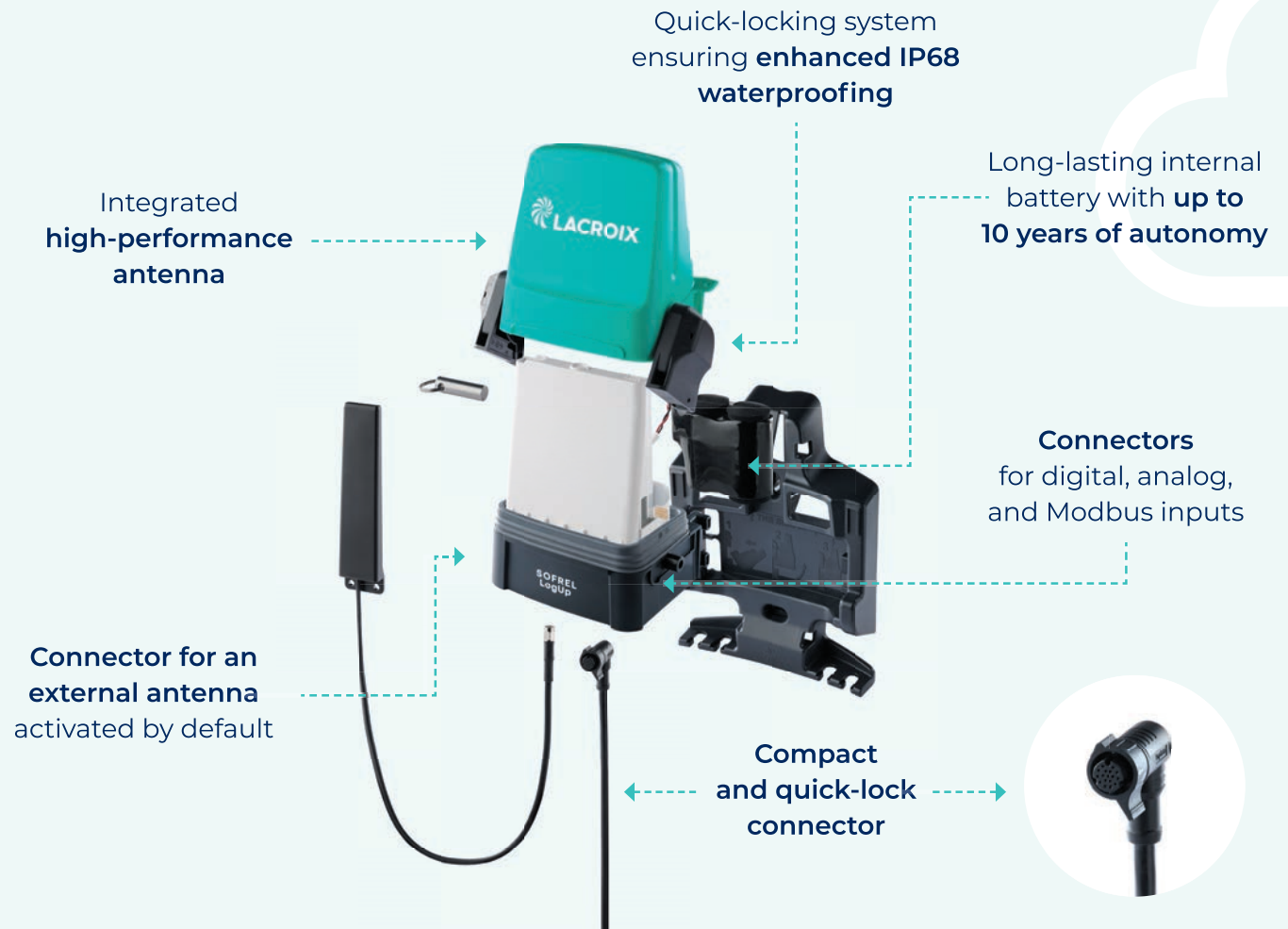
- A single model for all uses, drinking water and wastewater
- Connection of sensors via quick-lock connectors



Comprehensive security

- Automatic integration of security certificates
- Efficient and secure data transmission
- Intrusion detection on-site and product movement detection

Innovative and easy to install, the SOFREL LogUp data logger provides an effective and economical solution for remote management and diagnosis of water networks



SOFREL LogUp, A UNIQUE, ECO-DESIGNED, AND PATENTED MODEL



Tightening tool



2 PATENTED INNOVATIONS FOR IMPROVED WATERPROOFING

- ▀ Simple and effortless locking system ensuring the waterproofing of the data logger
- ▀ Designed to keep the connectors dry



AN ECO-DESIGNED PRODUCT FOR A REDUCED CO₂ FOOTPRINT

- ▀ Significant improvement of the carbon footprint throughout the product's entire life cycle (greenhouse gases, water consumption, raw materials...) from manufacturing to recycling



Sealing air bubble:
Keeps the connectors dry by trapping air under the data logger with a protective skirt

THE MY SOFREL LOGUP APPLICATION, TO REDUCE FIELD DEPLOYMENT TIME



Optimization of implementation costs

- Increase efficiency in commissioning and configuring your data loggers thanks to a highly intuitive mobile application
- Reduce on-site presence time to the bare minimum



For greater simplicity

- Configure the data logger and sensors via a dynamic interface
- View current values and operating statuses locally

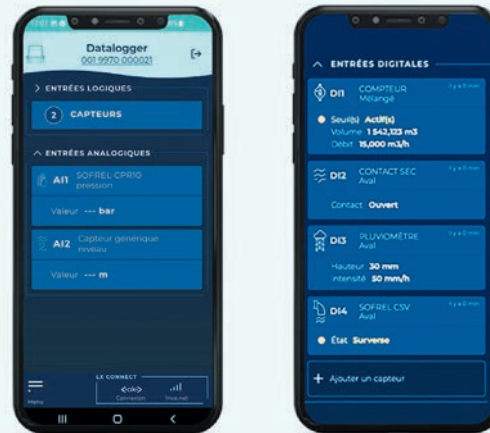


Enhanced Security

- Rely on a secure Bluetooth connection (data encryption) to connect locally with your equipment

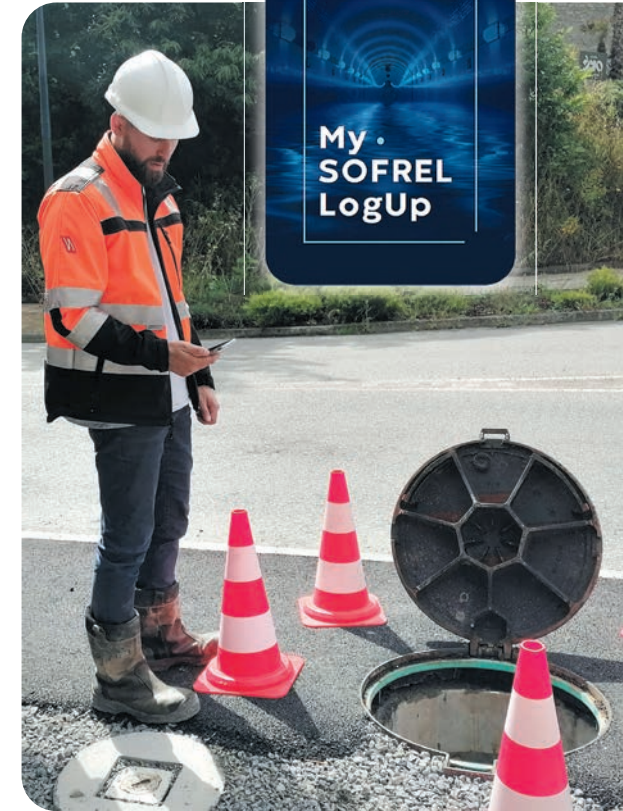
The solution includes the **My SOFREL LogUp** mobile application through which a user can commission, configure, and diagnose its installation

Data is transmitted exclusively between the mobile application and the data logger via the secure local connection



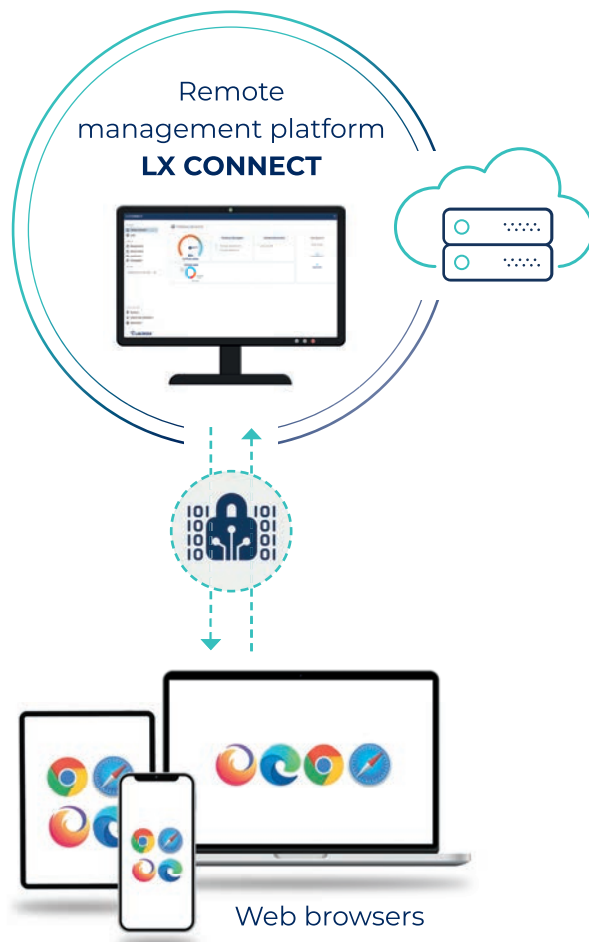
The configuration of the data logger is carried out optimally while allowing for a reduction in on-site presence time

The configuration can subsequently be retrieved and completed remotely from **LX CONNECT**



LX CONNECT: THE IoT PLATFORM FOR SOFREL LogUp DATA LOGGERS

The **LX CONNECT** platform enables centralized management of a remote monitoring network and automates cybersecurity as well as software updates for your equipment fleet



COST OPTIMIZATION BY ANTICIPATING OPERATIONS

- **Prepare in advance** or after installation the configurations of your data loggers
- **View the operational status** of your equipment fleet (battery, firmware) **at any time** and remotely for optimal maintenance
- Access your data from any web browser and **manage your fleet in real-time**



SIMPLICITY ON A DAILY BASIS

- **Manage user rights** associated with the equipment fleet
- **Centralize** all your field data on the LX CONNECT platform
- Centrally and coordinatedly **update** your equipment fleet and its software versions
- **Remotely modify** business configurations
- **Share** field data from the platform with one or more SCADA systems



SECURITY AT THE HEART OF THE SOLUTION

- Rely on the **high level of security** of the solution, which fully meets the requirements of the IEC 62443 standard
- Connect the solution to a Microsoft PKI for the **automatic creation and renewal of authentication** certificates for data loggers

LX CONNECT: A NEW ARCHITECTURE FOR AUTOMATED CERTIFICATE MANAGEMENT

An **automated and self-sufficient procedure** ensuring cybersecurity

Daily monitoring of the certificate validation duration, true digital **passports for the equipment**

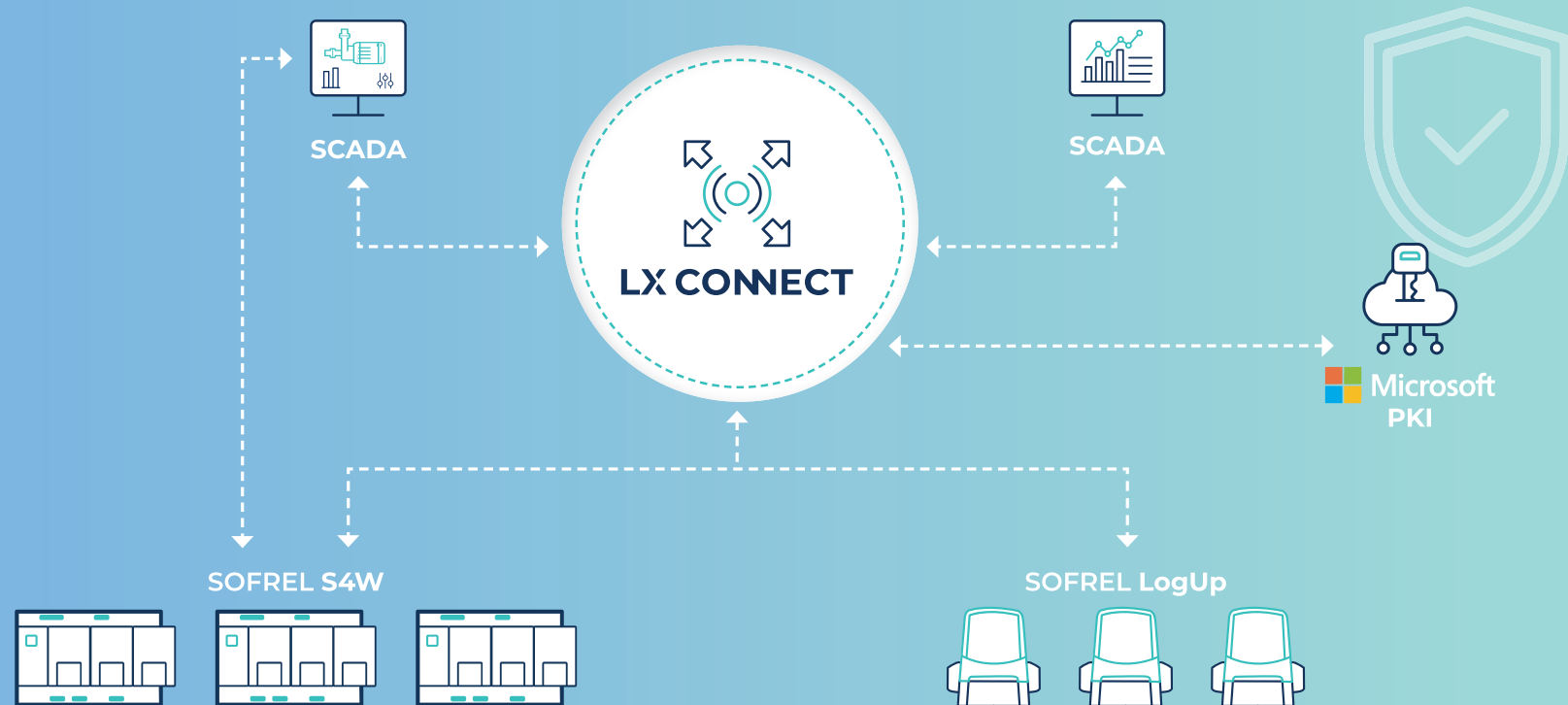
Automatic certificate renewal with Microsoft PKI before expiration

Connection to **SOFREL LogUp data loggers** or **SOFREL S4W** via **LX CONNECT** to ensure they have properly registered the new certificates

- ▶ **Automatic certificate management** that operates seamlessly for the operator

- ▶ **Dashboards** for monitoring the deployment of certificates

- ▶ **Scheduling** of large-scale certificate renewal campaigns



CYBERSECURITY AT THE CENTER OF THE SOFREL LogUp SOLUTION

A solution that fully complies with the **European cybersecurity regulatory framework**



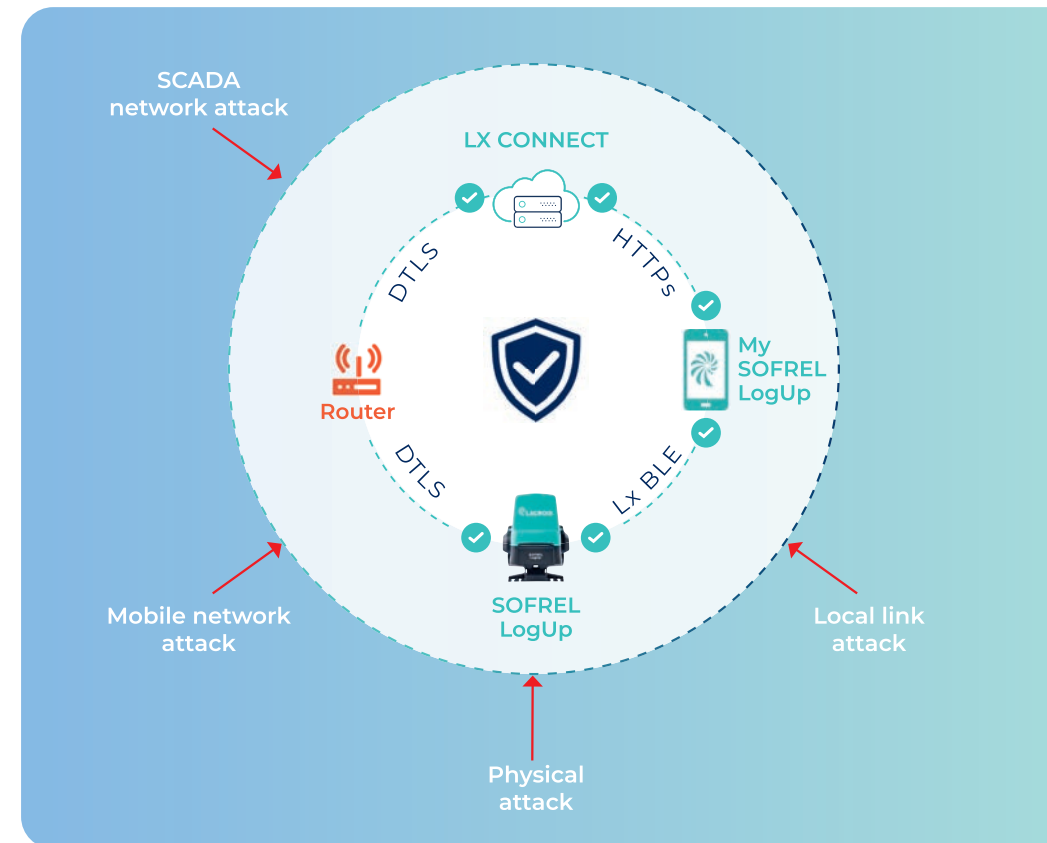
The SOFREL LogUp solution natively integrates a level of cybersecurity compliant with IEC 62443

“Secure by design,” the **SOFREL LogUp**, data logger, the mobile application, and the **LX CONNECT** platform are cybersecurity-secured from end to end

Cybersecurity is deployed automatically and transparently for the user

To maintain the level of cybersecurity at all times, regular updates of authentication certificates are automatically conducted by LX CONNECT without user intervention:

- ▶ Deployment of cybersecurity for **data exchanges** between field devices and supervision
- ▶ **Management of users**, their rights, and the history of their interactions with the ecosystem
- ▶ **Mutual authentication** of devices through certificate exchanges to prevent any attempt at impersonation
- ▶ **Integrity of the system** ensuring that exchanged data cannot be modified
- ▶ **Encryption of data** ensuring that it cannot be read by unauthorized individuals



A SINGLE DATA LOGGER MODEL WITH **UPGRADEABLE REMOTE SOFTWARE**

1 CHOOSE AND ORDER

A single common hardware for both drinking water and wastewater
in a **Pack** that meets your **needs**



101

1 counting DI
1 dry contact DI

202

2 counting DI
2 dry contact DI

222

2 counting DI
2 dry contact DI
2 AI mA

2 UPGRADE REMOTELY

The capabilities of your equipment
and integrate **upcoming new features**

M101

Open Modbus
1 counting DI
1 dry contact DI

M222

Open Modbus
2 counting DI
2 AI mA
2 dry contact DI

An evolving pack that covers **100%** of water-related use cases

LX CONNECT - LACROIX'S CENTRALIZATION SOLUTION FOR MANAGING NEXT-GENERATION TELEMETRY EQUIPMENT

A common platform for S4 and LogUp products deployed in 2 FORMATS

■ **LX CONNECT EDGE**: a centralization platform that is easy to **deploy and manage by the operator** for data and equipment management, closely connected to the telemetry network

■ **LX CONNECT PREM**: an evolving centralization platform that can be deployed in a **private cloud** or a **managed data center**

3 service packs

3 service packs

		Centralized management of equipment and users	S4W	LogUp
Included	CONNECTIVITY Pack	Update of individual firmwares	X	X
		Monitoring and automatic renewal of certificates	X	X
		Access to event logs		X
		Centralization of configurations		X
		Data visualization		X
		Data sharing with a third-party application (e.g., SCADA)		X
		Orchestration of software and cybersecurity updates for the equipment fleet	S4W	LogUp
License required	ADVANCED FLEET MANAGEMENT Pack	Advanced monitoring of a fleet of SOFREL S4 & LogUp equipment	X	X
		Campaign management for mass and scheduled updates of SOFREL equipment regarding firmware and certificates	X	
		Operational data reporting to multiple third-party applications	S4W	LogUp
License required	DATA SHARING Pack	Data sharing to multiple SCADA systems via Web Services		X

CONNECTED
TECHNOLOGIES
FOR **SMARTER**
WATER &
ENERGY



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