



# SOFREL Products

Telemetry, District Metering and SCADA solutions



LACROIX Sofrel brings you a complete range of telemetry District Metering and SCADA solutions suitable for all technical facilities and various operational needs:

- **Modular Remote Terminal Units**
- **Battery powered Remote Terminal Units**
- **GSM/GPRS data loggers**
- **SCADA Central Stations**
- **Communication front-ends and servers**
- **Sensors and accessories**

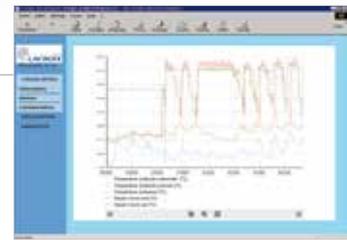


# Remote Terminal Units

## SOFREL S500: modular Remote Terminal Unit



- SOFREL S500: modular Remote Terminal Unit
  - Modular remote monitoring solution, user friendly
  - Process control and remote management applications for technical installations :
    - Drinking water networks,
    - Wastewater treatment,
    - Heating Ventilation and Air Conditioning,
  - Use of standard tools (web browsers...)
  - Communicate through various medium



## SOFREL AS: Process control Remote Terminal Unit

- Telemetry and process control in a same device
  - Pumping optimisation and energy saving
  - Preservation of water resources and the environment
  - Optimised call-outs for alarm reporting
  - ST and LADDER process control workshop
  - Communication through various medium (Ethernet, GSM, GPRS, SMS, Radio, DL, Serial link...)
  - Communication through various protocols: DNP3, IEC...



## SOFREL HF-BOX: Battery powered Remote Terminal Unit

- Developed for the remote control of small and isolated facilities without power supply
- Well-suited solution for slave control between reservoirs and pumping stations
- Radio transmission to a SOFREL S500 o AS Remote Terminal Unit
- Data acquisition (signals, meter readings, measurements...)



# Data Loggers

## SOFREL LS/LT: GSM/GPRS data loggers



SOFREL LS/LT products are especially designed to remotely monitor underground and isolated hydraulic installations (manholes, Combined Sewer Overflows, Pressure Reduction Valves, ...)

- GSM/GPRS communication
- Waterproof (IP68)
- High performance antenna
- Battery powered (up to 10 years life)
- Easy installation and handling



### SOFREL LS data loggers: drinking water network solutions



SOFREL  
LS

SOFREL  
LS-P

SOFREL  
LS-Flow

SOFREL  
LS-V

District metering, remote meter reading, leak detection	✓		✓	✓
Monitoring of interconnection and "Major Consumer" meters	✓		✓	✓
Pressure Regulation Valve control				✓
Monitoring of pressure	✓	✓	✓	✓
Serial communication with flow meters			✓	

### SOFREL LT data loggers: wastewater network solutions



SOFREL  
LT

SOFREL  
LT-US

SOFREL  
LT-US Atex

Self-monitoring of wastewater and rainwater networks	✓	✓	✓
Monitoring of Combined Sewer Overflows	✓	✓	✓
Measurement of wastewater collector flow	✓	✓	✓
Autonomous sampler monitoring and control	✓	✓	✓
ATEX certified			✓
Ultrasonic measurement cell management		✓	✓

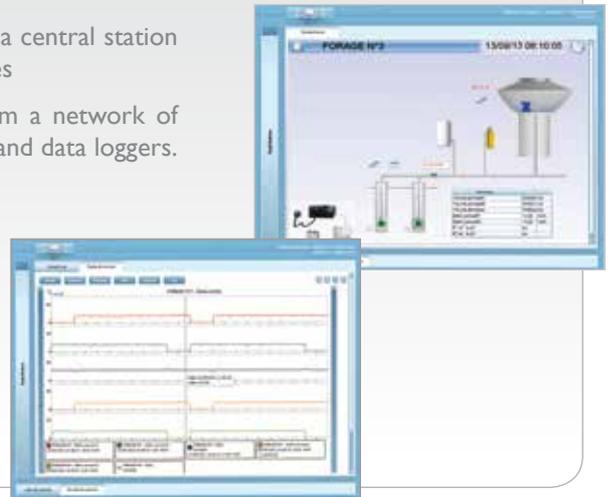
# Data Centralisation Solutions

## SOFREL PCWin2: SCADA Central Station

PCWin 2 is a user friendly scada central station with a full range of functionalities

It centralizes data received from a network of SOFREL remote terminal units and data loggers.

It boasts a full features range: SQL database, Excel reports, graphs and mimic diagram, alarm reports and management, curve, plotter...



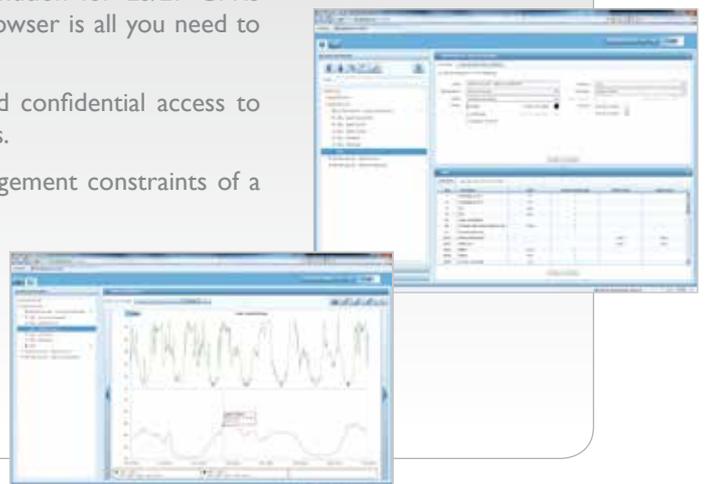
## SOFREL WEB LS: Cloud solution for LS/LT data management

SOFREL WebLS is a webhosted centralization solution for LS/LT GPRS Loggers accessible through the internet: a web browser is all you need to get online with WebLS.

For privacy reason, users have a fully secured and confidential access to their LS/LT loggers data points and historical values.

This solution eliminates the investment and management constraints of a central unit and scada software.

A geolocation interface allows the equipment's location and direct access to the information managed via PC or smartphone (smart LS app).



## Communication front-ends and servers

### SOFREL OPC Servers

- Communication of SOFREL RTU's and Loggers with any OPC Client SCADA system using SOFREL OPC server.

### SOFREL SG1000

- Secured gateway for GSM / GPRS Network, allowing the communication with a Scada and site to site communication between Sofrel RTU's range.
- Encrypted Virtual Private Network (VPN)
- Secured communication guaranteed

### SOFREL FR1000

- Front-end communication processor
- Compatible with SOFREL modem cards (PSTN, GSM/GPRS, radio, PL, etc.)
- Secure solution for communications between a network of SOFREL Remote Terminal Units and SCADA
- Main communication support failure secured by a secondary communication support back-up



# Other products and services

## SOFTTOOLS: configuration software

SOFTTOOLS is the software used to configure and run SOFREL Remote Terminal Units and SOFREL Data loggers

A real operational tool, SOFTTOOLS allows you to view data, run diagnostics on the installation, and view archived values through a curve or an Excel workbook extraction.



## Sensors and accessories

### SOFREL Sensors

Robust, reliable, and economical, SOFREL's sensors are designed for:

#### ■ Drinking water networks:

- CNPi: submerged sensor for measuring water levels (reservoirs, wells, etc.).

- CNPr: a connectable sensor to measure pressure in pipes (manholes).

#### ■ Wastewater networks:

- CNPa: submerged sensor with ceramic membrane (lift station).

- CSV: overflow detector (Combined Sewer Overflows).



### SOFREL surge protections



Especially designed for SOFREL RTU's, these products provide optimal protection for devices and installations, even in harsh conditions.

### SOFREL S500 & AS Window



When fitted to the front side of an enclosure, the SOFREL S500 Interactive Graphical Screen provides effective protection from dust and water (IP65). It makes it easy to view the interactive graphical display or to connect to SOFTTOOLS when working on site. The S500 Interactive Graphical Screen is available for the S550, S530, AS50 and AS30.

## Services

Project studies, training, hotline, commissioning assistance, and maintenance... LACROIX Sofrel offers a full range of services to support its customers as they install and use our telemetry and SCADA equipment. Visit SOFREL's website at [www.lacroix-sofrel.com](http://www.lacroix-sofrel.com) to access a technical area where you can view technical documents and applications, download software, or contact the After Sales department directly.



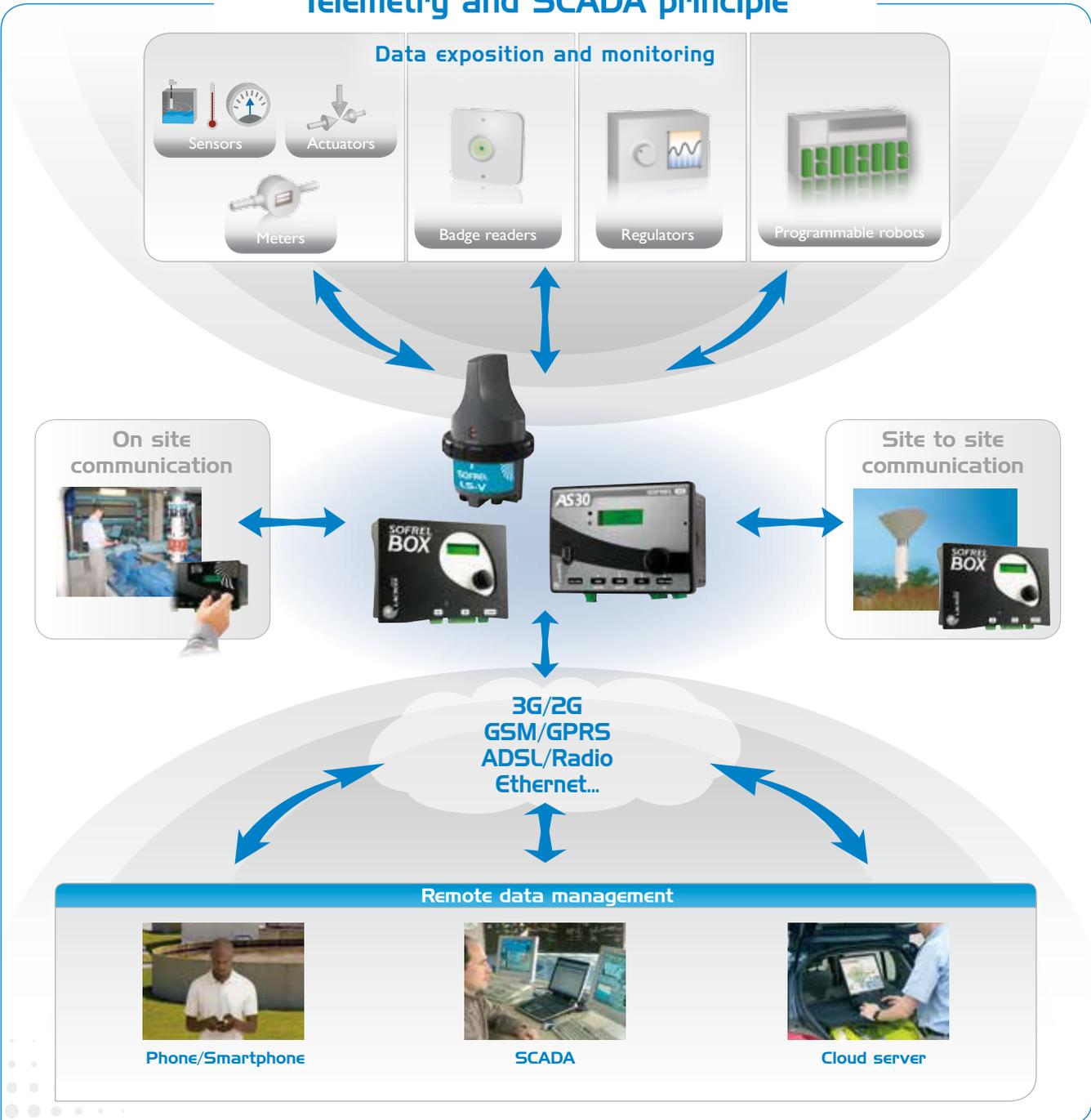


# LACROIX Sofrel, your telemetry and SCADA partner

LACROIX Sofrel is a subsidiary of LACROIX Group. With over 40 years' experience in telemetry and SCADA, it brings all the confidence of a longstanding company and market leader. With considerable R&D resources, and technical sales partner network, LACROIX Sofrel combines innovation, industrial capacity, and customer services.

Present in France and abroad, the company remains committed to provide its customers with the bests products and services. Quality and continuous improvement are the main concern of all LACROIX Sofrel teams.

## Telemetry and SCADA principle



Sofrel  
**LACROIX**

2, rue du Plessis - 35770 Vern-sur-Seiche - France  
 Tel. : +33 (0)2 99 04 89 00 - Fax: +33 (0)2 99 04 89 01  
 E-mail: lacroix-sofrel.en@sofrel.com - Website: www.sofrel.en  
 SOFREL LS website: www.ls-leak-detection.com