SOFREL PCWin2

SCADA system for remote control and monitoring of telemetry networks

LACROIX

SOFREL PCWin2: supervision that meets THE **DAILY CHALLENGES** FACED BY UTILITIES

The SOFREL PCWin2 telemetry and SCADA supervisor is entering a new era..

With the migration of communication media towards all-IP and the development of communicating sensors, water networks and energy installations are becoming increasingly connected and generate more and more data to be analysed on a daily basis.

The installation of a supervision solution is now essential for any operator wishing to effectively manage and monitor their network remotely.

SOFREL PCWin2 has been designed to meet this challenge and allows operators to easily get to grips with a supervision solution to better handle data and effectively manage the performance of their network.

DEVELOPMENT OF COMMUNICATIONS
TOWARDS ALL-IP

CENTRALISATION OF DATA

ADAPTABILITY
TO WATER AND HVAC MARKETS

OPENING TO
THIRD-PARTY APPLICATIONS

SECURE SHARING OF DATA

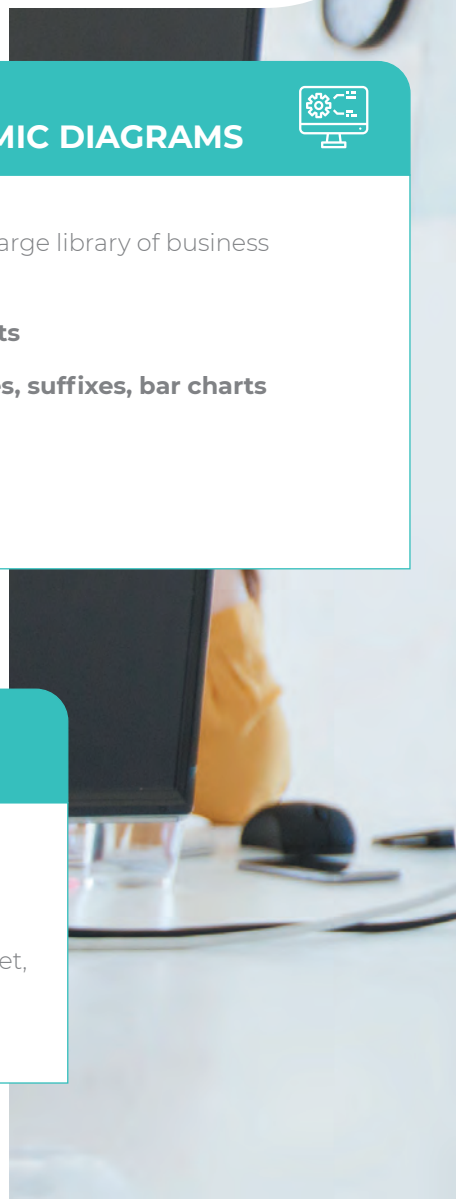
SOFREL PCWin2: simple and effective supervision TO **MANAGE** AND **MONITOR** A **TELEMETRY NETWORK**

The use of the SOFREL PCWin2 Scada system offers many advantages to operators:

- **Centralisation** of all data sent by devices
- **Data processing** and storage
- **Display** of the overall state of the network and each site controlled by dynamic and mimic mapping
- **Graphical analysis** of data by time or by business sector
- **Alarm management**
- **Data sharing** with other users or third-party applications

ANIMATED GRAPHIC MIMIC DIAGRAMS

- **Fully customisable view** with a large library of business symbols available
- **Display of animated components**
- **Displays of current digital values, suffixes, bar charts**
- **Data tables**
- **Control buttons**



COMMUNICATION WITH REMOTE DEVICES

- **Compatibility with all ranges SOFREL** S4W, S4TH, S500, S500TH, BOX, LS/LT, etc.
- 2G/3G/4G **Communication**, RTC, ADSL, Ethernet, internet, radio, etc.

PRODUCT BENEFITS

- **Remote management of sites**
- **Intuitive control and customisation of mimic views**
- **Access to all views and data via PC, tablet and smartphone**
- **Reduction of on-site operations**

DATA PROCESSING

- **Advanced calculations** covering current values
- **Advanced calculations** covering archived values
- **Calculation** formulas

CURVE CHARTS

- **Display of 1 to 6 curves** in a single view
- **Zoom** to adjust framing and scope
- **Time lag** to track information over different time periods
- **Export of curve points** to Excel

OPERATION REPORTS

- **Automatic data export** in Excel
- **Periodic generation of reports** (days, weeks, months, etc.)
- **Inserting totals** into rows and columns
- **Automatic** email **distribution**

MANAGEMENT OF ALARMS AND STAND-BY DUTIES

- **Annual schedules** for assignment of stand-by duties
- **Weekly** recipient call sequence **calendars**
- **Alarm transmission**
- **Logging of alarms, calls and acknowledgements**

ANDROID APP

Google Play

SOFREL Smart PCWin
download from Google Play

- **Viewing and acquisition of alarms**
- **Viewing current data statuses**
- **Positioning and modification of instructions**
- **Triggering of equipment queries**

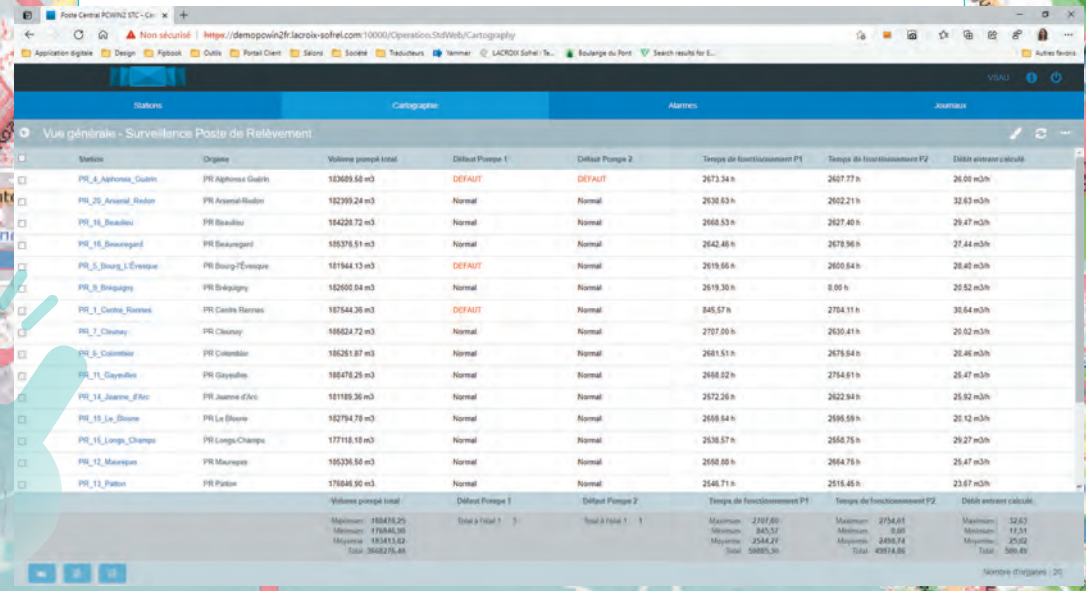
SOFREL PCWin2: a new business analysis module FOR **DATA PROCESSING** PURPOSES

DYNAMIC MAPPING

- Network **overview**
- **GPS tracking** of equipment
- **Importing layers** for displaying installations and areas
- **Data display** by geographical area and business analysis
- **Immediate access** to site data and summaries

BUSINESSS ANALYSIS TABLES

- **Instantly compare** the performance of your sites
- **Identification of points of malfunction** or under-performance
- **Act on one or more instructions** regarding a piece of equipment
- **Go directly to the list of information** and mimic diagram of a system to perform an investigation
- **Share data** from a business analysis



PRODUCT BENEFITS

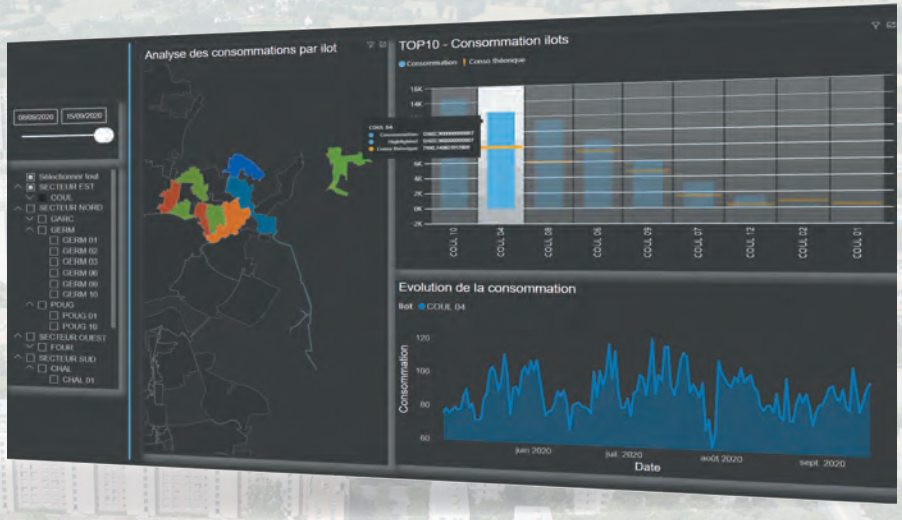
- **The user is able to fully customise the business views of their choice**
  - **Type of business analyses**
  - **Choice of indicators**
  - **Immediate action regarding these indicators**

European patent application (EP20176925.4)

District A - LS02
District metering
48°7'37.738" N 1°41'13.207" W
Volume lost - 1/1/0001 12:00:00 AM
Leak detected
Incoming water volume 738 m3
Outgoing water volume 921.000000000466 m3
Water lost 96 m3
PUMPING STATION
Bayview
3/9/2021 10:59:59 AM
Upper Seletar Reservoir
Lower Seletar Reservoir
Nee Soon Camp
Military Industrial Complex
Singapore Botanic Gardens
Bukit Timah Road
Holland Road
Orchard
Newton
Little India
Beach Road
Marine Parade
Queenstown
Tanglin
Bugis
Bras Basah
City Hall
Buangkok Green
Buangkok Drive
Mandai Avenue
Yishun Avenue 1
Jalan Kayu
Mo Kio Avenue 5
Central
Serangoon North
Bartley
Tai Seng
MacPherson Road
Woodsville
Whampoa
Kallang Bahru
Serangoon Road
Bendemeer Road
Kallang
Geylang
Sims Avenue
Nicoll Highway
East Coast
Scotts Road
Stevens Road
Farrer Road
Sixth Avenue
Chantek
Eng Neo
Seletar

Opening to third-party applications TO **SHARE TELEMETRY DATA**

In addition to centralising data from SOFREL-branded equipment, the SOFREL PCWin2 supervisory programme also enables third-party solutions such as hypervisors or data analysis applications to retrieve all or part of its current information which is archived on a daily basis.



SQL INTERFACE

- **Extraction of archived data** by an external application, using SQL queries
- **Information accessible** in different lists:
  - List of **stations** managed by PCWin2
  - List of **station data** and its characteristics
  - List of **stored files** for a list of station information over a time interval (start, end)
  - List of **alarm log** records over a time interval

OPERATIONAL PERFORMANCE

Hypervision

Data Analytics

SMART CITIES

Big Data

"WEB SERVICES" INTERFACE

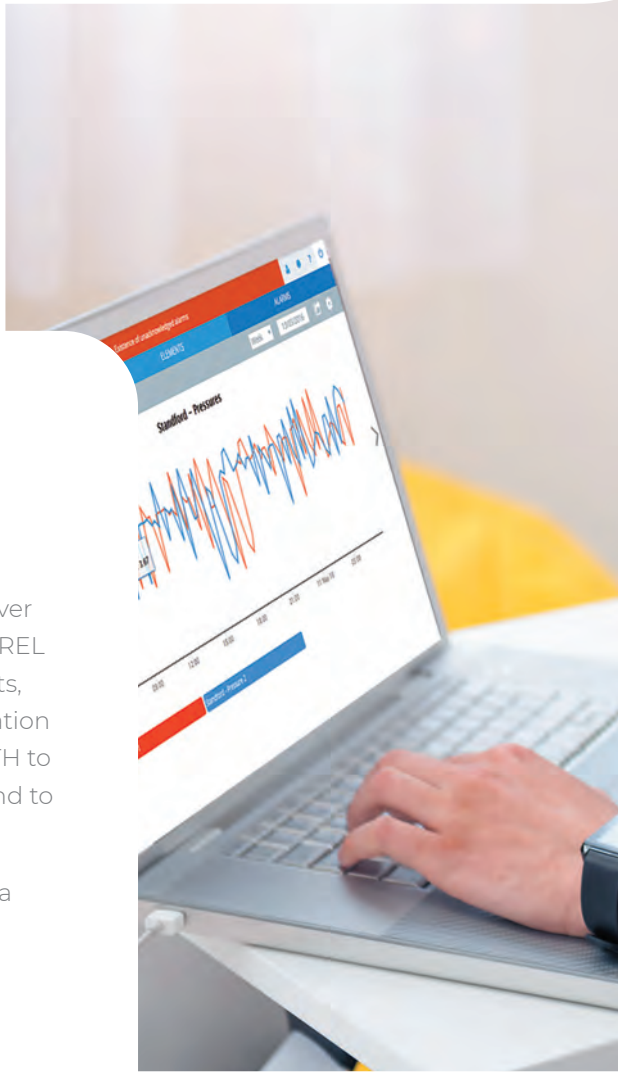
- **Consultation and management** of current values
- **Reading** the following information:
  - List of configured **stations** and their data
  - Current values of a **data list**
  - Current values of an **operational parameter**
  - List of **alarms** present
- **Write** access to:
  - Current values of an output **information list**
  - Alarm **acknowledgement**

SOFREL FR400: communication front-end processor FOR **EQUIPMENT NETWORK** AND **SOFREL TELEMETRY** AND **SCADA**

The SOFREL FR4000 front-end processor facilitates the **management of communication media** and allows for the implementation of **data sharing** between several SCADA System.

Compatible with all SOFREL telemetry equipment, this front-end processor retransmits all or part of the analogue and IP communications it receives to relay them via **a single IP interface** to the supervisors attached to it.

SOFREL FR4000 also manages all **communications initiated by supervision** wishing to query a remote terminal unit to retrieve the data and position a new instruction or operating parameter for it.



PRODUCT BENEFITS

- **Compatibility with all SOFREL telemetry equipment**
- **Possible interface with 4 SCADA system**
- **Scaled to manage up to 500 remote terminal units and a unlimited number of data loggers**
- **Management of the dual communication system with the remote terminal units**
- **Definition of functional rights for each connected SCADA system**
- **Ability to remotely modify a data logger configuration**

Compatible with the SOFREL SG4000 server for the installation of **VPN tunnels** to SOFREL S500, S4W and S4TH remote terminal units, SOFREL FR4000 also supports the installation of **certificates** with SOFREL S4W and S4TH to authenticate communications and respond to **cyber security** issues.

The front-end processor is configured via a secure WEB interface.

OPERATOR SCADA

COMMUNITY SCADA

FR4000

PSTN / GSM-CSD
IP NETWORKS
Public or private APN

REMOTE TERMINAL UNITS

S4W

S4TH

S500

S500TH

BOX

DATA LOGGERS

LS

LT

CONNECTED TECHNOLOGIES FOR **SMARTER WATER** & **ENERGY**

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