

SOFREL S4TH & B4TH

Range of connected controllers for HVAC installations



CONNECTED CONTROLLERS DESIGNED FOR YOUR HVAC APPLICATIONS

BOILER ROOM

- Complete control of boiler rooms: boilers and heating circuits
- Control based on occupancy schedules
- Regulation and monitoring of domestic hot water production
- Recording of meter and sensor data for consumption monitoring and deviations

VENTILATION AND AIR CONDITIONING

- Air recirculation and renewal rate management
- Heating and cooling control
- Consideration of occupancy schedules for control
- Recording of installation data (temperatures and flow rates)



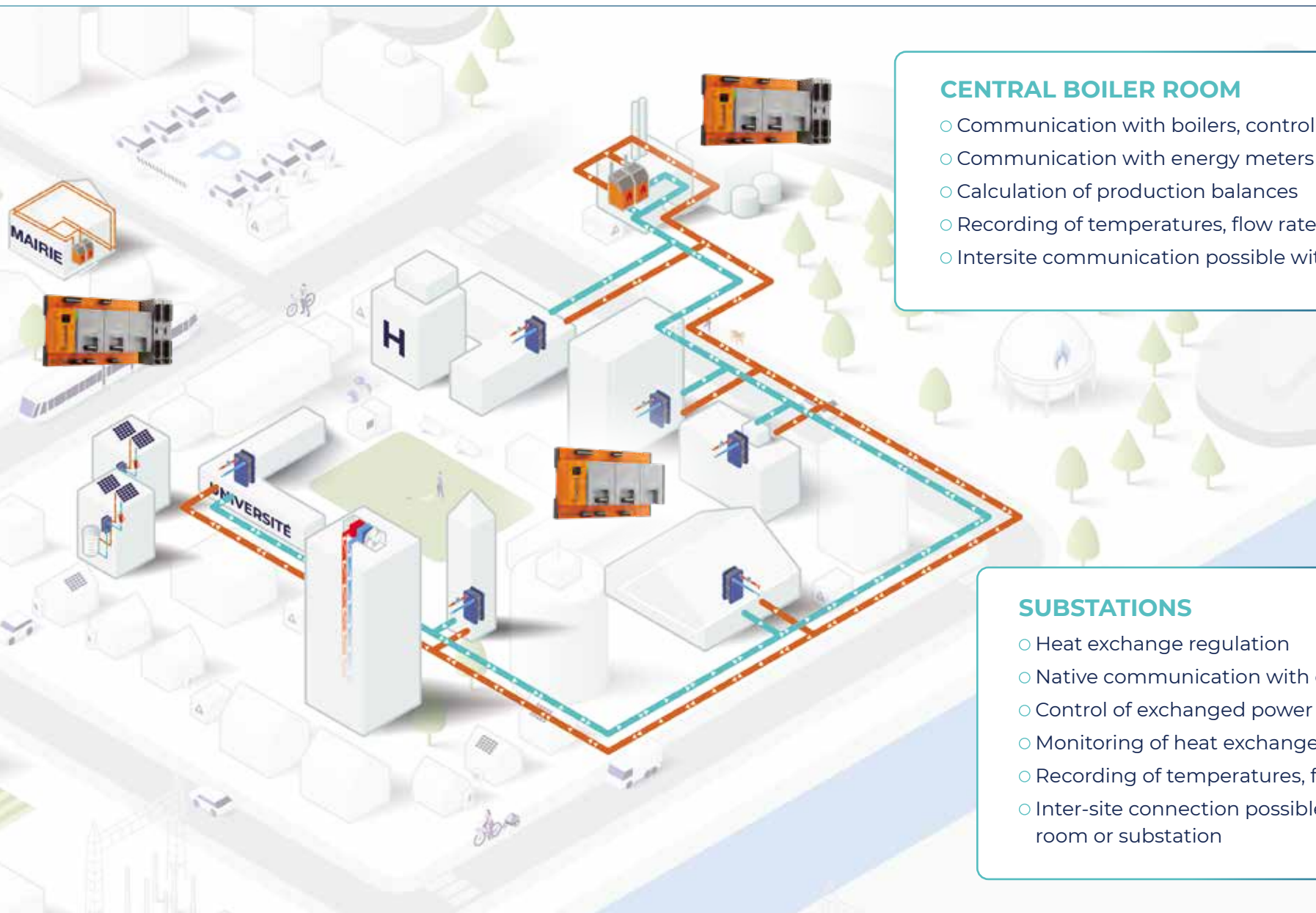
TOWARDS SMART BUILDING MANAGEMENT

- Centralization and control of technical equipment
- Solution that meets the requirements of the BACS decree
- Improved energy performance of commercial buildings

SOLAR HOT WATER

- Comprehensive control of DHW production
- Temperature monitoring to prevent equipment failure and Legionella
- Native communication with energy meters
- Recording of meter and sensor data for consumption and deviation monitoring
- Inter-site capability with backup boiler

CONNECTED REGULATORS DESIGNED FOR YOUR HEATING NETWORKS



CENTRAL BOILER ROOM

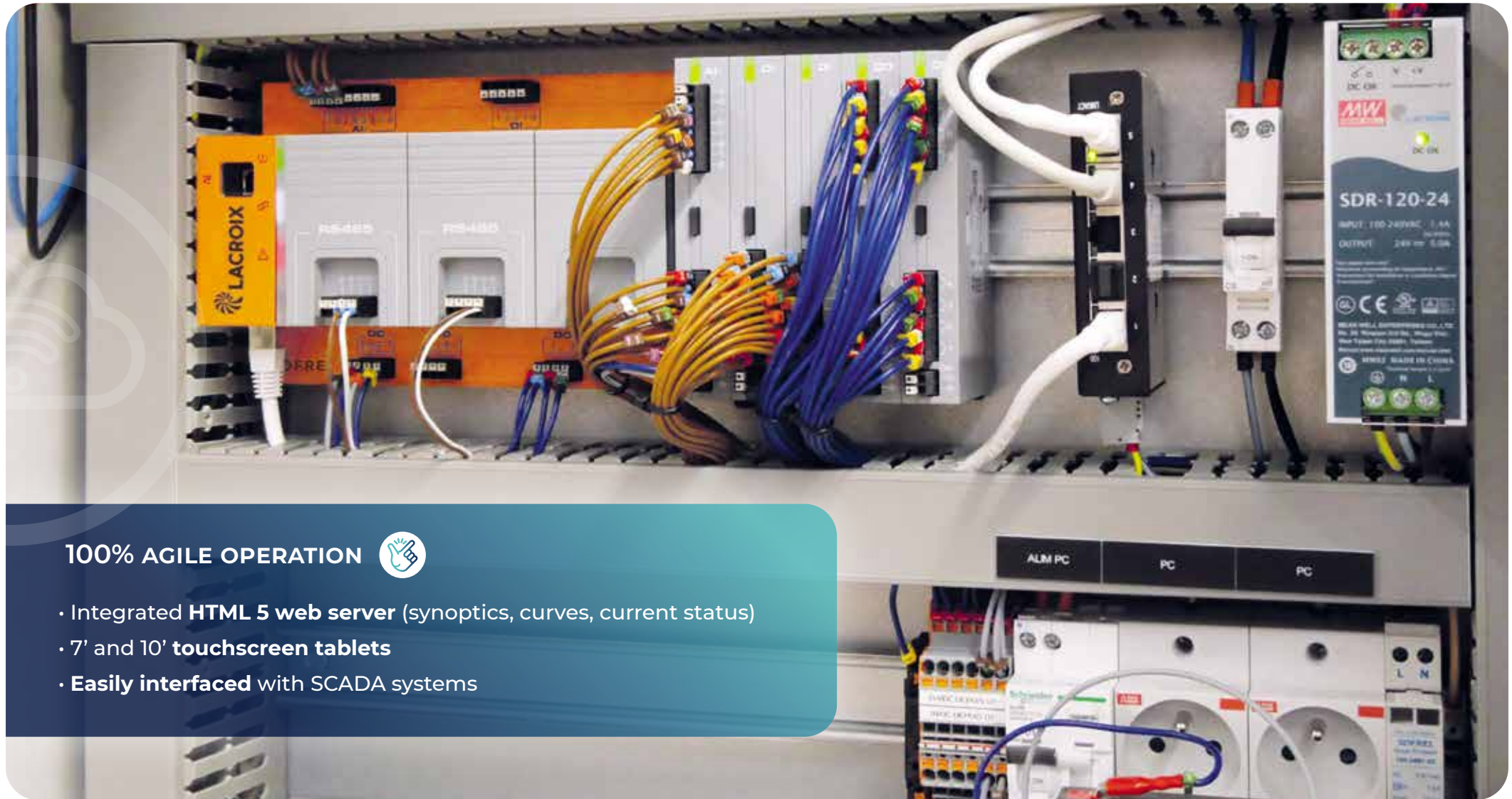
- Communication with boilers, controllers, or regulators
- Communication with energy meters
- Calculation of production balances
- Recording of temperatures, flow rates, calories
- Intersite communication possible with substations

SUBSTATIONS

- Heat exchange regulation
- Native communication with energy meters
- Control of exchanged power and possible limitation
- Monitoring of heat exchanger fouling
- Recording of temperatures, flow rates, calories
- Inter-site connection possible with central boiler room or substation

LACROIX EXPERTISE

RELIABLE, AGILE AND SUSTAINABLE SOLUTIONS



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RELIABLE, AGILE AND SUSTAINABLE SOLUTIONS

EASE OF IMPLEMENTATION



- **Ergonomic** configuration tool
- **Ready-to-use** business libraries: Heating, Communication, CTA
- **Standardized automation workshop**
- **Centralized** network management

ROBUSTNESS AND DURABILITY



- **100% French** design and manufacture
- **High EMC level** to withstand power surges
- **Operating temperature** from -20° to +70°C
- **3-year warranty**

RELIABLE COMMUNICATIONS



- **Integrated 4G modem** with communication redundancy
- **Monitoring** of exchanged **data** and **cost control**
- **Compatibility** with radio media
- **Complete data upload** to central systems
- **Backup battery** to ensure continuity of operation

HIGH LEVEL OF SECURITY



- Integrated **cybersecurity**
- **Centralized** access **management**
- **Watchdog mode** in case of anomalies



SOFREL S4TH & B4TH: A RANGE TAILORED TO YOUR NEEDS

Battery backup



100% software
configuration



Compact



Integrated
modem



Communications
redundancy



Warranty



2G/3G/4G modem

4 or 8 AI T°
inputs

4 or 8 DI inputs

Up to 10
I/O expansion modules
(optional)

USB terminal

Up to 3 communication
modules (optional)

Ethernet port
100 MBIT

USB port
(Display)

2 or 4 AOv outputs

2 or 4
DO outputs

Spring-loaded
plug-in connectors

EXT bus extension
modules (optional)



SOFREL S4TH & B4TH: A RANGE ADAPTED TO YOUR NEEDS ACCORDING TO YOUR COMMUNICATION PROTOCOLS

SOFREL S4TH

for cyber-secure
communication
to the supervision station
via the LACBUS protocol



SOFREL B4TH

for communication with
the supervisory station
via the BACnet IP protocol



Remote control & remote management of HVAC installations

- ▶ **Time stamping** of information at source
- ▶ **Calculations and archiving, reports**
Operating parameters, thresholds, conversion tables
- ▶ **Management of alarms**, recipients, and alert sending sequences
- ▶ **Continuous monitoring** of the installation
- ▶ **Diagnosis** of the status of the connected controller and peripherals
- ▶ **Automatic control** of actuators and motors
- ▶ **Consumption** and drift **monitoring**
- ▶ **Communication redundancy**
- ▶ **4G operator selection assistance**

THE + PRODUCTS



NATIVELY CONNECTED
with a built-in 4G modem and Ethernet port



DEDICATED TO HVAC PROFESSIONALS
M-Bus, Modbus, BACnet IP protocols, Automation workshop included, "Heating" and "Ventilation" libraries



EASY
configuration with the intuitive graphical configuration tool with standardized automation workshop operating with the server HTML5 web

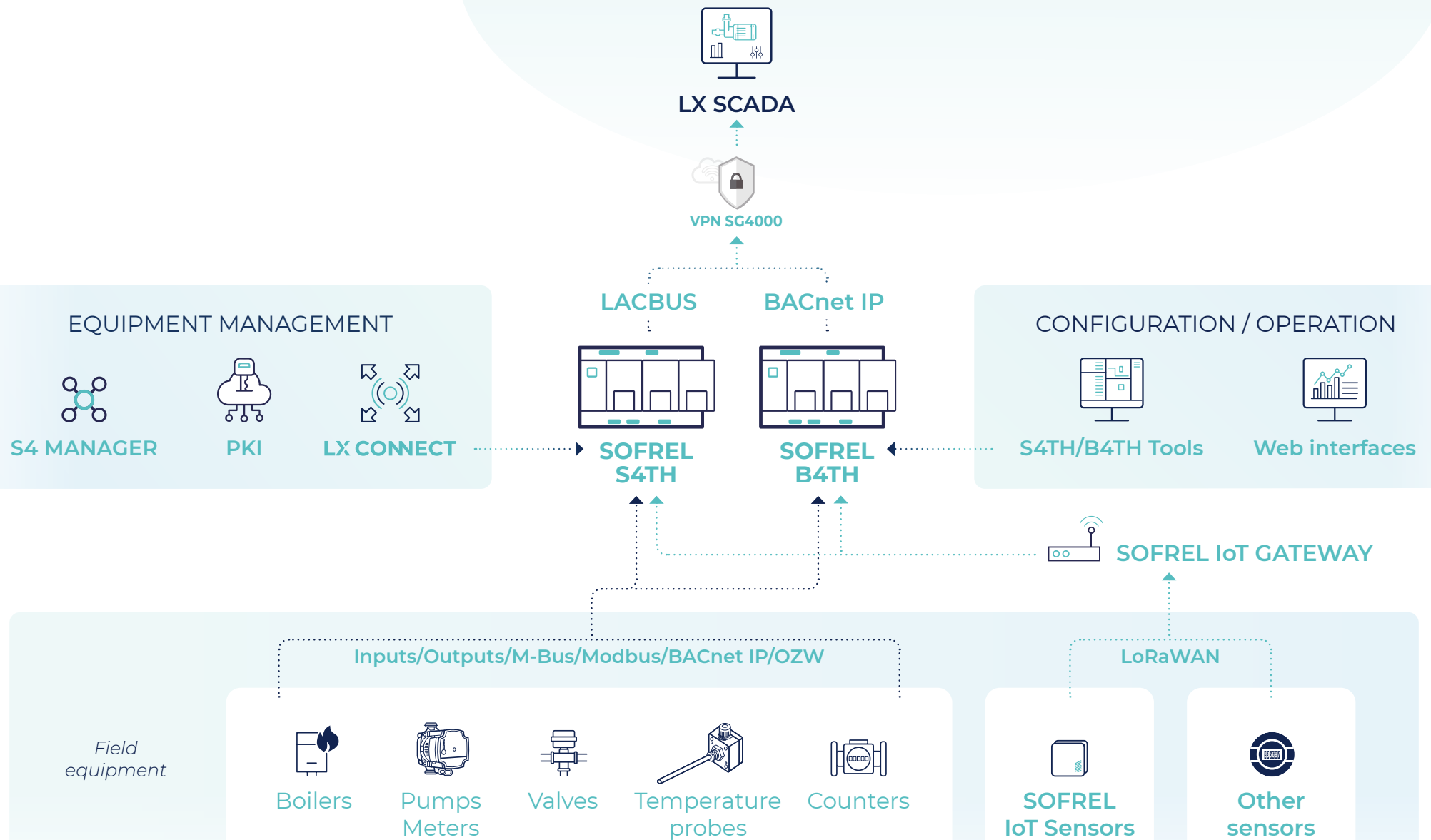


RELIABILITY AND ROBUSTNESS
with an industrial product designed and manufactured in France



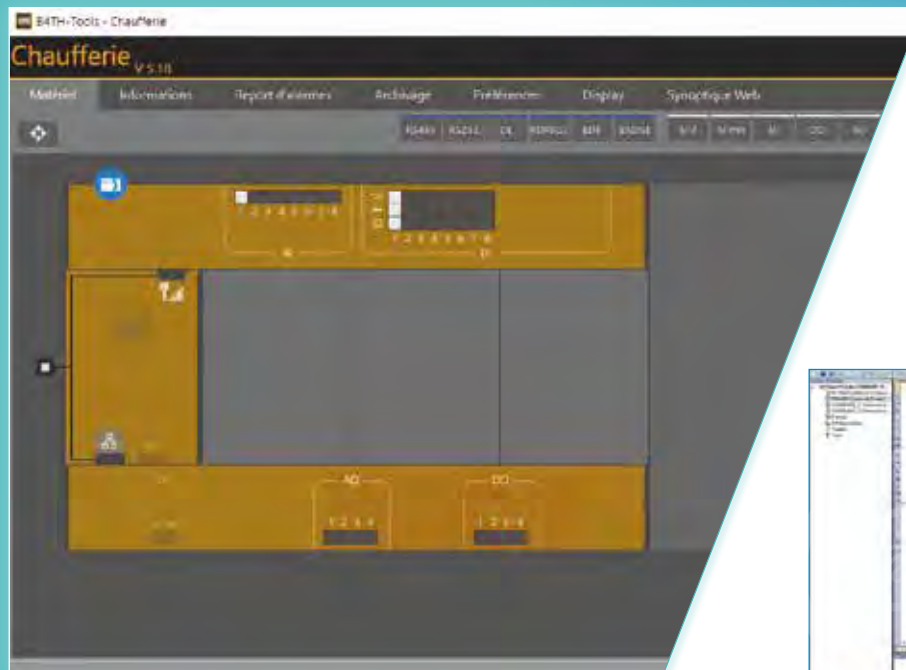
SUPPORT
with support from the LACROIX teams

SOFREL S4TH & B4TH EQUIPMENT AT THE HEART A CYBERSECURE ECOSYSTEM



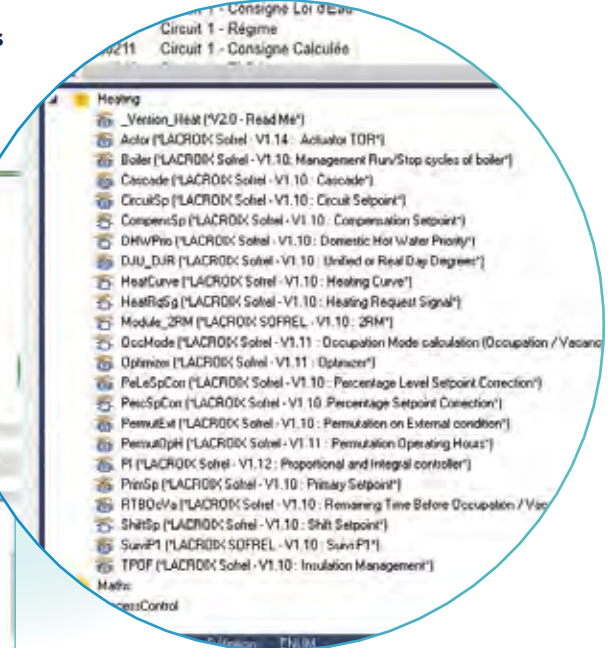
TOOLS DESIGNED FOR EASY CONFIGURATION VIA SOFREL S4TH & B4TH - TOOLS

Graphical and ergonomic
configuration of controllers
connected to SOFREL S4TH & B4TH



An IEC 61131-3 standardized
automation workshop to meet
the specific needs of each application

- ▴ Support for ST, FBD, Grafcet, and Ladder languages
- ▴ Simulator, debugger, analyzer
- ▴ Ability to create your own blocks and library
- ▴ Upgrading of business libraries:
Heating, Ventilation



A COMPLETE ECOSYSTEM FOR SECURE MANAGEMENT AND PEACEFUL NETWORK MANAGEMENT

LX CONNECT IIoT platform providing complete management of a fleet of SOFREL S4TH & B4TH

Automation of cybersecurity for SOFREL S4TH & B4TH:

Automatic renewal of S4TH certificates and ecosystem

Simplification of cybersecurity processes and automated fleet management:

Equipment version tracking and mass deployment the latest software versions and security patches



SOFREL S4-Manager for centralized administration

For users

- Definition of individual accounts: Passwords, rights, revocations
- Automatic update of all workstations SOFREL S4TH & B4TH

For local SOFREL S4TH & B4TH workstations

- Backup and sharing configurations SOFREL S4TH & B4TH between users

SOFREL SG4000 Securing communications

Creation of a VPN server on the public internet

SOFREL S4TH & B4TH VPN network

- Authenticated connections
- Encryption of exchanges
- Automatic connection recovery

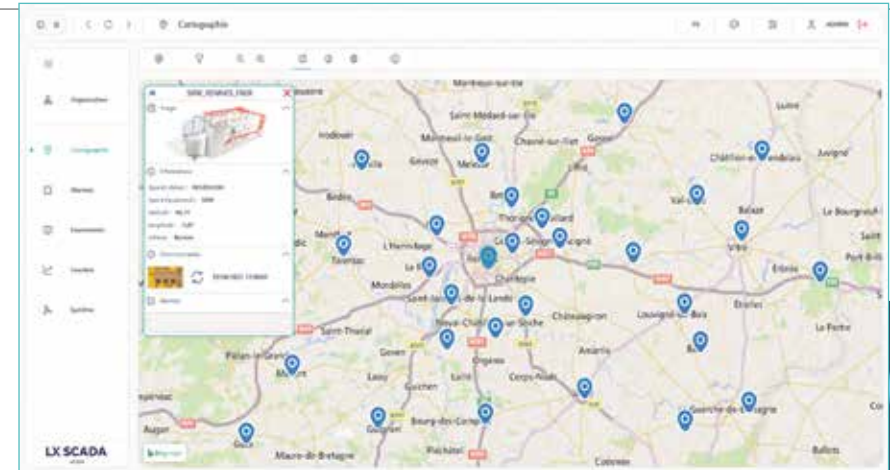
Interface with the central site LAN

- VPN firewall for local workstations/central LAN
- Business applications: central workstation, monitoring, management
- Utilities: messaging, remote access

TOOLS FOR EASY AND SUSTAINABLE OPERATION

HTML5 web server

- ▶ Responsive HTML5 web server
- ▶ Access to data via smartphone, PC, or tablet
- ▶ Data consultation
 - Alarm logs and acknowledgments
 - System operation log
 - Settings for instructions/schedules
 - Information curves
- ▶ Animated graphical overviews
 - Editor integrated into S4 & B4TH-Tools



LX SCADA LACROIX fullweb supervision solution and multi-protocol

- ▶ Configuration and operation of data
- ▶ Dynamic mapping
- ▶ Alarm and on-call management
- ▶ Centralized planning

CONNECTED
TECHNOLOGIES
FOR **SMARTER**
WATER &
ENERGY



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