

# SOFREL FR4000

## FRONT-END PROCESSOR FOR NETWORKING SOFREL TELEMETRY DEVICES

SOFREL FR4000 is an effective solution for opening up telemetry networks to supervisory control software and central systems developed by operators.

As the central unit, FR4000 centralizes all SOFREL telemetry equipment communications and transmits the data via an Ethernet link (LACBUS-PC protocol) to operators' SCADA systems.

This data exchange solution is suitable for both private APN networks that provide a 100% secure barrier preventing intrusion into the telemetry network and public APN networks alike. In the case of the latter, SG4000 software will also be required to secure network data transmissions over the public APN.



### PRODUCT advantages

- Secure sharing of devices between a private APN and another network via a secure VPN tunnel
- Interaction with SG4000 for operation on Public APNs
- Centralization of 500 Remote Terminal Units and an unlimited number of data loggers
- Automatic switchover to a backup medium in order to ensure proper data transmission in case of communication failure with a device
- Easy switchover from multi-source networks to IP

### BENEFITS

- Network operation via 4 central SCADA stations
- Distribution and sharing of device data with third party networks
- Secured exchanges



# IP and multi-source centralization and communication

## Private APN

Creation of a 100% secure barrier

## Network operation through 4 central stations

Opening of the telemetry network to supervisory control software and central systems developed by operators

## Network data transfer

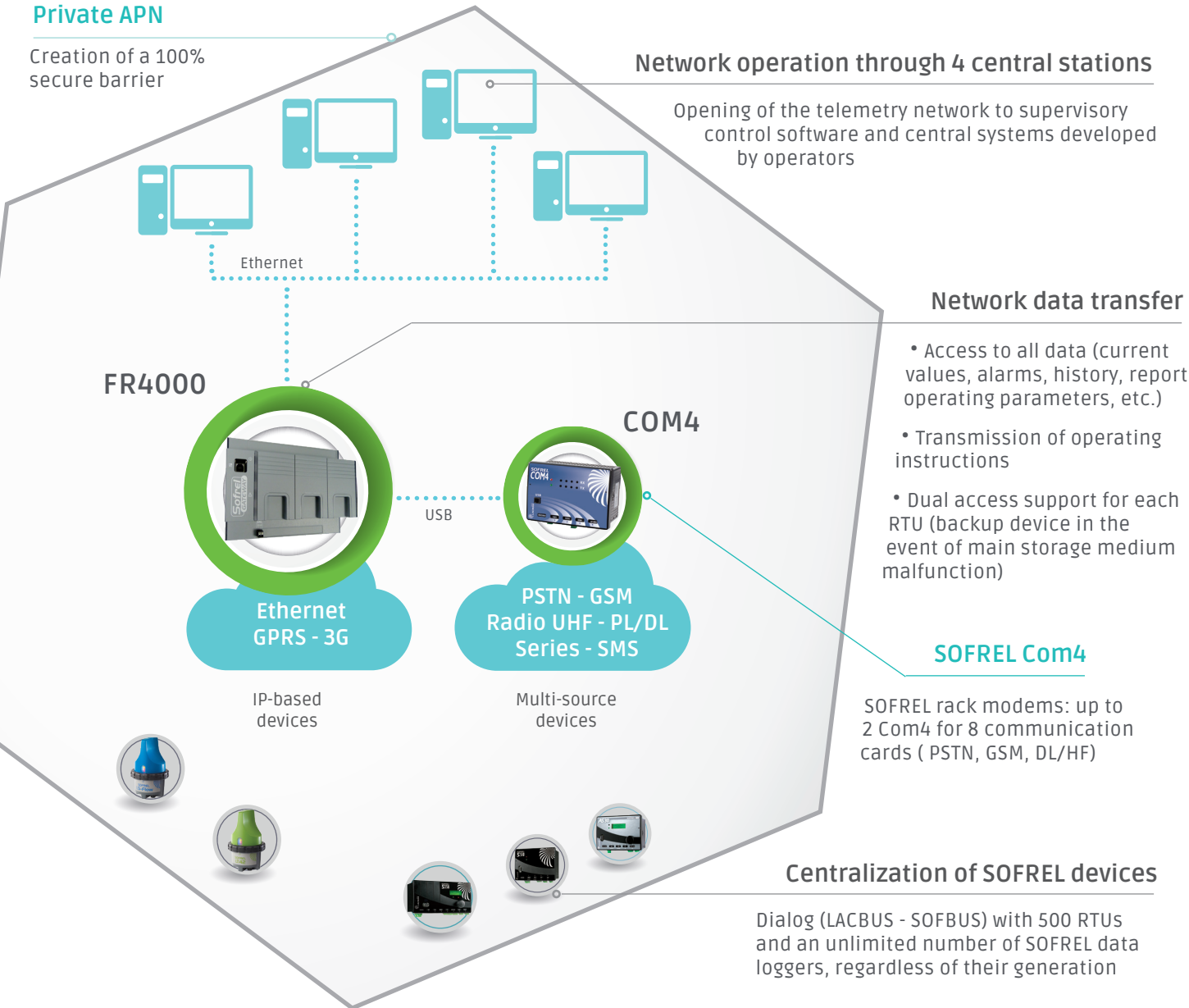
- Access to all data (current values, alarms, history, reports, operating parameters, etc.)
- Transmission of operating instructions
- Dual access support for each RTU (backup device in the event of main storage medium malfunction)

## SOFREL Com4

SOFREL rack modems: up to 2 Com4 for 8 communication cards (PSTN, GSM, DL/HF)

## Centralization of SOFREL devices

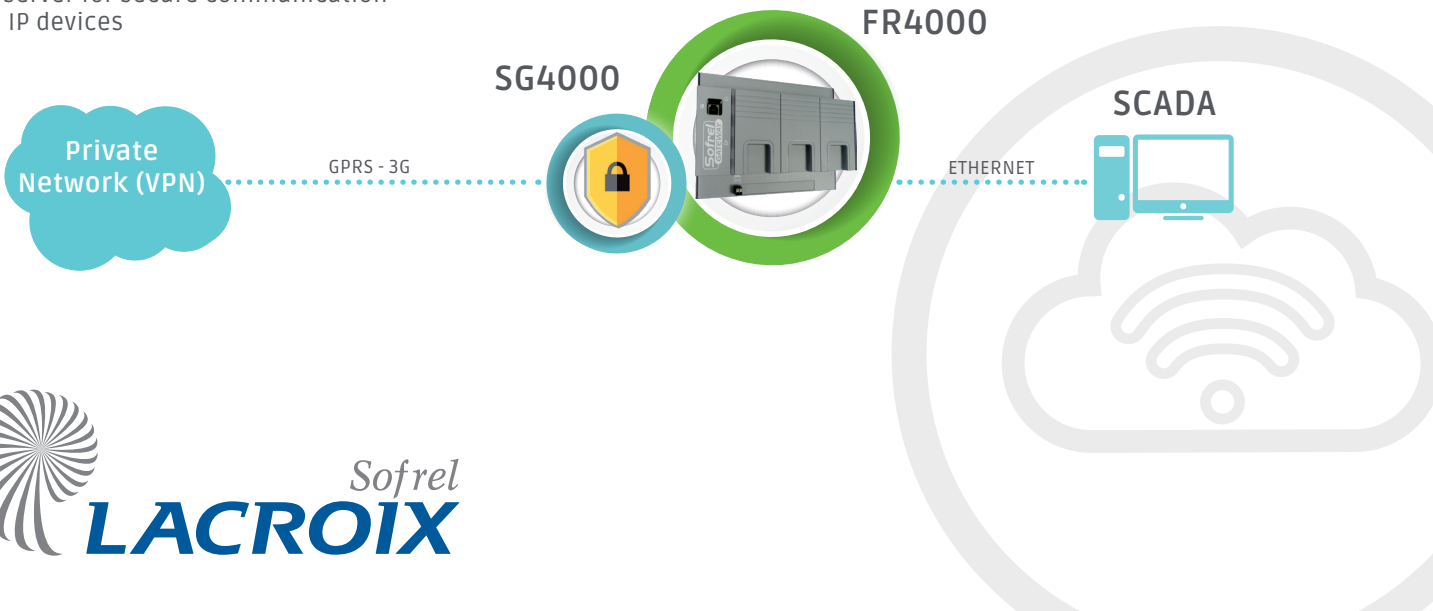
Dialog (LACBUS - SOFBUS) with 500 RTUs and an unlimited number of SOFREL data loggers, regardless of their generation



# IP security on public APN network

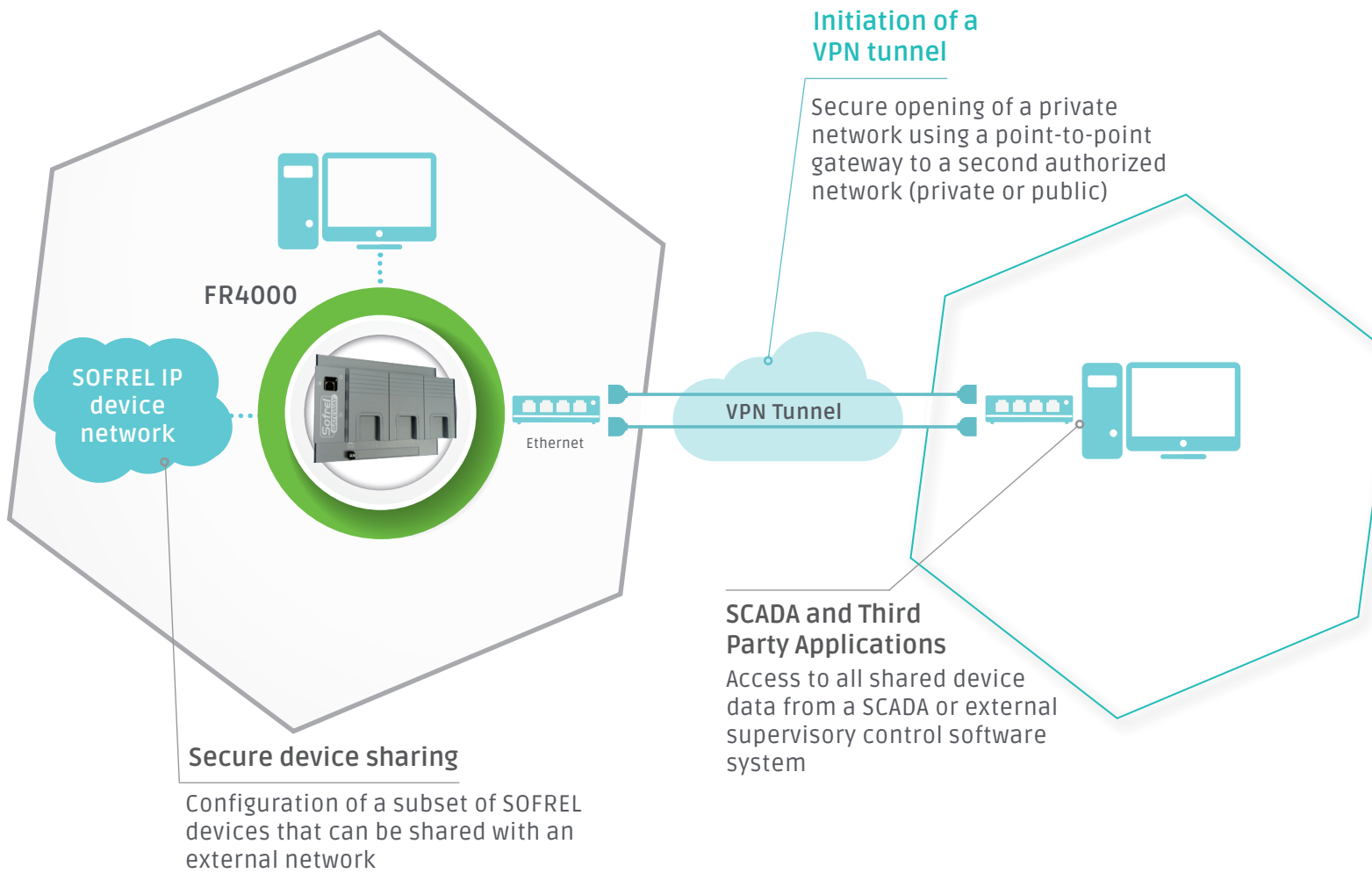
## SOFREL SG4000

VPN server for secure communication with IP devices



## Other FR4000 use cases

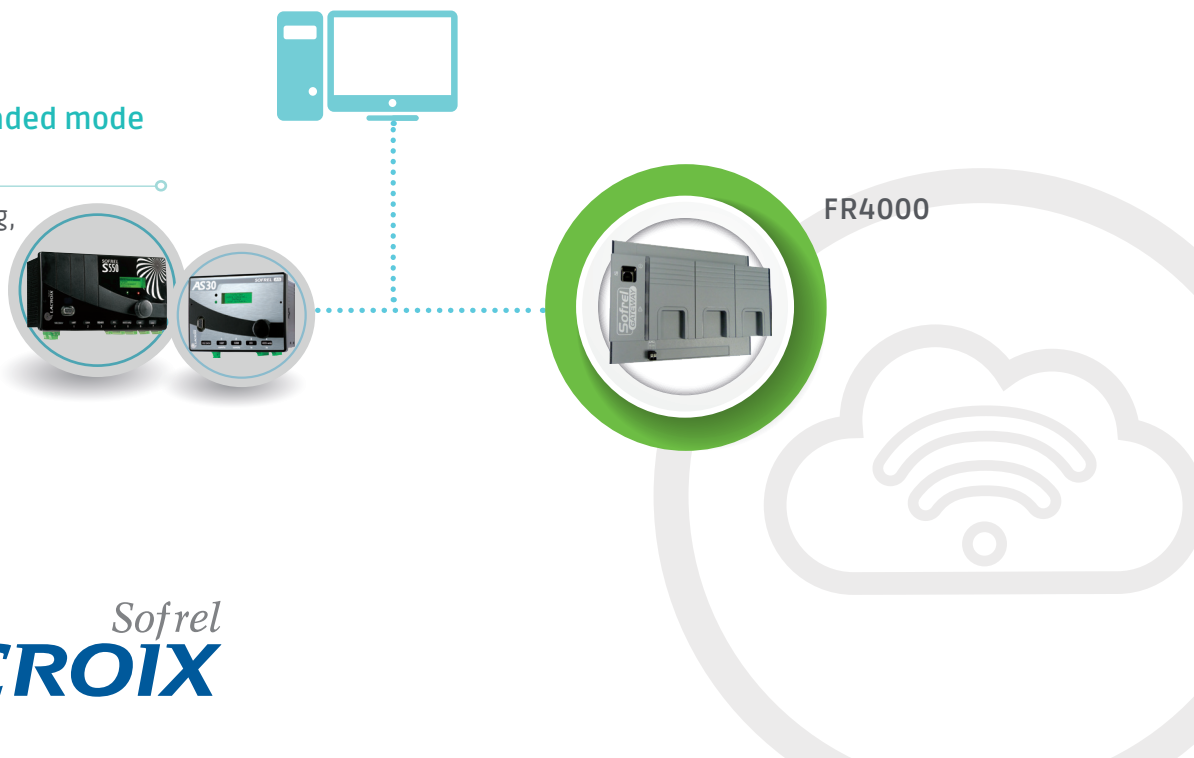
### Secure sharing from a private APN to another network



### Monitoring and stand-by duty downgraded mode by «Watchdog» equipment

#### Stand-by duty downgraded mode via AS or S500

FR4000 fault monitoring, communication cards, SCADA links and SOFREL RTUS



## Operational specifications

FEATURES	CAPACITIES
<b>Devices</b>	500 remote telemetry units Unlimited number of data loggers
<b>Ethernet interface</b>	4 LACBUS-PC servers for exchanges with 4 supervisory control systems 1 MODBUS-TCP server for "reporting" devices 4 clients for queries from RTUs 40 servers for receiving spontaneous device transmissions
<b>Means of communication with devices</b>	Maximum 8 cards from the following: <ul style="list-style-type: none"><li>- PSTN (RTC communications)</li><li>- GSM (GSM-Data and GSM-SMS communications)</li><li>- DL/HF (Motorola Radio Communications or Private Line)</li><li>- RS232 (for connection of an external radio modem)</li></ul>
<b>Configuration models</b>	50 communication models with RTUs 10 models for data relay from RTUs to SCADA 1 model for data relay from data loggers to SCADA

