CONDIS®

Grid Control

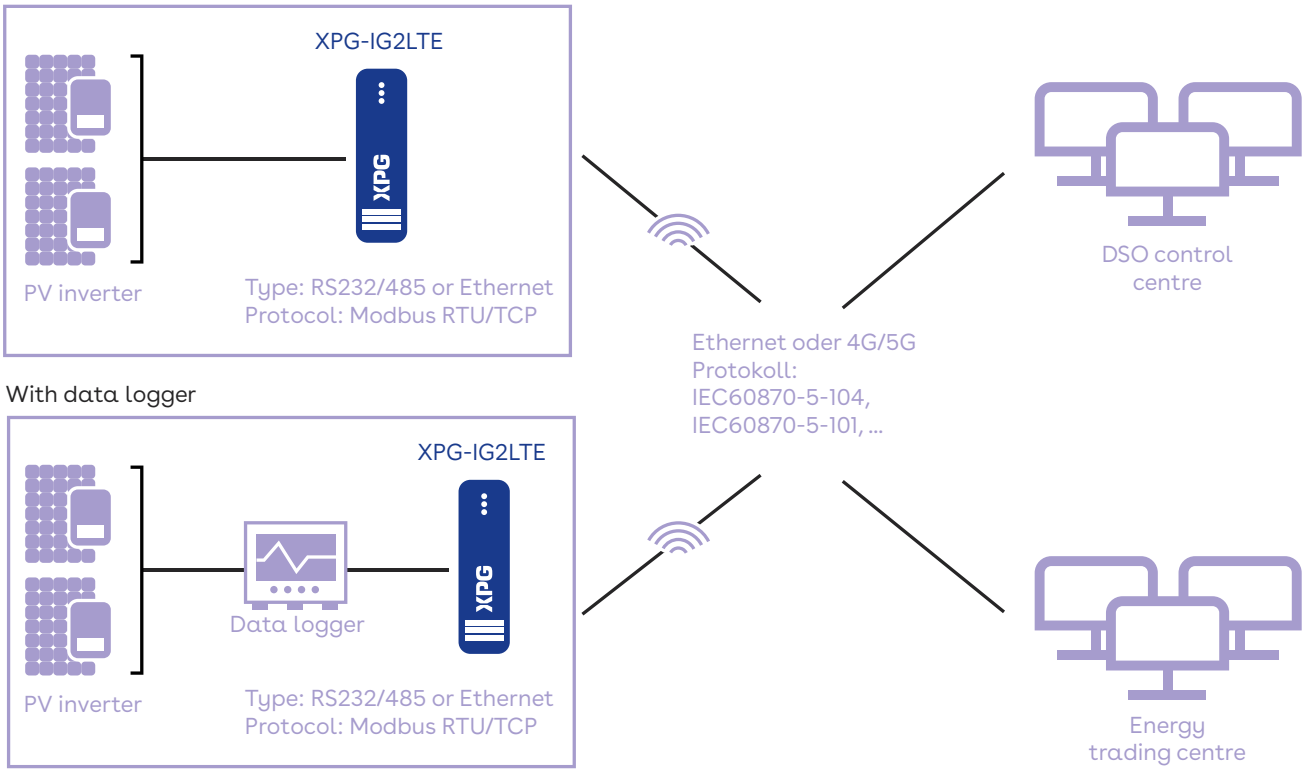
XPG - Gateway DER

This solution allows DSOs to monitor and control energy injections into their grid via solar systems installed at their customers' premises. An interface is set up to integrate this data into the DSOs SCADA and data is collected by XPG-IG2LTE-Gateways. The control units of solar systems communicate in modbus with gateways while data transmissions to the control centre are done via a supported protocol chosen by the DSO such as IEC 60870-5-104.

Schematics

Direct link to the inverter

Injection through private solar system



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Product Sheet

Grid Control

Hardware



XPG-IG2LTE Communication Gateway
XPG-IG2LTE, ISOS (Industrial Secure Operating System), Quad-core Cortex-A53, 1.8GHz Power supply 8-36 VDC, 2x Ethernet Ports, 3x Serial Ports, Temperature: 0 to 60°C, Dimension: 112 x 84 x 25 mm, RAM 2 GB, DIN Rail Mount, Modem for 4G/5G communications.
Check out our product sheet: IG2 device for XPG

Key features

Protocol
- IEC 60870-5-104 Client
- IEC 60870-5-104 Server
- Modbus RTU Master (serial)
- Modbus RTU Slave (serial)
- Modbus TCP Client
- Modbus TCP Server
- MQTT Publisher/Subscriber
- OPC UA Client
- OPC UA Server
- REST API (RESTful API)
- SNMP client (v2c, v3)
- EtherCAT Client

Data
- Energy measurement
- Facility health info
- Control for a reactive power compensation function

Data inverter standard
- SunSpec

Use cases

The connection with SCADA can be done by wire or by 4G/5G link. In this case, a VPN tunnel (IPSec or OpenVPN) is established with the customer firewall directly or through an application supplied by CONDIS and installed in the infrastructure.

Benefits

- Compliant with the highest cyber security
- Comprehensive online configuration management platform
- User-friendly management tools
- Minimal clutter for integration into the producer's or DSOs installation
- Customer support

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