IXXAT SG-gateway with I/O Interface

Remote terminal unit for Smart Grid applications

The SG-gateway with I/O interface is a remote terminal unit for the energy market with four digital inputs and four digital outputs for monitoring and controlling the connected devices.

It supports the communication protocols used in the energy sector, e.g. IEC60870-5-104 and IEC61850. The gateway can support the connected electric equipment in the field, via an Ethernet interface and/or a serial port, using the protocols Modbus TCP and RTU. As an option, the SG-gateway can also include 3G modem.

Easy WEB-PLC programming

The application logic can be programmed on the device either using the integrated graphical web editor or by using a predefined configuration loaded to the device. The graphical web editor is a very intuitive and easy to use interface to program software applications and configure the gateway. No engineering tools are required and it can easily be accomplished by service technicians.

Features and benefits

- Easy way to transport I/O data from electrical equipment in the field to SCADA systems
- Connects intelligent electrical devices (IEDs) with IEC protocols to industrial automation systems
- Connects machines to PLC's and Virtual Power Plant / Demand Response companies
- Supports several communication protocols (IEC61850 client/server, IEC60870-5-104 client/server, Modbus TCP client/server, Modbus RTU master/slave)
- Transmission over *3G (*optional) or over Ethernet
- Connects serial based Modbus RTU electrical equipment over a selectable RS232/RS485 interface
- Easy web based configuration using any standard browser
- Robust metal housing for stand-alone operation with DIN rail mounting
- Global free technical support and consulting services

Technical specifications

Dimensions (LxWxH)	73 x 46 x 103mm
Weight	320 g
Operating temperature	0 to +55ºC
Enclose	Continuously hot-dip aluminium-zinc coated steel sheet
Power supply	24 VDC Weidmuller BL 3.50/03
Current consumption (at 24 VDC)	max. 0.1 A (without IOs) max. 0.5 A per digital output **Modem version:** max 0.14 A (without IOs) max. 0.5 A per digital output
LED indicators	X5
SD card slot	Supporting micro SD cards up to 32 Gbyte
Ethernet connector	1x 10/100 BaseT RJ45
I/O connectors	Weidmuller BL 3.50/10
Serial connector	Weidmuller BL 3.50/08
CAN connector	Weidmuller BL 3.50/04
Cellular Modem	3G Tri Band UTMS modem (optional with SIM card slot)
Mechanical rating	IP20, NEMA rating 1
Mounting	DIN-rail (EN 50022 standard)
Supported protocols	IEC61850 Client/Server, IEC60870-5-104 Client/Server, Modbus TCP Client/Server, Modbus RTU Master/Slave
Required software	CHIPtool for IP configuration
Config method	Integrated webserver / WebPLC
Certifications	CE