EMPURON HARDWARE PARTS
Hardware Parts for EMPURON Solutions

EMPURON Grid Gateway & SCADA Metering

Multifunction gateway with the functions of a data concentrator and protocol converter. Tasks: Combining isolated segments of distributed management systems, data processing in real time with the help of SPS algorithms (according to IEC 61131-3), support through intelligent I / O modules.

The **EMPURON Grid Gateway** has the ability to collect data from different devices at different transmission lines and protocols. All the collected and processed data can be presented visually in a local HMI (touchscreen) and simultaneously transmit superior remote SCADA system.

Possible area of usage

- Integration of complex management of distributed systems
- Video surveillance
- Access Control
- Fire protection
- Management of traffic
- Management of the electric power industry and the industry:
  Integration of microprocessor protection and IED devices
  Integration of RTU and connection to a different SCADA systems in parallel

Communication capability

Using the **EMPURON Grid Gateway** it is possible to communicate with more subordinate units on the same transmission path, namely: the serial port (with or without modem), radio and wireless connectivity, the TCP / IP and UDP network protocol or optical transmission paths. The EMPURON Grid Gateway enables the maximum flexibility in terms of data transfer rates in terms of communication protocols used.

Supported communication protocols

IEC 61850	Client/Server	MODBUS RTU	Master/Slave
IEC60870-5-101	Master/Slave	MODBUS TCP	Client/Server
IEC60870-5-102	Master	SPA	Master
IEC60870-5-103	Master/Slave	HART	Master
IEC60870-5-104	Client Server	ProfiBUS	Master
DNP 3	Master	NEO	Master
BACNET	Master	FINS	Master
DLMS			

EMPURON **Grid Gateway**

Usage together with:
- Data-Warehouse
- Calculation Engine
- EMPURON SCADA
- Middleware
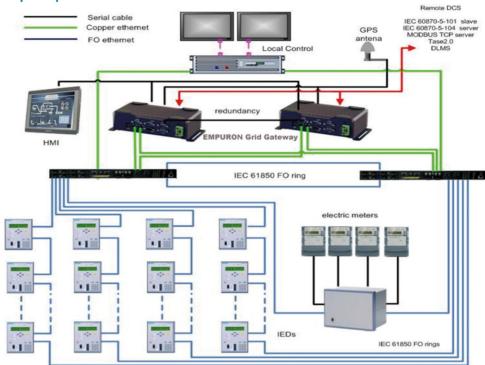- Reporting and Business-Intelligence (BI)
- EMPURON Portal
- Application Server

EMPURON Grid Gateway

The **EMPURON Grid Gateway** is a powerful system for local and remote process monitoring and control. It is optimized for space limited and environmentally critical implementations in electrical power systems, water supply systems, gas supply systems, as well as other industrial control systems.

The **EMPURON Grid Gateway** as **SCADA Metering** enables the Meter reading by the usage of Standard Meter Protocols. With **SCADA Metering** a higher read frequency compared to normal counter systems is possible. In addition, the high accuracy of tariff meters leads to optimization of **network management for target load curves**.

Example Layout

The highly available configuration layout can also be changed in a non-redundant "stand-alone" system, if the requirements in terms of availability and data security does not warrant this.

Structure	Mechanical characteristics	
Intel ULV Celeron 400/650 MHz	Installation	wall mounted (the default mode), the DIN-rail (optional)
1 Ethernet network adapter 100 Mbps	Dimensions	212,5 mm x 74,2 mm x 107 mm
8 Serial ports 5xRS232, 3xRS232/422/485	Net weight	2,16 Kg
Type II Compact Flash memory 1 GB (SSD hard disk)	Operating temperature	-25°C - 60°C with CFD (6 50MHz)
3 digital input and 3 output	Operating humidity	5 - 95% when operating at 40°C
3 USB ports	EMC	CE
WEB support		

Services

Services included are:

- Delivery of the gateway system
- Remote installation support and training on the job using web-based training lessons
- Trouble shooting and telefone support

Demand for your offer at EMPURON: Mail address sales@empuron.com