EMPURON **SUPERVISE PV**
Centralized Monitoring of PV Plants

Successful PV system management for more efficiency

The Monitoring provided will support any activity necessary for plant managament. The cutting-edge architecture enables a huge data amount to be managed.

Plant data are made available from the scalable database solution **EMPURON HIS** (Historical information System) in terabytes dimensions. Already installed or new plants can be thus monitored and operated producer-spanning – independently of inverter or module types.

EMPURON SUPERVISE PV ensures the required presentation of all energy generation data and paints a complete picture of plant statuses and working processes.

Ease of Analysis using SCADA Overviews

The rich Reporting features hands the evaluation power over to the users and provides the reports for any kind of information needed – for management as well as for key service figures. By creating layouts in a full graphic editor the reports can be delivered e. g. in HTML, Excel or PDF.

Get the optimum yields controlled

The automatic analysis tools are tracking the continuous generation of energy and are reporting the quality of your plant.
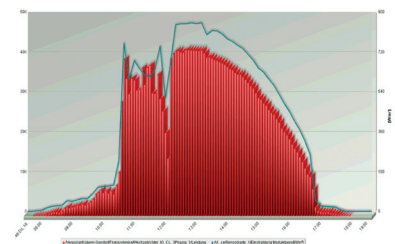
Technology pointing the way ahead

The Monitoring application provides a full set of tools for the service of renewable plants. The open Data-Warehouse solution is based on a Middleware with scalable computing power and failover functionality.

All components are web-based and independent of operating systems (on client and servers). Also ORACLE or Microsoft SQL-Server is free of choice.

EMPURON **SUPERVISE PV**

- Data-Warehouse
- SCADA for Renewable Source
- Calculations
- Application Server
- Middleware
- Reporting and Business Intelligence
- Data Management for Plants

Ease of Analysis using the SCADA system modules
The free configurable display enables the adequate view to plant status information.

The key plant data are configured using the calculation engine which provides unique features:
Dynamic time slot calculation or detecting spec al events, free formula and calculation chain definition.

Follow the service operations and broad functionality

The **EMPURON MONITORING APPLICATION** enables optimal performance over the life span of the power plant- e.g. reduce generation losses.

It helps maintenance to optimize its operation by supplying all relevant data (components, location, manufacturer, etc).

Using the Monitoring provides data of generation for funding/billing issues, e. g. kWh produced per day/month in automatic generated reports or as download data. The Middleware is data communication based for all connected partners (all PV-plants, AMR, billing, etc.).

The Monitoring also offers plant overall data collection, evaluation and reporting. The Alarm Center provides a data collection from small to large scale including tele-communication services for alarming by SMS, voice call or email.