

# EMPURON DISPLAY SOLUTIONS

## Display Systems for EMPURON Server

### Freely customizable visualization of plant data with multimedia displays

**EMPURON Display Solutions** allows the Client-/Server-based presentation of plant data for Renewable Energies. The structure of the self-running presentation is individually configurable. If several installations on a server are recorded, arbitrary plant data can be used for presentation. Therefore, different displays can be realized for different display locations.

**EMPURON Display Solutions** use the functions of the **EMPURON Application Server**. This allows a user defined data linkage to utilize specific values for presentation.

**EMPURON Display Solutions** allow a representative presentation of plant information which serves either the vividness and clarity of complex interrelationships in the provision of energy or informational purposes to represent the individual plants with their specifics.

### EMPURON Display Solutions

- Data-Warehouse
- Calculation Engine
- Middleware
- Reporting and Business-Intelligence (BI)
- EMPURON Portal
- Application Server

Display with access to the central server using an Internet connection





### EMPURON PORTAL

The **EMPURON PORTAL** provides the base for design and presentation of the individual displays. The diagrams are also executable without additional software, e.g. flash.

### EMPURON Application

**Server** provides access to all services for the hosting of the pages and the database.

### Server functions of EMPURON Display Solutions

- **EMPURON Display Solutions** is able to manage multiple displays within one application. It allows to run different displays in parallel. Thus, different locations can have their individual displays, all hosted by one server (Multi-client and multi-plant capacity).

Example for a sequence of display images



### Overview EMPURON Display Solutions

- Interface for the free design of the display and the automatic sequence of display pages.
- Provision of interfaces for the linking of data and the definition of the imported values.
- IF-THEN-ELSE statements in formulas allow to execute status, sums and time series conditionally
- Independence from the provided hardware: A wide range of data loggers and inverters is available for the integration of data. In addition, standard power system control protocols (e.g. IEC 101, IEC 104, IEC 61850, IEC 1107, BACnet, Modbus) are used.