

### Secure management of solar plants

The **OPC interface** of **empuron AG** provides an OPC based solution for the continuous provision of energy data. Simultaneous data collection, processing, saving and remote data transmission allow the networking with energy generation systems at geographically dispersed locations.

### Complete energy data collection via empuron OPC-I

Because of uniform, standardized integration interfaces conception, the **empuron OPC Interfaces** provide ease and cost efficiency in commissioning and services of plants. The end user can freely choose between different providers of hardware and software components and focus on functional criteria. The continuous integration via the standard OPC offers plant operators a significant cost advantage and allows a homogenous infrastructure for plant access.

Via OPC DA ("Data Access") Ethernet and Web interfaces the **empuron OPC-I** can simultaneously collect, bundle and cache the data access protected of many inverters and weather stations to a central data base. The recorded status information can easily be integrated via the standard OPC interface into the **empuron** application portal. Parallel operation of OPC and proprietary interfaces is provided.

#### Advantage of the OPC technique:

- Producer independence for Hard- and Software
- Plug & Play configuration of the data exchange
- Multi-Client access and data transmission
- Networking and Internet/Intranet
- Reduction of the costs through reduction of the engineer working time and flexibility in the plant conception

#### \* empuron OPC technique:

- **empuron OPC HDA Server** for the access of **empuron HIS** historical data
- **empuron OPC Client** for the access of plant data and transfer in the archive
- **empuron OPC-I** for the temporary storage and data transfer base on Canbus, Profibus and Modbus

**Figure: Plant configuration with OPC-Client and OPC-Server\* infrastructure**

