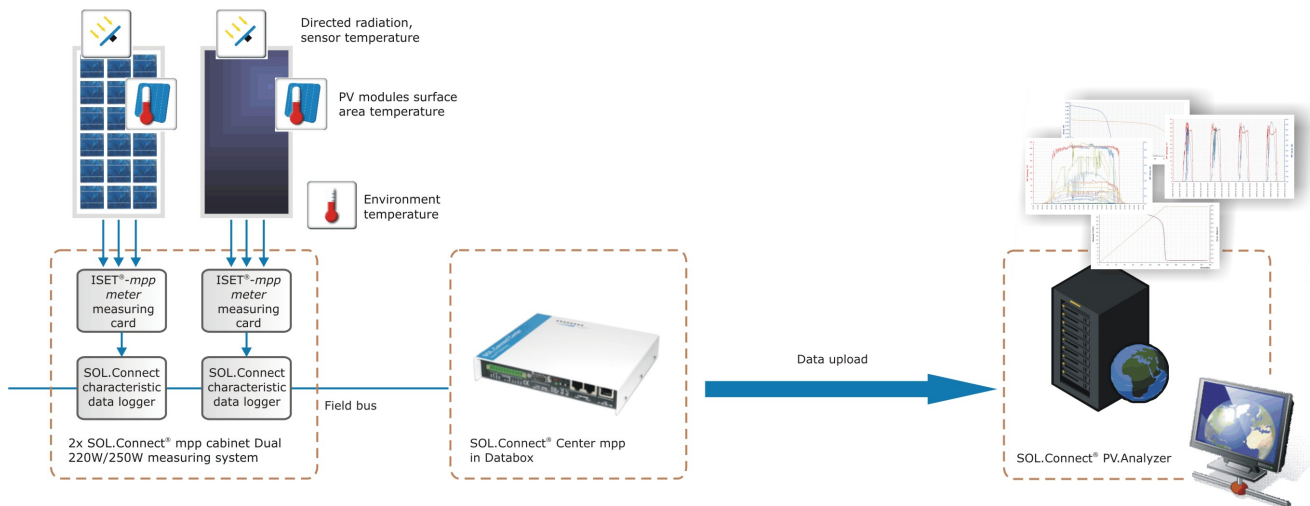


Features

- ❑ Evaluation of the energetic characteristics of PV modules at any location
- ❑ Digital identification of the I/V-characteristics, U_{oc} , I_{sc} , U_{mpp} , I_{mpp} , irradiance, module temperature and further optional sensors
- ❑ Operating mode for the pv module: MPP, short circuit, open circuit
- ❑ No interference by network or inverter
- ❑ Time synchronicity of all I/V-characteristic logging
- ❑ Server software for data storage and analysis to operate at the customer site— SOL.Connect PV.Analyzer (Linux, MySQL, PHP)
- ❑ Planning, delivery, integration, on-site support of the measuring device at the customer site
- ❑ Evaluation and investigation support by partners of Papendorf Software Engineering GmbH



ISET®-mpp meter measuring card*

- ❑ Input voltage: standard up to U_{dcmax} 259V_{dc}, Booster 350V_{dc}
- ❑ Input current ranges: standard up to 10A, Booster up to 20A
- ❑ Resolution of measured values (V, I): 16 Bit
- ❑ Measurement inaccuracy (V, I): <1% STC**
- ❑ Measurement period of characteristic curve: 320ms (prolongable)
- ❑ Measuring points per characteristic: up to 256
- ❑ Module temperature: PT1000
- ❑ Radiance: ISET Sensor (135mV) with measurement of sensor temperature
- ❑ Environment temperature: -10C° - +40°C inside the cabinet, IP54
- ❑ Calibration: Fraunhofer IWES

Models

- ❑ The measurement equipment is available in stainless steel cabinets with dorsal cooling element for outdoor installation. Each measuring cabinet is delivered and tested according to the requested configuration.
- ❑ **MPP cabinet Dual 150W/180W**
2 measuring stations: U_{dcmax} 50V or 259V, I_{dcmax} 2,5A or 4,4A or 10A, P_{dcmax} 150W (180W***)
- ❑ **MPP cabinet Dual 220W/250W**
2 measuring stations: U_{dcmax} 50V or 259V, I_{dcmax} 2,5A odr 4,4A or 10A, P_{dcmax} 220W (250W***)
- ❑ **MPP cabinet Booster 400W**
1 measuring station: U_{dcmax} 350V, I_{dcmax} 10A or 15A or 20A, P_{dcmax} 400W

Communication system/reporting

- ❑ **SOL.Connect® Center mpp** in databox for up to 6 measuring stations, scalable
- ❑ Webbased application
- ❑ Central power supply and field bus communication to the measuring stations
- ❑ Communication user/server LAN, GSM, DSL, SAT-modem etc.

Reporting SOL.Connect® PV.Analyzer

- ❑ Easy web application for data analysis and export
- ❑ Measuring value selection, -filtering and -comparison
- ❑ Characteristic illustration
- ❑ Measuring value illustration in scatter and line diagrammes
- ❑ Access administration
- ❑ Administration of plants and measurements
- ❑ Operating system Linux (server), MySQL data base, PHP application
- ❑ Operation as managed service at the company Papendorf Software Engineering GmbH under licence at the customer site.

* The measuring card is based on the development of ISET®-mpp meter measuring card by the Fraunhofer-Institut für Windenergie und Energiesystemtechnik IWES.

** The measuring is determined by the configuration used in the measurement equipment and influenced by the used module technology

*** short time operation