

Press Release

System provider Papendorf offers a new measuring system to compare location-specific modules

Gärtringen, 16 May 2008. Papendorf Software Engineering GmbH is launching a measuring system to compare location-specific solar modules in June. The innovative product consists of a special measurement acquisition unit – the **ISET®-mpp meter** – and the communication unit **SOL.Connect® individual**.

The new measuring system is suitable for mobile as well as stationary operation. It records short-circuit current and open-circuit voltage, as well as the current and the voltage in the maximum power point (MPP) of the solar module, or solar generator. The irradiance and the module temperature, needed for an exact comparison, are also measured. For this, the entire current/voltage characteristic values are collected. According to the customer's request, the resolution can take place in mean values ranging from per second to per hour.

Module comparison at as many locations as desired

All data are available exclusively to the customer, who continuously receives the newest measured data. Thanks to the modular design, the solar modules can be compared to each other at as many locations as desired.

A further advantage lies in the high precision of the measurement procedure. Former sources of errors through inverter or grid variations are avoided. The measuring system calculates, among others, the solar yield from the temperature-compensated irradiance, adapted spectrally. The Performance Ratio is determined independently of the inverter and other disturbing influences for each module.

According to the customer's wishes, the system transfers the data hourly or daily to a central data base. Using the special analysis software **SOL.Connect® PV.Analyzer**, one can selectively evaluate and compare data. In the case of a malfunction, the system sends warning messages automatically via E-mail.

Papendorf Software Engineering delivers the measurement acquisition unit **ISET®-mpp meter** with the required accessories (sensors, converter, power supply and heat sinks) completely preassembled in a weather-proof stainless steel cabinet. As an option, the company also integrates the complete evaluation technology, in addition to the communication unit **SOL.Connect® individual**. Apart from the external provision of electricity (optionally self-sufficient), the operation takes place completely independently. Hamburg-based Sharp Electronics (Europe) GmbH is already using the measuring system successfully.

The new measuring system will be presented, for the first time, within the scope of Europe's largest trade fair for solar technology, the "Intersolar", from 12 to 14 June in Munich, Germany. You can find us in Hall C, Stand Number 3.658.

About the Institute for Solar Energy Supply Technology (ISET)

ISET deals with application-oriented research for electronic and system technology for the utilisation of renewable energies. Its services range from theoretical work on experimental studies and field tests, all the way to technical developments of devices. The research institute concentrates above all on the working areas of photovoltaic as well as wind energy, bio-

energy, hydroelectric power and sea energy, energy converters and storage, power converters, hybrid systems and energy management.

The measurement acquisition unit **ISET®-mpp meter** is a product development of the ISET and is based on a fifteen-year-long measurement and test operation of photovoltaic components (see also www.pvtestlab.de, www.iset.uni-kassel.de).

About Papendorf Software Engineering GmbH

Papendorf Software Engineering GmbH offers software services and hardware developments for system operators and manufacturers. Solutions to visualisation, to monitoring and to the management of energy-producing plants make up the focal point of the company's activities. Its spectrum of products ranges from data loggers to completely automated monitoring solutions for solar power plants.

Publisher

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