



Solar-Log 1900

For Large-Scale PV Plants and Solar Power Stations

Functions

Feed-In Management

The Solar-Log 1900 is equipped with all of the functions needed for feed-in management. This includes solutions for active and reactive power control as well as response signals for the grid control center.

Self-Consumption

The Solar-Log 1900 offers the option to measure the amount of self-produced power consumed and to present it graphically via the Solar-Log WEB Enerest[™]. An additional power meter serves as a consumption meter.

Solar-Log 1900 Alarm Function

The external alarm can be used to provide anti-theft protection to protect the system from burglars.

Direct Marketing

In Germany since 01 January 2016, PV plants with an installed output of more than 100 kWp are required to participate in direct marketing. Solare Datensysteme GmbH offers the Solar-Log 1900 as technical solution for all direct marketers.

Licenses

Detailed information on the direct marketing and feed-in management licenses, FTP and SCB licenses as well as the advanced options of the Solar-Log[™] are described on page 100 and 101 in our portfolio.

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Options

Solar-Log 1900 PM+ & Solar-Log[™] Utility Meter

Combining the Solar-Log 1900 and Utility Meter simplifies implementation of the diverse requirements for powermanagement in Germany. The voltage-dependent reactive power control, Q(U) function, is accomplished by measuring the medium voltage with the Utility Meter. The combination of the Solar-Log 1900 and Utility Meter is also needed to send a confirmation of the current amount of feed-in power to the grid operator.

Solar-Log 1900 & PM-Package

For plants larger than 100 kWp, remote control of the reactive power supply and power limitations are required along with a confirmation of the current amount of feed-in power. In practice, each grid operator stipulates its own signalization variant in the technical connection requirements (TAB). To fulfill the requirements from a particular grid operator, Solare Datensysteme offers a grid company specific PM-Package. This package includes hardware that is adjusted to a company's remote control technology and profile file.

String Connection Box (SCB)

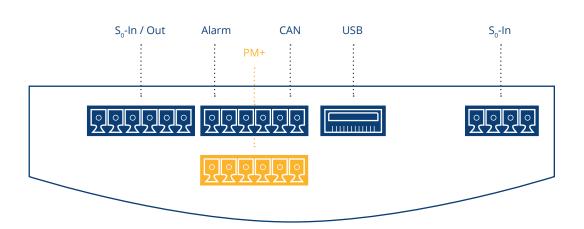
When used with the Solar-Log WEB Enerest[™] XL and either the SCB, the Solar-Log 1900 monitors every single string, ensuring the most complete and secure monitoring for large-scale PV plants with exact error identification and localization.



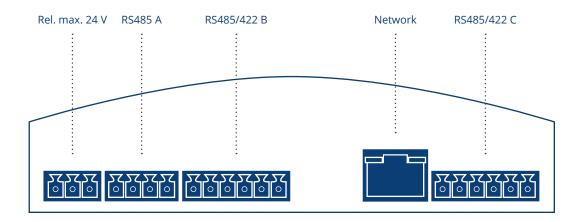
Feed-in management - feed balance: The times when there was a grid feed and when electricity was purchased from the grid can be seen at a glance in this graph. Negative (red) values indicate that electricity was purchased from the grid and positive (yellow) values that there was grid feed.

Solar-Log 1900 PM+

Interfaces



Тор



Bottom

Inverters

A maximum of 100 inverters (just one manufacturer per bus), maximum plant size 2000 kWp.

Interfaces

The interfaces can be used to connect inverters and components such as the Utility Meter, Pyranometer and SCBs. The Solar-Log 1900 Standard and Solar-Log 1900 PM+ have two RS485/RS422 interfaces and one RS485 interface.

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Solar-Log 300, 1200, 1900 and 2000

Common Features

Functions

LCD-Status-Display

Status display for installation and operations.

Smart Energy

Recording and presentation of self-consumption control and visualization of individual appliances for the optimization of self-consumption.

Feed-in Management

Reduction of feed-in power with a dynamic allowance for self-consumption.

Display Options

Solar-Log WEB Enerest™

The Solar-Log WEB Enerest[™] online portal expands the presentation and monitoring functions of the Solar-Log[™] and offers comprehensive reporting options in the form of graphs and tables.

The App for Solar-Log WEB Enerest™

This app offers users comfort and security with its structured operating concept, intuitive controls, modern features and interactive graphics. The app is available for free from the app store.

Solar-Log[™] Dashboard

The Dashboard is a feature of the Solar-Log WEB Enerest^M L and XL that displays all important information for a plant such as yields, CO₂ savings and plant performance.

Solarfox® Large and External Display

A large external display used in combination with the Solar-Log^M can visually present live data from a PV plant. You can also add personalized advertisements. Large external displays can be connected via the RS485 or S₀ interface.

Connections

Inverters

The Solar-Log[™] is compatible with inverters from all major manufacturers.

Sensors RS485

The sensors measure solar irradiation, temperature and wind speed. They can even be combined with some inverters on an RS485 bus.

Meter S_o-In or RS485

The meter can record your consumption data or serve as an inverter and measure the power from incompatible inverters. In addition, batteries can be visualized via meters.

RS485 or S_o-Out

Connect a large external display to gain an additional overview of the data.

Solar-Log[™] USB Connection and Data Export

A USB stick can be connected for safe and quick manual installations of new firmware updates, configurations, and backups. The backup and configuration can be exported as a file via USB.

Ripple Control Receiver

The signal to reduce active power is generally sent via a Ripple Control Receiver or remote control technology. Up to two Ripple Control Receivers can be connected to the Solar-Log[™] PM+, one for power reduction and one for reactive power control.

Ethernet / Speedwire*

The Solar-Log[™] models can be connected to compatible inverters with an Ethernet connection. SMA inverters can be connected directly to a regular network infrastructure with SMA's own Speedwire protocol. The SMA inverter only has to be connected to an Ethernet switch or router.

Additional Functions

Protection for the Interfaces and Cables

The cable cover for the Solar-Log[™] offers the best possible mechanical protection for interfaces and cables as well as an attractive design.

Data Security

The data volume from the Solar-Log[™] can be recorded. The micro SD card is used to protect against any loss of data in the event of a power failure.

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*In many countries, the designation "Speedwire" is a registered trademark of SMA Solar Technology AG.