Solar-Log™ Hardware

Solar-Log^{200}, so small yet still so functional

Suitable for connection:

Display:

Optionally available with:

GPRS WiFi PM+

The Solar-Log^{200} is operated via a PC with a common web browser. The installation of software is not required. The graphic and tabular evaluations can be accessed at any time locally or via the Internet.

- **Perfectly suited for smaller plants with one inverter; and optional Powermanagement and cos φ control**
- **Recommended: max. plant size 15 kWp / Solar-Log^{200}**
- **Possible to monitor consumption of self-produced power**
- **Same depth of data as larger units, including notification via SMS or e-mail**
- **Optional: wireless connection via GPRS, WiFi and / or Bluetooth**

Simple installation and connection

- **Solar-Log™ Easy Installation**
  The installation and initial operation of the data logger is quick and simple with "Easy Installation". The search for inverters and Internet log-on takes places immediately and automatically.
- **Cable cover**
  With its attractive design the cable cover for the Solar-Log™ offers the best possible mechanical protection for interfaces and cables.

Solar-Log™ WEB

The Solar-Log™ WEB online portal expands the monitoring function of the Solar-Log™ and offers comprehensive evaluation programs concerning the monitoring of PV plants.

- **Solar-Log™ WEB "Commercial Edition"**
  Solar-Log™ WEB "Commercial Edition" allows the plant operator to offer an expanded and professional plant monitoring service in the framework of a "Full Service" maintenance agreement.

Number of inverters | Sensors | Meter S_0 | Solarfox display | Ripple control receiver

Solar-Log™ added functions

- **Solar-Log^{200} PM+**
  The new EEG 2012 (Germany) places special demands on new and existing plants: PV plants must engage in feed-in management and network safety management in order to prevent an overload of the distribution network. The PM+ product line covers the entire spectrum of requirements with regard to active and reactive power.

- **Solar-Log^{200} consumption of self-produced energy**
  The Solar-Log^{200} makes it possible to measure the consumption of your own self-produced energy and to display this in graphic and tabular formats via the Solar-Log™ WEB. In order to consume the power that you have produced yourself, a digital meter reader is required. As a consumption meter, it is used to measure the power consumed and to display this in comparison to the power produced.

Data security

- The data volume from the Solar-Log™ can be recorded for up to 20 years. The micro SD card is used to protect against any loss of data in the event of a power failure.

Cordless connection to the internet or to SMA inverters

- **Solar-Log^{200} GPRS**
  Solar-Log^{200} GPRS is the alternative to an external GPRS modem, allowing the data logger to be connected to the data network simply and securely. A GPRS connection is especially suited to free-standing plants or buildings which do not have a usable internet connection available.

- **Solar-Log^{200} WiFi**
  Solar-Log™ WiFi allows you to use the WiFi radio data network that is often available in homes and offices. The antenna that is integrated within the device is able to receive nearby WiFi networks. If the signal is weak, WiFi repeaters may be necessary.

- **Solar-Log^{200} BT**
  This data logger is equipped with a Bluetooth module and allows wireless connection to all SMA BT inverters.

Representative presentation

- **Solarfox large display**
  In connection with the Solar-Log™, the large display can present the live data of a PV plant in a way that is visually appealing and in combination with individual advertising.

Product comparison

	Solar-Log200	Solar-Log500	Solar-Log1000
Inverter communication / inverter = WR			
PM+ [2]	● NEW	● NEW	●
PM+ / WiFi [2]	● NEW	● NEW	●
PM+ / GPRS [2]	● NEW	–	●
Bluetooth (BT) [2]	●	●	●
WiFi (wireless LAN) [2]	●	●	●
Bluetooth (BT) / WiFi [2]	●	●	●
GPRS [2]	● NEW	–	●
Central inverter SCB and SMB [2]	–	–	●
max. number of inverters	**1**	**up to 10**	**up to 100**
Communication interface	**1 x RS485 / RS422**	**1 x RS485 / RS422**	**1 x RS485, 1 x RS485 / RS422 / 1 x CAN**
recommended max. plant size	**15 kWp**	**50 kWp**	**1 MWp**
max. cable length	**max. 1000 m [1]**	**max. 1000 m [1]**	**max. 1000 m [1]**
Plant monitoring			
String monitoring (depending on type of inverter)	●	●	●
Inverter failure, status of fault and power monitoring	●	●	●
Connection of sensors (temp. / wind)	● [3]	● [3]	●
E-mail and SMS alarm	●	●	●
Local alarm (pot.-free contact)	–	–	●
Yield forecast and degradation calculation	●	●	●
EEG “own power consumption”: Digital current meters	●	●	●
EEG “own power consumption”: Control of ext. consumers	–	–	●
Visualisation			
Integrated web servers	●	●	●
Graphic visualisation – PC local and internet	●	●	●
Graphic visualisation – USB flash drive	–	–	●
LED – status display	●	●	●
Display on device	–	**2-line text display**	**full-graphic display**
Operation on device	–	**keypad entry**	**via touch screen**
Large display RS485 / S_0 impulse	–	●	●
Interfaces			
Ethernet network	●	●	●
USB flash drive	–	–	●
Modem, analogue / GPRS(GSM) / DSL	–	–	●
Potential-free contact (relay)	–	–	●
Alarm contact (anti-theft)	–	–	●
General data			
Network voltage / device voltage / current consumption	**115 V – 230 V / 12 V / 3 W**		
Ambient temperature	**-10 °C bis +50 °C**		
Housing / dimensions (W x D x H) in cm / Assembly / Protection level	**Plastic / 22,5 x 4 x 28,5 / Wall-mounted / IP 20 (only for interior use)**		
Connection to Solar-Log™ WEB	●	●	●
Multi-lingual (DE, EN, ES, FR, IT, NL, DA)	●	●	●
Memory, Micro-SD, 2 GB, Endless-loop data recording	●	●	●
Warranty cover age	**5 years**		

[1] Depending on the inverter used, and the cable length (details can also vary from one type of device to another).
[2] Other important information about Bluetooth and compatibility, Powermanagement, „own power“ consumption, SCB and SMB central inverters can be found on our website www.solar-log.com.
[3] Using with a RS422 inverter on the same bus is not possible.

In Detail

	Solar-Log^{200}	Solar-Log^{500}	Solar-Log^{1000}
Accessories	Fully packaged cable kits for most supported inverters		
	Digital Meter	Digital Meter	Digital Meter
	PowerLine Package	PowerLine Package	PowerLine Package
	RS485 Wireless Package	RS485 Wireless Package	RS485 Wireless Package
	Sensors	Sensors	Sensors
	–	–	Mobile Wireless Package
	–	–	Modem Package
	Overvoltage protection	Overvoltage protection	Overvoltage protection
Accessories for SMA inverters	Special PiggyBack RS485 (except TL-20 series) (page 39)		
	Data Module SMA RS485 (page 39)		

Top Features	Solar-Log^{200}	Solar-Log^{500}	Solar-Log^{1000}
Compatibility	Compatible with all the major inverter manufacturers, can be found on our website www.solar-log.com		
Software	Web-interface, no software installation is required.		
Easy Installation	Connection is usually possible without PC and installation expertise.		
	The inverter search and the internet registration is enabled immediately and is started automatically.	Query for additional information, then automatic inverter search and internet registration.	
Network recognition	Automatic search for the DHCP server and assignment of a valid IP address in the local network.		
Ability to be reached on the local network	WINS registration automatically takes place and the Solar-Log™ can be found in a web browser at: http://solar-log.		
	The IP address of the Solar-Log™ no longer needs to be known, unless there are several Solar-Logs on the network.		
Additional function	Monitoring and optimisation of own energy consumption	Monitoring and optimisation of own energy consumption	Monitoring and optimisation of own energy consumption
	–	–	Monitoring of central inverters
	Evaluation of Sensor Box data		
Support for the Solar-Log™ SCB and Solar-Log™ SMB	–	–	Monitoring of large systems with the support of Solar-Log^{1000} or Solar-Log^{1000} PM+ acc. to the German law § 6.1 EEG 2009 with reduction in active power above 100 kWp
	–	–	Solar-Log^{1000} PM+ standby power regulation above 100 kWp (legally stipulated in Germany since 1 July 2010)

Article number overview for all Solar-Logs

Type	Art.-No. Solar-Log^{200}	Art.-No. Solar-Log^{500}	Art.-No. Solar-Log^{1000}
Standard	**255240**	**210501**	**211001**
BT	**255241**	**210502**	**211002**
WiFi	**255191**	**255189**	**255185**
BT / WiFi	**255192**	**255190**	**255186**
PM+	**255362** NEW	**255364** NEW	**211005**
PM+ / WiFi	**255363** NEW	**255365** NEW	**255366** NEW
GPRS	**255349** NEW	–	**255187**
PM+ / GPRS	**255402** NEW	–	**255188**