Solar-Log™

Technical Data	Solar-Log™ Base 15/15V2	Solar-Log™ Base 100	Solar-Log™ Base 2000
Interfaces			
RS485/RS422		2 x RS485 or 1 x RS422	
Ethernet network [1]		2 x 100 Mbit/s	
USB connection [2]		2 x USB 2.0	
S_0 in		1 x S_0	
Basic Functions			
Maximum plant size	15 kWp	100 kWp	2 MWp [3]
Inverter connection options		Ethernet, 2x RS485 or 1x RS422 [4]	
Battery storage: visualization, charging time shifts	●	●	●
Smart Energy	●	●	●
Powermanagement	●	●	●
Direct Marketing	●	●	●
Bus Analysis Function	●	●	●
Maximum cable length [5]		Maximum cable length 1000 m twisted pair	
Extension licences			
Expandable license for max. plant size	up to 30 kWp	up to 250 kWp	-
Solar-Log™ interconnection control licence	●	●	●
Modbus TCP direct marketing licence	●	●	●
Modbus TCP PM licence	●	●	●
Solar-Log™ PM PRO licence	●	●	●
SCB Software license	-	●	●
Additional function interfaces via the Solar-Log™ HBUS module connector [6]			
Digital control outputs		via an additional module (Solar-Log™ MOD I/O) [7]	
Digital control inputs		via an additional module (Solar-Log™ MOD I/O) [7]	
Interface for a ripple control receiver (PM+)		via an additional module (Solar-Log™ MOD I/O) [7]	
RS485 [9]		via an additional module (Solar-Log™ MOD 485) [7]	
RS422 [9]		via an additional module (Solar-Log™ MOD 485) [7]	
Visualization			
Integrated web servers	●	●	●
Graphic visualization		local and portal [8]	
Multilingual (DE, EN, ES, FR, IT, CN)	●	●	●
Recording duration: Daily, monthly, annual values		up to 10 years	

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TFT Display		●	●	●
Display on the device		●	●	●
Data transfer to external portals [10]		API, ftps, ftp		
HTTP data transfers to Solar-Log WEB Enerest™ for low data volumes		●	●	●
Compatible with large external display (RS485 and Modbus TCP)		●	●	●
Installation				
Power supply unit [11]		Depending on the output voltage (24V DC (+-5%), if required 12V DC (+-5%)), observe component requirement		
Installation wizard		●	●	●
Network detection / DHCP		●	●	●
Name resolution solar-log		●	●	●
Powermanagement				
Reduction to X percent (with and without the calculation of self-consumption)		●	●	●
Control PV systems for providing active and reactive power (VDE 4110-compliant) [12]		●	●	●
Plant Monitoring				
Inverter Failure, Status, Error and Performance Deviation notifications in the portal		●	●	●
Yield forecast		●	●	●
MPP Tracker Comparison		●	●	●
Sensor system connection (irradiation / temp. / wind)		●	●	●
Self-produced energy consumption; Digital electricity meter		●	●	●
Self-produced energy consumption: Managing external appliances		●	●	●
General Data				
Device voltage [13]		24V DC (+-5%), if required 12V DC (+-5%)		
Device current [13]		max. 1 A		
Power consumption		typ. 2,4 W		
Memory		4 GB internal		
Real-time clock (RTC)		Battery buffered in case of power failure		
Dimensions / Weight	Housing / Dimensions (W x H x D)	3TE / 53,6mm x 89,7 mm x 60,3mm		
	Height from top edge of mounting rail	~54,5mm		
	Net weight	112 g (Solar-Log™ Base 15V2: 100 g)		

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Mounting type	DIN rail	TH 35 / 7,5 or TH 35 / 15 to IEC/EN 60715
	Wall mounting	Mounting / screw clips (without DIN rail or additional modules)
Connection data	Connection technology	Push-in SPRING CLAMP®
	Solid conductor	0,2 … 1,5 mm² / 24 … 16 AWG
	Fine-stranded conductor	0,2 … 1,5 mm² / 24 … 16 AWG
	Fine stranded conductor with ferrule	0,14 … 1 mm²
	Stripping length	8.5 … 9.5 mm / 0.33 … 0.37 inch, with ferrules ≥ 6 mm. Please note the diameter of the plastic collar
Material data	Housing material	PC/ABS
	Colour	black
Ambient conditions	Ambient temperature	-20°C to +50°C (without condensation)
	Ambient temperature storage/transport	-20°C to +60°C
	Protection rating to EN 60529	IP20
	Mounting position	any
Warranty		2 years
Conformity marking		CE

1) No switch function. Only use Ethernet 2 interface for components.
2) USB interfaces for the specific use of enabled functions (firmware updates, configuration and data backups).
3) Several Solar-Log™ Bases can be combined into a virtual system in the portal for visual display purposes. An interconnection control licence is necessary if the PV plant needs to be completely controlled.
4) An RS485 meter cannot be connected when using RS422.
5) Depending on the inverter used, cable type and electrical boundary conditions (specifications may vary depending on the device type).
6) Additional modules connected to the Solar-Log™ Base are supplied with power and voltage via the Solar-Log™ HBUS module connector. The following aspects must be observed in this regard:
   1. The supply voltage on the Solar-Log™ HBUS module connector corresponds to the supply voltage on the Solar-Log™ Base.
   2. If the connected modules are not supplied separately with a higher voltage when required, the voltage at the outputs corresponds to the supply voltage at the Solar-Log™ HBUS module connector.
   3. The Solar-Log™ MOD I/O outputs can draw a maximum of ~0.4A from the Solar-Log™ HBUS module connector. If more current is required in total at the Solar-Log™ MOD I/O outputs, the Solar-Log™ MOD I/O must be supplied separately with its own power supply unit of sufficient capacity (note: a maximum current of ~0.15A is possible per Solar-Log™ MOD I/O output).
   4. If external components are to be supplied via the voltage outputs of the interfaces, an additional voltage supply for the Solar-Log™ MOD 485 module is essential.
7) Maximum number of expansion modules = 1 Solar-Log™ MOD I/O and/or 1 Solar-Log™ MOD 485.
8) Licence fees may apply for the use of the Solar-Log WEB Enerest™ 4 Portal.
9) Can only be used with Solar-Log™ Base firmware 6.x or higher.
10) Licence for a fee.
11) Only use NEC Class 2 power supplies for installations in the US market.
12) Further components (e.g. a PM package) may be necessary depending on the requirements of the energy supplier. You can find more details in our feed-in management section.
13) The Solar-Log™ Base and the Solar-Log™ MOD 485 module may only be supplied with 12V DC when used in conjunction with the special Piggy Back (Art 220020). Please also note the power supply for sensor boxes via the bus.

No power supply unit is included in the scope of delivery.

Interface	Solar-Log™ Base 15/15V2	Solar-Log™ Base 100	Solar-Log™ Base 2000
Inverter interfaces			
RS485/RS422 – interface	2x RS485 or 1x RS422	2x RS485 or 1x RS422	2x RS485 or 1x RS422
RS485/RS422 – interface usage	Inverter connection (Fronius / Sunville can be connected on an RS422 interface without an additional interface converter)		
	Connection of a Sensor Box Professional Plus to record environmental data (irradiance, module and ambient temperature, wind sensor)		
	Sensor Box Professional		
	Meter connection, numerous options		
	Connection of the display panels produced by Schneider Displaytechnik, Rico or HvG		
	Solar-Log™ Smart Relay Box connection for the management of consumption data		
	-	-	Connecting the Utility Meter
Additional interfaces			
S_0-In	S_0 pulse input – for optional recording and calculation of self-produced power consumption		
	Input to connect an additional power meter		
USB Connection	To access data / Import firmware updates		
PM+	Only possible with Solar-Log™ MOD I/O		
Network	Connection to the internet (Ethernet, fixed IP address or DHCP)		

Accessories	Article number	Solar-Log™ Base 15/15V2	Solar-Log™ Base 100	Solar-Log™ Base 2000
Relays				
Solar-Log™ Smart Relay Station V2 [1]	257257	●	●	●
Solar-Log™ Smart Relay Box	255656	●	●	●
Smart Heater				
AC ELWA 2	257274	●	●	●
AC THOR	257255	●	●	●
AC THOR 9s	257256	●	●	●
Meters				
Solar-Log™ PRO380	255913	●	●	●
Solar-Log™ PRO380-CT	256059	●	●	●
Solar-Log™ PRO1	255914	●	●	●
Solar-Log™ PRO2	256324	●	●	●
Utility Meter UMG 104	255385	● [2]	● [2]	●
Utility Meter UMG 604 E-PRO (24V)	257272	● [2]	● [2]	●
Utility Meter UMG 604 E-PRO	257197	● [2]	● [2]	●
Sensors				
Sensor Box Professional Plus	220060	●	●	●
Sensor Box Professional	255896	●	●	●
Lufft (e. g. WS 501 UMB)	On request	●	●	●
Kipp&Zonen (Pyranometer)	On request	●	●	●

1) The Smart Relay Station V2 is supported starting with firmware version 6.0.
2) Can only be used as a consumption meter with firmware lower than 6.X.