Solar-Log MOD I/O*

I/O Interface Module

The I/O module is the perfect addition to Solar-Log Base, enhancing its capabilities. With I/O module's numerous digital inputs and outputs, you are fully equipped to meet the requirements for the implementation of feed-in management. With plug and play, you just have to connect the I/O module to the Solar-Log Base.

Advantages of the Solar-Log Base and Solar-Log MOD I/O Module

- **Transparent pricing**

  You only for the functions that you really need.
- **Future-proof**

  Simple implementation of new functions and adjustments.
- **Easy**

  Simple installation with top hat rail mounting.
- **Quick**

  Plug and play with the bus connector on the Solar-Log Base.

***Please note:**
With the current version, only the PM+ function (connection to a ripple control receiver) is available. Addition functions (relays, alarms, etc.) will be available in the future with firmware updates for the Base module.

Technical Data

Interfaces

Interface for ripple control receiver (PM+)	1 x PM (6 pole, 2 digital outputs, 4 digital inputs)
Digital inputs /outputs	8x I/Os (not galvanically isolated)

Visualization

Display on the device	3 status LEDs, Status displays for the I/Os

Installation

Power supply optional [1) 2)]	Depending on the output voltage (24V DC (+-5%), if required 12V DC (+-5%)), observe component requirement.

Solar-Log Base Communication

Solar-Log™ HBUS module connector [2)]	2 included in the delivery

General Data

Device voltage V_{ss} [1)]		24V DC (+-5%), if required 12V DC (+-5%) via BUS / optionally via connection terminal (depending on the capacity of the overall system)
Device current [1)]		max. 1 A
Power consumption		typ. 2 W
Input voltage	Nominal value	24 V, if required 12 V
	For signal „1“	15 V to 24 V (at Vin 24 V) 7,5 V to 12 V (at Vin 12 V)
	For signal „0“	0 V to 5 V (at Vin 24 V) 0 V to 2,5 V (at Vin 12 V)
Input current	For signal „1“	Typically 2 mA
Total current of the outputs		For power with the HBus: 250mA
		For external power supply: 1A
Output voltage	For signal „1“	V_{ss} – 1,2 V
Output current	For signal „1“	Max. 150 mA
	For signal „0“ (residual current)	Max. 0,5 mA
Cable length		Max. 30 m
Dimensions / Weight	Housing / dimensions (W x H x D)	53.6 mm (3 DU) x 89.7 mm x 60.3 mm
	Height from top edge of mounting rail	~54,5mm
	Net weight	125g
Mounting	Top hat rails	TH 35 / 7,5 or TH 35 / 15 by IEC/EN 60715

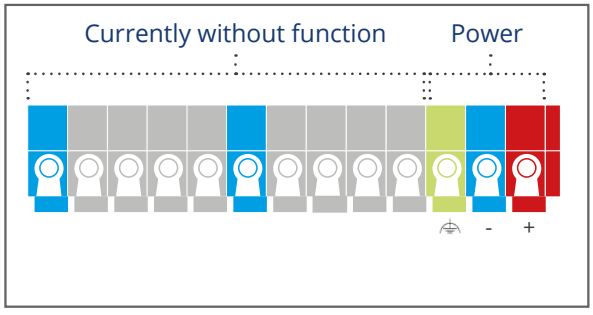
Technical Data

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 class according to EN60529	IP 20
	Mounting position	any
Warranty		2 years
Conformity marking		CE
Article number		256330

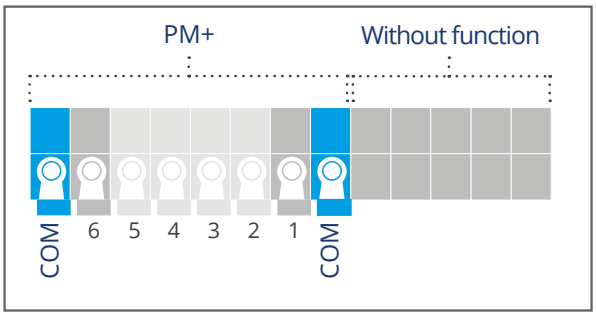
1) No power supply unit is included in the scope of delivery. Only use NEC Class 2 power supplies for installations in the US market.
2) The Solar-Log™ HBUS module connector is used to supply power and voltage to additional modules connected to the Solar-Log Base. The following aspects must be observed 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 Solar-Log MOD I/O module is 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).

Connection

Top



Bottom



Pin		Solar-Log MOD I/O
	COM	Functional earthing
	1	Control signal active power
	2	Digital_In 1
	3	Digital_In 2
	4	Digital_In 3
	5	Digital_In 4
	6	Control signal reactive power
	COM	Functional earthing

Technical drawings