## Changing the Modbus address with the sensor buttons on the meter

The Modbus address can be changed from the Program Menu (see supplementary sheet) under "PMOdE2". Additional changes are possible. A password is required to access the sub-menu "PMOdE3". The default password is "0000" – it can be changed via the programming.





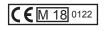




#### Attention

Measurement for billing purpose only with MIDconfirmed meters.

Example for MID-labeling::





For further requests regarding Solar-Log™, or meter configuration inside Solar-Log™ please consider:

## info@solar-log.com

or: +49 (0)7428/4089-300

For further requests regarding the PRO meter please consider:

info@kdk-dornscheidt.com

or: 02244 / 919940



# **Quick Start Guide**

Solar-Log™ PRO1

Electronic single-phase energy meter for DIN-railmount with MID-confirmation.



#### Please note

This document is only a quick reference guide and does not handle every function. The complete users guide is available at: www.kdk-dornscheidt.de

## Information for your safety

This quick start guide does not contain all of the safety instructions for operating the meter. Due to special operating conditions and/or local laws and regulations, additional measures may be required.

#### **Trained Personnel**

The meter may only be installed and connected by a trained, qualified specialist. Trained, qualified specialists are those who are certified to put devices, systems and circuits into operation, to switch them on, to ground them and to mark them according to safety standards and regulations.

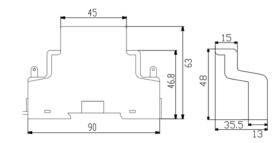


#### Attention

Case is sealed, do not open the meter! No warranty if case is opened or seal is removed.

#### Dimensions (mm)

Width: 17,5 mm
Height with cover: 117 mm
Height without cover: 90,0 mm
Depth: 63,0 mm



## Meter type: Solar-Log™ PRO1

## Technical data

Nominal voltage	230 V AC		
Current	0,25 - 5(45) A		
Frequency	50 Hz		
Measurement	Active- and Reactive energy in forward and reverse direction		
Accuracy class	В		
Power consumption	≤ 10VA/Phase - ≤ 2W/Phase		
Width	1 TE (17.5 mm)		
Pulse Output LED	10,000 lmp/kWh		
S <sub>o</sub> -pulse output:	2,000 lmp/kWh, RA = 0,5 Wh/lmp		
Pulse length	≤ 5 625 W -> 32 ms		
	> 5625 W -> 11,2 ms		
Temperature range	-25°C to +55°C		
Max. rel. humidity	75% average, 95% short term		
Registered harmonics:	0.05 – 0.25 kHz		
LED blinking red	consumption >4W, pulsrate= consumption		
Display	4 + 2 Digits (9,999.11 kWh)		
Max diameter	Mainclamps: max. 10 mm <sup>2</sup>		
	Additional clamps:: max. 2,5 mm <sup>2</sup>		



## Note the SO pulse length for the Solar-Log™ PRO1

The following values for the SO pulse length are known:

- ► ≤ 5625W = pulse length 32ms
- ► > 5625W = pulse length 11,2ms

The Solar-Log<sup>™</sup> can process a SO pulse with at least a length of 30 ms. This means a maximum power of 5625W can be defined for the SO output of the Solar-Log<sup>™</sup> PRO1

# **Connection diagramm**

## Connection diagramm 1000 (DIN 43856)

Clamp 1	Input Phase "L"
Clamp 3	Output Phase "L"
Clamp 4	Input Neutral "N"
Clamp 6	Output Neutral "N"
Clamp 20, 21	Connection S₀-pulse output
Clamp 23, 24	ModBus-Connection

# Connection diagram for different operating modes

## Solar-Log™ PRO1 (RS485 or S<sub>o</sub>) connection assignments

The meter connections are labeled IN (bottom) and OUT (bottom).

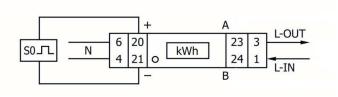
As consumption or sub-consumption meter: Connection to the grid (IN) – connection for appliances (OUT) As inverter /production meter: Connection for the production (IN) – connection to the grid (OUT)

## Solar-Log™ PRO1 connection assignments (only RS485)

As battery meter (bi-directional): IN = connection to the grid – OUT = connection to the battery

Please note that only Solar-Log<sup>™</sup> PRO1 meters can operate on the RS485 interface (one or several). It is not possible to combine the operation with other components.

Terminal block connector Solar-Log™ (RS485)	Solar-Log Base	PRO1
Terminal	Terminal	Terminal
1->	(A) 6 or (B) 10 (Data+)	23 (A)
4->	(A) 9 or (B) 13 (Data-)	24 (B)



If the meter is the last device on the bus, it has to be terminated at connection block 22 and 23 with a resistor (120 ohm / 0.25W).

## All display values of the meter

Change the meter from the automatically rotating display to the manual display by pressing the keys.

Pressing on the keys here allows all of the available display values to be accessed in sequence. Please refer to the attached table for the menu navigation. If no keys are pressed after a short time, the meter reverts back to the automatic display mode.