

iSolar Smart Display SD3

Mounting

Connection



Safety advice

Please pay attention to the following safety advice in order to avoid danger and damage to people and property.

This product is to be used in accordance with its intended use only (see pages 2 and 3).

The device is to be operated on safety extra-low voltage via the iSolar VBus®.

The surface material is susceptible to scratches.

Avoid scratches on surfaces when arranging the device.

Technical Data

Housing: High-grade steel frame with wood elements

Dimensions: 6" x 6.5" x 1"

Protection type: IP20 (suitable for dry rooms)

Protection class: III

Display: Numerical 7-segment LED display

Segment size: 0.3" x 0.4", 10° digit inclination

Ambient temperature: 0 ... 100 °F

Power supply: via iSolarVBus®

Bus connection: iSolarVBus®



Scope of delivery

1 x Smart Display SD3

1 x wall-mounting bracket

1 x accessory bag:

2 x screw and dowel

1 x wooden rod

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Errors and technical changes excepted.

The Smart Display SD3 is designed for simple connection to iSolar controllers via the iSolar VBus® for visualisation of the data issued by the controller: collector and store temperatures as well as energy yield of the solar system. The use of high-efficient LEDs and filter glass assures a high optical brilliance and good readability - even in poor visibility conditions and at a larger distance. An additional power supply is not required.

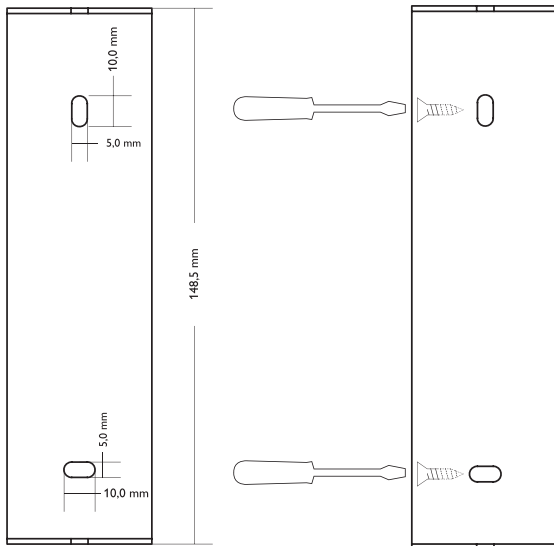
Note:

Remove protective film from front plate or housing if necessary.

- simultaneous visualisation of collector and store temperature as well as heat quantity
- one 6-digit and two 4-digit 7-segment LED displays
- simple connection via iSolar VBus®
- outstanding design
- power supply via iSolar VBus®

1. Installation

1.1 Mounting



Wall mounting

The wall mounting of the SD3 has to be carried out using the enclosed high-grade steel bracket.

1. Hold bracket to the desired place on the wall. Mark drilling holes on the wall and drill holes with a 6 mm drill.
2. Insert dowels and attach the bracket to the wall with the screws (accessory bag).

Place the SD3 in the middle of the bracket.



The device must only be located in dry interior rooms. It is not suitable for installation in hazardous locations and should be protected from electromagnetic fields.



wooden rod

Use as table-top unit

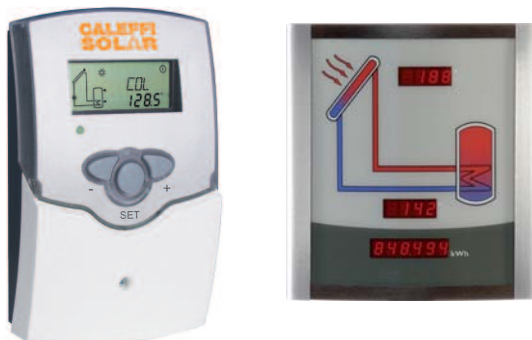
Insert wooden rod into the lower hole on the rear side of the housing.

The SD3 can now be placed to the desired place.

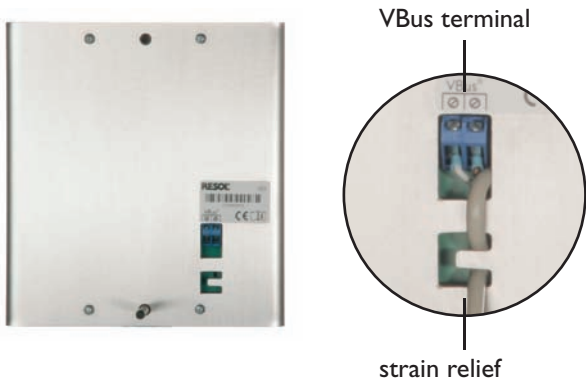
Note:

Protect susceptible furniture surfaces against scratches.

2. Connection and commissioning



The iSolar Smart Display SD3 is designed for simple connection to iSolar controllers via the iSolar VBus®. The bus cable can be extended with a two-wire cable (bell wire). The cable carries low voltage and must not run together in a cable conduit with cables carrying a higher voltage than 24 V (please pay attention to the valid local regulations such as VDE regulations for Germany). The cross section must be at least 0.5 mm² and the cable can be extended up to 165 ft. in the case of a single connection.



The Smart Display SD3 can be operated in parallel with a controller and additional modules via a bus line.

Connect the connection cable with stripped ends and any polarity to the VBus[®]-terminals at the rear side of the SD3.

Pass cable through strain relief.

During commissioning, the Smart Display SD3 carries out an initialising phase. After this test the following indications are shown:

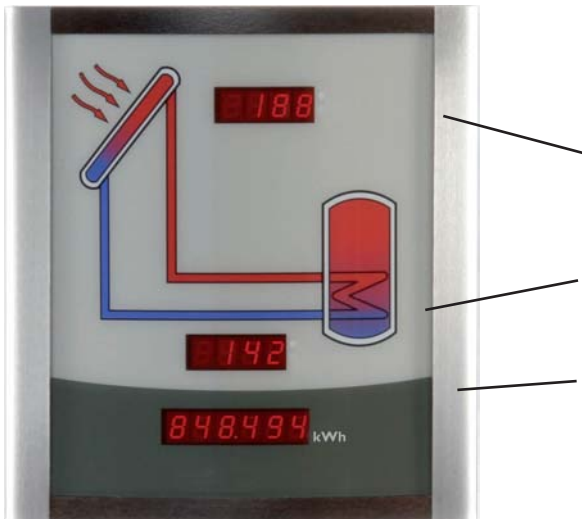
- SD3 in the upper display
- Software version in the display in the middle
- Date of software version (YYMMDD) in the lower display

Afterwards, the SD3 receives data packets from the controller. The progress is indicated in the lower display.

Afterwards, the SD3 is ready for normal operation.

Note:
When several additional modules are used simultaneously, an additional power supply of the modules might possibly be required.

3. Displays



Note:
If no indication is shown in the display, please check the connection at the VBus[®] terminals.

Collector temperature in °F.

Store temperature in °F.

Energy yield in kWh.

Important notice:

We took a lot of care with the texts and drawings of this manual and to the best of our knowledge and consent. As faults can never be excluded, please note: Your own calculations and plans, under consideration of the current standards and DIN-directions should only be basis for your projects. We don't offer a guarantee for the completeness of the drawings and texts of this manual - they only represent some examples. They can only be used at your own risk. No liability is assumed for incorrect, incomplete or false information and the resulting damages.

Please note:

The design and the specifications are to be changed without notice.
The illustrations may differ from the original product.