

# RESOL Smart Display SD3

Mounting

Connection



# SD3

GB  
Manual

Thank you for buying this RESOL product.  
Read this manual carefully to get the best performance from this unit.

## 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 RESOL 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:** 150 x 165 x 24 mm

**Protection type:** IP20 (suitable for dry rooms)

**Protection class:** III

**Display:** Numerical 7-segment LED display

**Segment size** 7,5 x 10 mm, 10° digit inclination

**Ambient temperature:** 0 ... 40 °C

**Power supply:** via RESOLVBus®

**Bus connection:** RESOLVBus®



## 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 RESOL controllers via the RESOL 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.

## Declaration of conformity

We, RESOL Elektronische Regelungen GmbH, D-45527 Hattingen, declare under our sole responsibility that our product Smart Display SD3 complies with the following standards:

- EN 55 014-1
- EN 60 730-1

According to the regulations of the above directives, the product is labelled with **CE**:

- 89/336/EWG
- 73/ 23/EWG

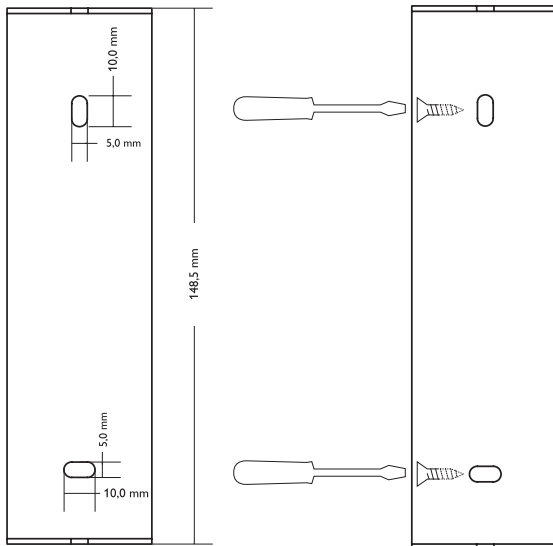
Hattingen, 13.06.2007  
RESOL Elektronische Regelungen GmbH,

ppa. Gerald Neuse

- 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 RESOL VBus®
- outstanding design
- power supply via RESOL 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.

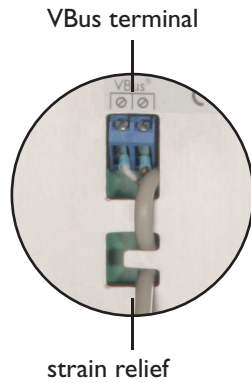
Note:

Protect susceptible furniture surfaces against scratches.

## 2. Connection and commissioning



The RESOL Smart Display SD3 is designed for simple connection to RESOL controllers via the RESOL 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 50 V (please pay attention to the valid local regulations such as VDE regulations for Germany). The cross section must be at least 0,5 mm<sup>2</sup> and the cable can be extended up to 50 m 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:

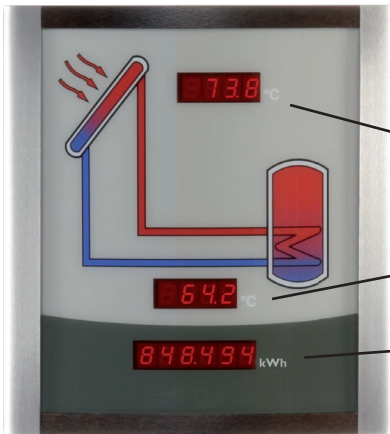
- SD3 in the upper display
- Software version in the display in the middle
- Date of software version (YYMMDD) in the lower display

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 °C.

Store temperature in °C.

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.

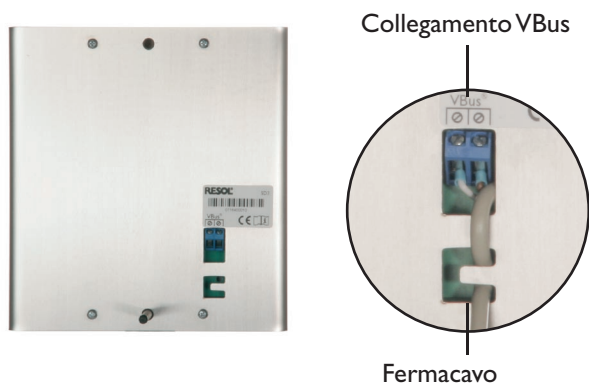
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#### Please note:

The design and the specifications are to be changed without notice.

The illustrations may differ from the original product.

**Nota**

Se si utilizzano più moduli contemporaneamente potrebbe essere necessario provvedere ad un'alimentazione di tensione aggiuntiva dei moduli.

essere prolungato fino a un massimo di 50 m in caso di collegamento singolo.

Lo Smart Display SD3 può essere operato in parallelo con regolatore e moduli aggiuntivi mediante un cavo bus.

Collegare il cavo con le estremità spelate ai morsetti del VBus® sul retro dell'SD3 (polarità indifferente).

Inserire il cavo nel fermacavo.

Al momento della messa in funzione, lo Smart Display SD3 esegue automaticamente una fase di inizializzazione. Al termine di questo test vengono visualizzate le seguenti indicazioni:

- SD3 nel display superiore
- versione software nel display centrale
- data della versione software (AAMMGG) nel display inferiore

Lo Smart Display SD3 riceve ora pacchetti di dati dal regolatore. Il progredire della trasmissione viene visualizzato nel display inferiore.

Al termine il display è operativo.

### 3. Indicatori luminosi

**Nota**

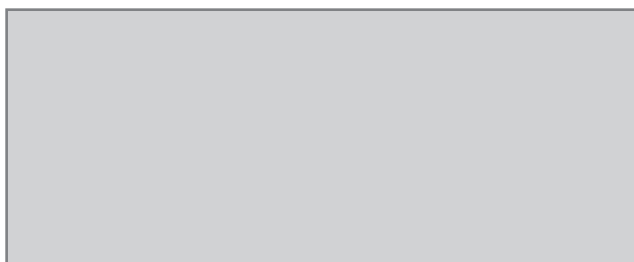
Se non dovesse apparire alcuna indicazione, verificare i collegamenti ai morsetti del VBus®.

Visualizzazione della temperatura del collettore in °C.

Visualizzazione della temperatura del bollitore in °C.

Visualizzazione del rendimento energetico in kWh.

**Ihr Fachhändler / Your Distributor / Votre distributeur /  
La ditta rappresentante:**



#### RESOL - Elektronische Regelungen GmbH

Heiskampstraße 10

45527 Hattingen / Germany

Tel.: +49 (0) 23 24 / 96 48 - 0

Fax: +49 (0) 23 24 / 96 48 - 755

www.resol.de

info@resol.de

**Nota importante**

I testi e le illustrazioni di questo manuale sono stati redatti con la massima cura possibile e attingendo al meglio delle conoscenze disponibili. Non essendo possibile escludere totalmente la presenza di errori, si segnala quanto segue.

Ogni progetto dovrebbe basarsi esclusivamente su appositi calcoli e pianificazioni eseguiti nel rispetto delle disposizioni e delle norme DIN vigenti. Si esclude qualsiasi garanzia relativamente alla completezza di tutti i disegni e testi pubblicati nelle presenti istruzioni che hanno unicamente carattere esemplificativo. Qualora si utilizzino o si applichino i contenuti qui riportati, il rischio va a esclusivo carico dell'utente. Si esclude qualsiasi responsabilità dell'editore in relazione a dati non pertinenti, incompleti o non corretti e per tutti i danni che ne conseguono.

**Note**

Con riserva di modifiche del design e delle specifiche senza preavviso.

Le figure possono differire leggermente dal modello in produzione.

**Sigla editoriale**

Le presenti istruzioni per il montaggio e l'uso sono protette dal diritto d'autore in tutte le loro parti. Per l'utilizzo in deroga al diritto d'autore è necessaria l'approvazione della Ditta RESOL Elektronische Regelungen GmbH. Ciò vale in particolar modo per la riproduzione / copia, traduzione, riproduzione su microfilm e salvataggio su supporti elettronici.

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