SEProDL2

Short manual

beginning with firmware version 2.2.0

11213478

Thank you for buying this product.
Please read this manual carefully to get the best performance from this unit.
Please keep this manual carefully.

en-US/CA

Manual

Safety advice

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

Instructions

Attention must be paid to the valid local standards, regulations and directives!

Information about the product

Proper usage

The SEProDL2 is connected to controllers via the VBus® interface. It enables logging of system data and parameterisation of a solar thermal system.

- Use in dry interior rooms only.
- Avoid ambient temperatures lower than 0 °C or higher than 40 °C
- Do not expose to strong electromagnetic fields.

Improper use excludes all liability claims.

CE Declaration of conformity

The product complies with the relevant directives and is therefore labelled with the CE mark. The Declaration of Conformity is available upon request, please contact the manufacturer.

Note

Strong electromagnetic fields can impair the function of the device.

➔ Make sure the device as well as the system are not exposed to strong electromagnetic fields.

Subject to technical change. Errors excepted.

Target group

These instructions are exclusively addressed to authorised skilled personnel.
Only qualified electricians should carry out electrical works.

Description of symbols

WARNING! Warnings are indicated with a warning triangle!

➔ **They contain information on how to avoid the danger described.**

Signal words describe the danger that may occur, when it is not avoided.

- **WARNING** means that injury, possibly life-threatening injury, can occur.
- **ATTENTION** means that damage to the appliance can occur.

➔ Arrows indicate instruction steps that should be carried out.

Note

Notes are indicated with an information symbol.

Disposal

- Dispose of the packaging in an environmentally sound manner.
- Dispose of old appliances in an environmentally sound manner. Upon request we will take back your old appliances bought from us and guarantee an environmentally sound disposal of the devices.

Contents

1 Overview

The SEProDL2 is the interface between a controller and the Internet and additionally permits logging of system data. The SEProDL2 enables the access to the system data via www.VBus.net.

- **Remote access to the system via the VBus.net visualisation portal**
- **Comfortable system parameterisation via the RPT Parameterisation Tool**
- **Internal memory for datalogging**
- **Data transfer via SD card**
- **Firmware updates via Internet or SD card**
- **Suitable for all controllers with VBus®**

Technical data

Housing: plastic PC-ABS and PMMA

Protection type: IP 20 / EN 60529

Protection class: III

Ambient temperature: 0 … 40 °C

Dimensions: Ø 130 mm, depth 45 mm

Mounting: wall mounting

Display: bar LED for monitoring the memory capacity, 1 illuminated push button for indication of the SD card status

Interfaces: VBus® for the connection to the controller, LAN

Power supply:
input voltage of mains adapter: 100 … 240 V~, 50-60 Hz
rated current: 350 mA
input voltage of Datalogger: 5V⎓ ± 5 %

Memory: 160 MB internal memory, with a logging interval of 5 min.

VBus.net

The Internet portal for easy and secure access to your system data – www.vbus.net

Included

If one of the items mentioned below is missing or defective, please contact your distributor:

❶	SEProDL2, ready to plug in, including mains adapter and VBus® cable
❷	Interchangeable mains adapter plugs (EURO, UK, USA, AUS)
❸	Network cable (CAT5e, RJ45), 1 m
❹	Wall plugs and screws
❺	Terminal block for extending the VBus® cable
❻	Service CD (incl. manual)

2 About this manual

This document is a short manual for the SEProDL2.

This short manual contains information about the following topics:

- Installation
- Electrical connection
- Operating controls
- Access over the VBus.net visualisation portal
- Access over the RPT Parameterisation Tool
- Using the SD card

A detailed manual with the detailed information can be found on the included CD.

Please insert the CD into the optical drive - the installation routine will start automatically. However, if it does not start, e.g. because the autostart function is deactivated or when the CD is in the drive during Windows startup, please double-click on the drive symbol of the CD-ROM drive in "My Computer" or in the Windows Explorer. You can also start the ServiceCenter Setup from the main directory of the installation CD by double-clicking on the file.

3 Installation

ATTENTION! **ESD damage!**

Electrostatic discharge can lead to damage to electronic components!

➔ **Take care to discharge properly before touching the inside of the device. To do so, touch a grounded surface such as a radiator or tap!**

ATTENTION! **Short circuit!**

A short circuit can lead to damage to electronic components!

➔ **Close the housing before establishing the mains connection!**

Do not use the device if it is visibly damaged!

The SEProDL2 comes with the mains adapter and the VBus® cable pre-connected.

The housing does not have to be opened in order to mount the device.

Initial installation must be carried out by the system installer or qualified personnel named by the system installer.

The controller must additionally be supplied from a double pole switch with contact gap of at least 3 mm.

3.1 Wall mounting

The unit must only be located in dry interior locations. In order to function faultlessly, the device must be protected from strong electromagnetic fields in the selected mounting location.

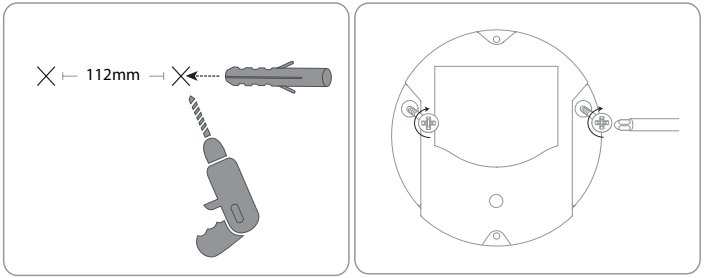
Please pay attention to separate routing

of bus cables and mains cables.

➔ Choose a mounting location.

➔ Drill 2 holes (Ø 6 mm, centres 113 mm) and insert the wall plugs.

➔ Fasten the base part of the housing by means of the enclosed screws (4 x 40 mm)



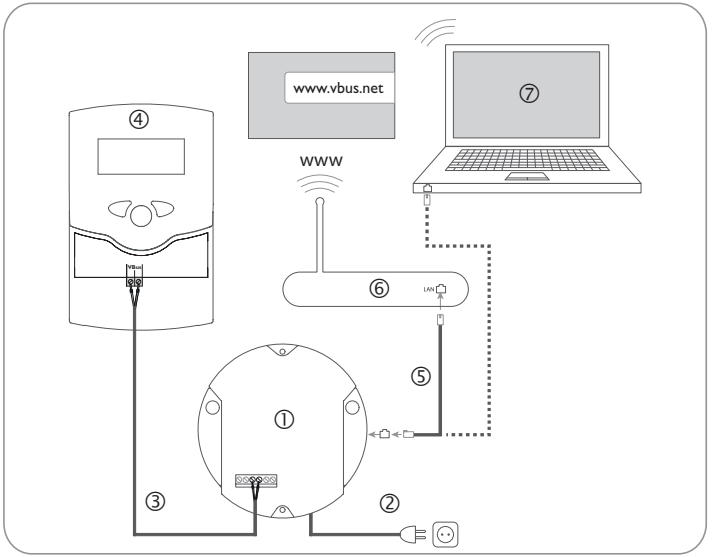
3.2 Electrical connection

Carry out the connection of the Datalogger ① to other modules in the order described below:

➔ Connect the data cable (VBus®, ③) to the controller ④. If necessary, extend the cable using the terminal block included and a common two-wire cable.

➔ Plug the mains adapter ② into a socket.

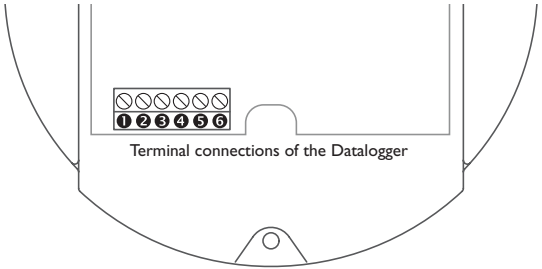
➔ For a direct connection to a router or a PC, connect the Datalogger to a router ⑥ or a PC ⑦ using the network cable (included with the SEProDL2, ⑤).



Power supply is carried out via an external mains adapter. The supply voltage of the mains adapter must be 100 … 240 V~ (50 … 60 Hz).

The SEProDL2 Datalogger comes with the mains adapter and the VBus® cable pre-connected.

3.3 VBus®/data communication



Terminal connections of the Datalogger

The SEProDL2 Datalogger is to be connected to the controller via the pre-connected VBus® cable. The corresponding terminal allocation is described in the controller manual.

The VBus® cable can be extended using the terminal block included and a common two-wire cable.

The VBus® cable is pre-connected to the Datalogger terminals ❸ and ❹. Another module can be connected to the terminals ❺ and ❻.

3.4 Connecting the network cable

The SEProDL2 Datalogger can be connected to a computer or a router by using a network cable (CAT5e, RJ45).

➔ Connect the network cable included to the network adapter of the computer or the router.

4 Indications, operating controls, and connections

The following elements are featured on / in the housing of the SEProDL2 Datalogger:

① Operating control LED / Reset button

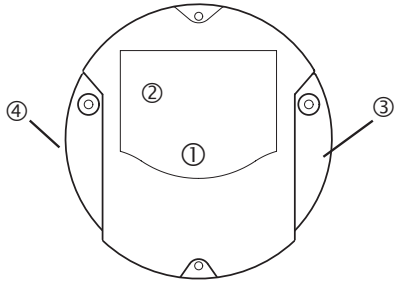
② Memory capacity and VBus® signal LEDs

③ LAN connector

④ SD memory card slot

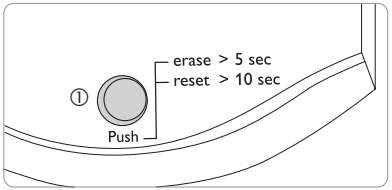
Power supply connection (inside the housing)

VBus® connection (inside the housing)



Positions of the operating controls and connections

4.1 Operating control LED

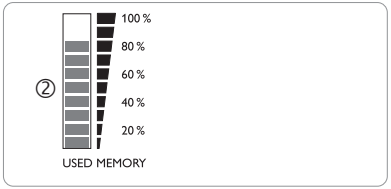


The operating control LED ① indicates the operating status of the DL2 Datalogger by issuing flashing signals.

LED flashing codes

Colour	Permanent	Flashing
Green	• The SD card can be removed. • The firmware update is completed.	• Do not switch off power supply! A firmware update is being run. • Do not remove the SD card! Data are being copied onto the SD card.
Orange	• Power supply is working and the device is ready for operation.	• An error occurred during the copy process.
Off	• The device is booting. • No power supply.	

4.2 Data memory progress bar



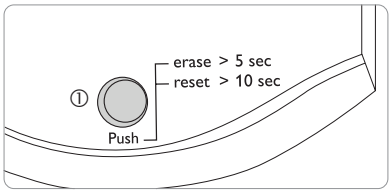
The data memory progress bar ② indicates the currently occupied memory capacity of the SEProDL2 Datalogger.

The data memory progress bar is divided into 10 segments. Each segment represents 10% of the memory capacity.

Data memory progress bar

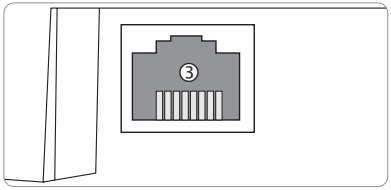
LED segment	
permanently on	• The memory capacity of this segment is fully occupied.
flashing	• The memory capacity of this segment is partly occupied. • VBus® connection okay.

4.3 Reset button



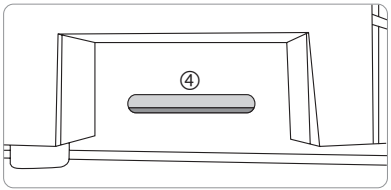
The reset button ① is integrated in the operating control LED. By means of the reset button, data logged can be deleted and the SEProDL2 Datalogger configuration can be reset to the factory settings.

4.4 LAN connector



The integrated LAN connector ③ is located on the right-hand side of the device. The LAN connector supports transfer rates of up to 100 MBits per second.

4.5 SD memory card slot



The SD memory card slot ④ is located at the left-hand side of the device. By means of the SD memory card slot, data logged can be transferred onto an SD or SDHC card of up to 8 GB memory capacity.

The memory of an SD card in the slot is used for data transfer only. It will not enlarge the memory of the SEProDL2 Datalogger.

4.6 Power supply connection

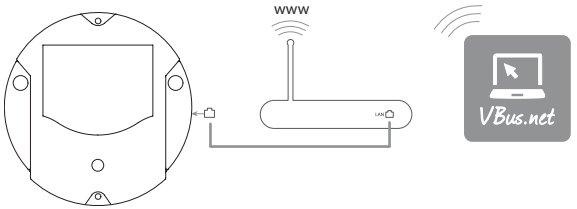
Power supply is carried out via a pre-connected mains adapter. The connection terminals are located inside the housing of the SEProDL2 Datalogger.

4.7 VBus® connection

The SEProDL2 Datalogger is to be connected to the controller via the pre-connected VBus® cable. The connection terminals are located inside the housing of the SEProDL2 Datalogger.

5 Accessing the SEProDL2 over the Internet with the VBus.net visualisation portal

The SEProDL2 can be easily connected to VBus.net.



Note

In order to enable VBus.net access, the SEProDL2 must have unconditional access to the ports 80 and 1194/1195.

In order to access a SEProDL2 delivered with the firmware version 2.0.0 or higher via VBus.net, proceed as follows:

- ➔ Enter VBus.net into the address bar of the browser and click **Sign up**.
- ➔ Wait for the confirmation e-mail to arrive.
- ➔ Click **Add new device**.
- ➔ Enter the alphanumeric 8-10-digit code (Access Token, see label).

If you do not have a token label, proceed as follows:

- ➔ Activate VBus.net in the SEProDL2, if necessary.
- ➔ In the main menu **Device Config**, select the submenu **Remote Access**.
- ➔ Note down the alphanumeric 8-10-digit code (Access Token) indicated on the **Remote access over Internet** tab.
- ➔ Enter VBus.net into the address bar of the browser and click **Sign up**.
- ➔ Wait for the confirmation e-mail to arrive.
- ➔ Click **Add new device**.
- ➔ Enter the alphanumeric 8-10-digit code (Access Token)

6 Accessing the SEProDL2 with the RPT Parameterisation Tool via VBus.net

To use RPT, the **VBus access over local network** has to be enabled.

In order to activate the VBus access, proceed as follows:

- ➔ In the main menu **Device Config**, select the submenu **Remote Access**.
- ➔ On the **VBus access over local network** tab, in the dropdown menu **Local network access enabled?** select **Yes.**
- ➔ On the **Remote access over Internet** tab, in the dropdown menu **Use VBus.net for remote access?** select **Yes.**

With a VBus.net account you can easily use RPT in order to parameterise the controller:

- ➔ In the VBus.net menu **My Devices**, click on **Edit**.
- ➔ On the **General settings** page, tick the option **Allow parameterization using the via address and the Parameterization Tool (RPT)**.
- ➔ Enter the Via tag from the VBus.net menu item **General settings** into the RPT field **URL/IP.**
- ➔ Enter the password into the **Password** field.
- ➔ Click on **Connect**.

7 Firmware update with SD card

New firmware versions extend the functional range and enhance the operation.

The current software can be downloaded from www.resol.de/firmware.

In order to run a firmware update over the SD memory card slot, proceed as follows:

- ➔ Download the firmware from the Internet (www.resol.de/firmware) and save it to your PC.
- ➔ Extract the file.

Among the extracted files there is a folder called **SDCARD**.

- ➔ Insert an SD card formatted with the FAT32 format into the PC.
- ➔ Copy the contents of the **SDCARD** folder onto the first level of the SD card.

There should then be a folder structure called RESOL/DL2 on the SD card, containing the firmware file.

➔ Remove the SD card from the PC and insert it into the SD card slot of the SEProDL2.

The firmware update is being run and the SEProDL2 automatically reboots. This may take a few minutes. The operating control LED starts flashing, lights up for a while and then all LEDs go out.

➔ Wait until the operating control LED is permanently green.

8 Data export

There are 2 different ways to export logged data from the SEProDL2 Datalogger:

1. Export logged data onto an SD memory card. The data are stored as a VBus® format file and can be read out on a computer using the ServiceCenter software.
2. Export logged data onto a computer over the Web interface. Different file formats can be selected.

Information about exporting data over the Web interface can be found in the detailed manual on the CD included.

8.1 Data export over SD card

In order to copy data onto an SD card, proceed as follows:

➔ Insert the SD card into the SD card slot

The operating control LED flashes (green):

The card has been recognised and data are being transferred.

The operating control LED is permanently green:

The transfer is completed. The card can be removed.

9 Ordering software

For an expense allowance of EUR 20,-, a DVD containing the source code and the compiler scripts of the Open Source applications and -libraries can be ordered.

Please send your order to:

RESOL – Elektronische Regelungen GmbH

Heiskampstraße 10

45527 Hattingen

GERMANY

Please name the version number of the firmware in your order. It can be found in the Web interface, main menu **About**, sub-menu **General**, bottom area (e. g.: „1.0 (200805241128)"). Per order, only one version number can be named.

10 Accessories

MicroSD card incl. adapter

Art. no.: 112 121 86

11 Spare parts

VBus® cable

Art. no.: 112 091 98

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