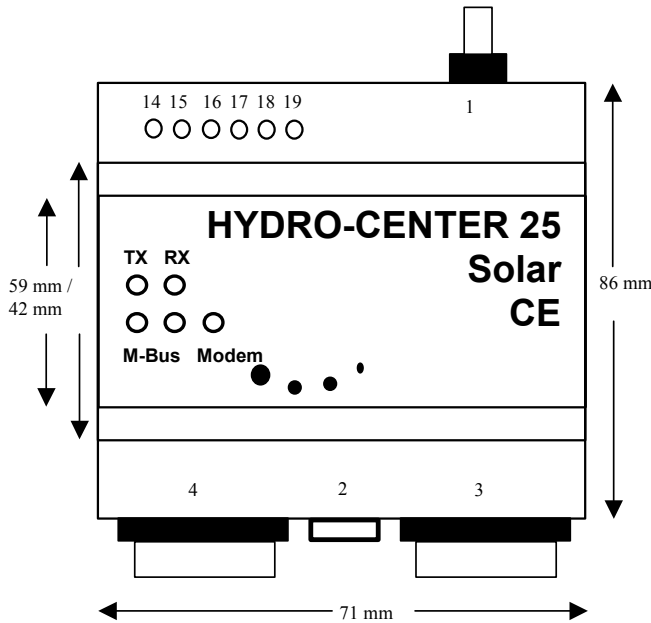


HYDRO-CENTER 25 Solar Installation



- Input:** 12 V Solar Panel
- Maximum Input Current:** 1 A charging current
- Output M-Bus:** 30 V max. 70 mA
- Communication:**
- PC (RS23):** 300, 2400, 9600 Baud Autobaud
- Modem (RS23):** 19200 Baud
- M-Bus:** 300, 2400 Baud Autobaud DIN EN 1434-4

- Important Note:**
- The HYDRO-CENTER 25 Solar device may only be installed and operated by trained personnel.
 - Unauthorized personnel may not open the HYDRO-CENTER 25 Solar housing.
 - The HYDRO-CENTER 25 Solar device may only be operated in dry rooms.
 - The HYDRO-CENTER 25 Solar device is intended to be used with 12 V solar panels (max. power output 15 W) and may not be operated with other voltages.

Mounting and Dismounting

The HYDRO-CENTER 25 device is prepared for mounting on a standard rail mount.

- Important Note:** **Disconnect power supply prior to mounting or dismounting the HYDRO-CENTER 25 device.**

Mounting: Clamp the HYDRO-CENTER 25 device on the rail mount. The black hook at the bottom of the device should snap in firmly.

Dismounting: Use a screwdriver to pull the black hook down. The HYDRO-CENTER 25 device will snap off the rail mount and you can take it off.

Electrical Connections

Number	Description
1	Cable Coding: green: Protective earth yellow: +12 V Cellular modem brown: +12 V Battery gray: +12 V Solar panel white: Common ground of solar panel, battery and GSM modem
2	Black hook
3	Connector SUB DB9 female for PC connection (RS232 interface)
4	Connector SUB DB9 male for modem connection (RS232, analog-, ISDN-, GSM-modem, etc.)
14, 16, 18	M-Bus Output -
15, 17, 19	M-Bus Output +

Notes

- Power Supply:** Only connect the HYDRO-CENTER 25 device to solar power supplies with a maximum output of 15 W.
- M-Bus:** M-Bus meters are connected to the M-Bus output clamps (see table). The M-Bus is polarity independent. One has to connect one + and one – output to the respective(s) meter(s). **Since the HYDRO-CENTER 25 device is a M-Bus Mini-Repeater the maximum M-Bus cable length should be below 1 km.** This is in contrary to the HYDRO-CENTER 60 / 250 devices which are able to drive cable lengths of several kilometers.
- Modem:** Connect a modem to connector 4. Use the interface cable provided with your modem.
- PC:** Connect a PC to connector 3. Use the interface cable which comes with your HYDRO-CENTER 25 device.
- Important Note:** **You may only connect a PC or a modem to the HYDRO-CENTER 25 device. If you connect PC and modem simultaneously the communication is not working.**

Display

- TX / RX:** The HYDRO-CENTER 25 device has got a total of 5 display lights (LEDs):
The green LED is flashing if the HYDRO-CENTER 25 device is receiving data from one of its input channels (PC or modem). The red LED is flashing if the HYDRO-CENTER 25 device is sending data to the PC or modem.
- M-Bus:** If the green LED is on the HYDRO-CENTER 25 device is connected to the power supply and is working. The M-Bus output has got its voltage of approx. 24 V. If the maximum allowed M-Bus current (approx. 70 mA) is exceeded the red LED is light up (overload condition). If the red LED is permanently on there is a short circuit on the M-Bus line or you have connected more than 25 M-Bus devices. Either eliminate the short circuit or disconnect some M-Bus devices.
If the red LED flashes during the reading of the HYDRO-CENTER 25 there is no M-Bus overload.
- Modem:** An additional yellow LED shows if there is a modem connection established.

HYDRO-CENTER 25 Solar

- Battery Charging:** A micro controller is permanently controlling the battery voltage and cuts the connection between solar panel and battery if the maximum voltage of 13.9 V is reached.
- Protection against deep discharging:** If the voltage of the battery falls below 11.4 V the power supply to M-Bus and the cellular modem is switched off to prevent deep discharging.
- Supply of cellular Modem:** The cellular modem is switched on between 08:00 AM and 04:00 PM. At all other times it is switched off to conserve battery power. Therefore, it is not possible to connect to the HYDRO-CENTER 25 after 04:00 PM until 08:00 AM. The automatic data reading of the HYDRO-CENTER 25 must be activated with a reading period of 15 minutes.

Customer Support

A complete technical datasheet, additional information, and the HYDRO-CENTER software are available at our download center internet page.

HYDROMETER GmbH
Systems
Industriestraße 13
91522 Ansbach
Germany

Phone: +49 981 1806 0
Fax: +49 981 1806 605
Email: support@hydrometer.de
WWW: <http://www.hydrometer.de>
<http://www.hydrometer.com/systems>

Configuration Examples

