

CheckWatt

Installation manual

CM10

CheckWatt CM10 is a gateway for measurement data collection and control of various energy resources. Each device is equipped with a power supply, antenna, and built-in SIM card.

This manual describes the four steps involved in an installation:

1. Installation of CM10
2. Check: Is CM10 online?
3. Connect CM10 to energy source
4. Registration

1: Installation of CM10

Power Supply

Mount the power supply on the DIN rail according to the accompanying instructions and connect V+ to V+ and V- to V- on the CM10.

LAN1

Internet connection via local connection to 'LAN 1' on the CM10: connect an Ethernet cable between the router (or other network equipment such as a PLC-modem, Wi-Fi repeater, or network switch) and the RJ45 port marked as 'LAN1' on CM10. DHCP is configured as default and communication takes place over ports 443 and 8443. Contact CheckWatt for static IP.

Local connection on LAN1 should always be installed.

LAN2

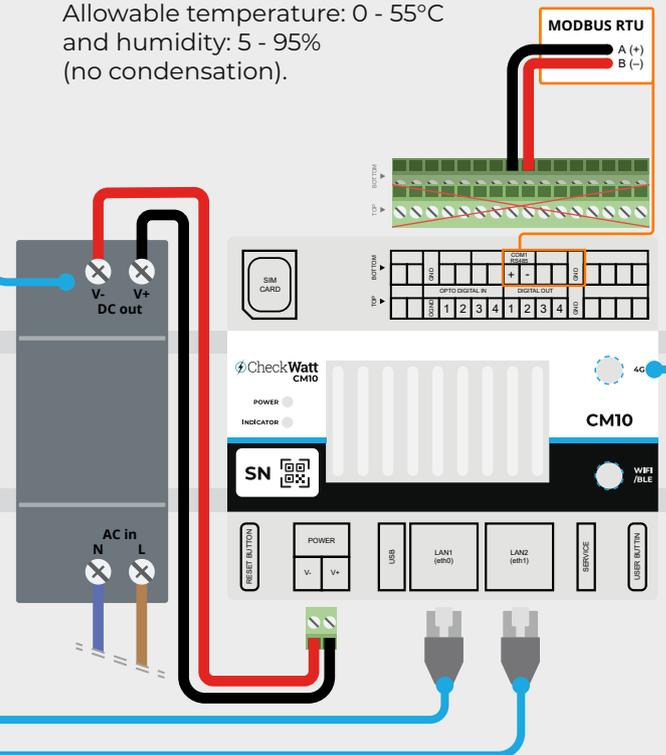
CM10 provides a subnet with router function via the RJ45 port marked LAN2 according to the following specifications:

DHCP*	192.168.5.101 - 192.168.5.240
Static IP	192.168.5.2 - 192.168.5.99
Gateway	192.168.5.1
Subnet mask	255.255.255.0

Mounting

Mount CM10 and the power supply on the DIN rail in the electrical panel. Together, CM10 and the power supply are eight modules wide.

Allowable temperature: 0 - 55°C
and humidity: 5 - 95%
(no condensation).



Antenna

Connect the antenna cable to the SMA connector marked 4G (the one at the top) on the front side of CM10 and mount the antenna at a suitable place with good mobile coverage.

The antenna should always be installed as it acts as a redundancy if the connection via LAN1 is broken.

*Recommended



Each CM10 has a unique serial number (SN) which can be found on a sticker on the front side of the CM10. The QR code leads to <https://register.checkwatt.se/register/> with the SN filled in.

2: Check: Is CM10 online?

- 2.1 Check that the LED "Power" lights up red on the CM10.
- 2.2 Fill in "SN" (Serial Number) (Can be found on the sticker on CM10) into the URL:
<https://register.checkwatt.se/meter>
- 2.3 If the timestamp is showing the current date, then the internet connection to CM10 is functional.
Assuming a correct installation, the status of the system goes from "Offline" to "Producing/Connected" when the CM10 has been configured by CheckWatt.
- 2.4 If the timestamp is not updated, follow the troubleshooting guide "Felsökning Installation" (in Swedish) which can be found via the QR code in step 3 or on
<https://checkwatt.se/installation>.

3: Connect CM10 to energy source

Communication with the inverter, smartlogger, and electricity meter takes place through wired communication (modbus RTU or TCP/IP, alternatively MQTT).

Manuals for specific manufacturers can be found via the QR code below or on

<https://checkwatt.se/installation>.



4: Registration

Register the system by scanning the QR code on the front side of the CM10 and fill in the information about the customer and facility.

Alternatively go to **<http://register.checkwatt.se>** and fill in the serial number beside the QR code.

The system will be configured by CheckWatt within five business days after a complete registration.

Installation troubleshooting and other instruction manuals:
<https://checkwatt.se/installation>