Installation manual CheckWatt CM10 and Eastron SDM 630(MCT) Updated 2023-11-17

Installation of the CheckWatt CM10 and the electricity meter from Eastron should be done according to their respective installation manuals. The following documentation specifically describes how communication is established between the CheckWatt CM10 and the electricity meter from Eastron. For measurement via current transformers, please note that the order in which phases L1, L2, L3 are connected for voltage measurement must match the order in which they are connected for current measurement. LA and NA are connected to phase and neutral respectively for the meter's internal power supply.

Communication between the CM10 and the electricity meter from Eastron is done using Modbus RTU via a shielded twisted pair cable.

Eastron SDM630 Modbus

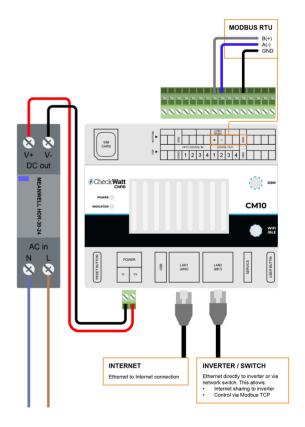
Connect the bus cable (shielded twisted pair cable) between the electricity meter and the CM10:

- Connect the cable from the meter's terminal 'A+' to terminal COM1: (+) on the CM10 (Note: rear row).
- Connect the cable from the meter's terminal 'B-' to terminal COM1: (-) on the CM10 (Note: rear row).

Eastron SDM630MCT

Connect the bus cable (shielded twisted pair cable) between the electricity meter and the CM10:

- Connect the cable from the meter's terminal 14 (A/TX+) to terminal COM1: (+) on the CM10 (Note: rear row).
- Connect the cable from the meter's terminal 13 (B/TX-) to terminal COM1: (-) on the CM10 (Note: rear row).

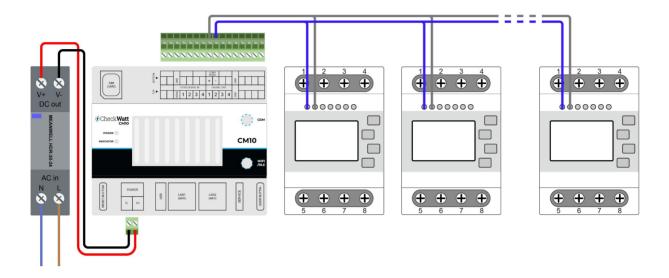




Daisy Chain

If multiple electricity meters and/or inverters are connected via Modbus RTU, connect them in a daisy chain with the CM10 as the master according to the diagram in the image below.

Always ensure that (+) is connected to (+) and (-) is connected to (-), and that each meter has a unique Modbus address (1, 2, 3, etc.) set to ensure proper communication.



Settings

Settings are adjusted according to the electricity meter's installation manual via the "Set Up" menu. Ensure that the CT rate is correct for measurement with a current transformer and that the electricity meter has the following Modbus settings:

Address: 001 Baud rate: 9600 Parity: None Stop bit(s): 1

