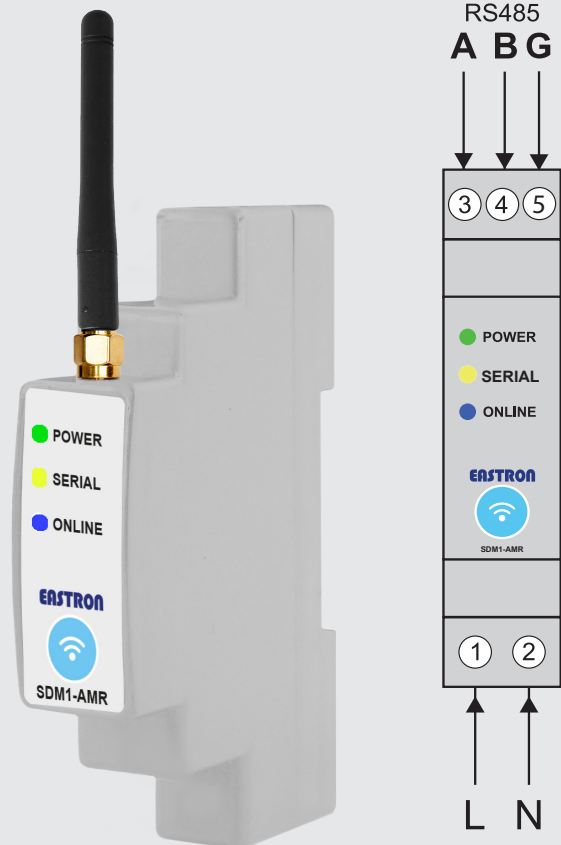


Data Sheet

2019 v1.0

SDM1-AMR DIN Rail RS485 Datalogger

- Wireless Data Transfer
- NB-IoT / LTE-M (Vodafone/O2 Network Connectivity)
- Preconfigured to all Eastron Meters
- No Site Commission
- Available with Emig Software for Monitoring



SDM1-AMR DIN Rail RS485 Datalogger

The SDM1-AMR Datalogger is a low-cost solution for remotely monitoring Eastron digital power meters equipped with Modbus RS485 RTU.

This device utilizes the NB-IoT / LTE-M network to transfer data wirelessly from meter to the cloud. This data can be presented using our software, or if preferred, it can be provided in a raw format such as a CSV file allowing you to present the data through your own software.

The SDM1-AMR is specifically designed to enable a simple, low cost, remote wireless management solution that does not require specialist technical skills for installation.

The SDM1-AMR can take up to 3 parameter inputs through Modbus RS485 from the following list:

- Total Active Energy (Σ kWh)
- Import Active Energy (kWh)
- Export Active Energy (kWh)
- Current (A)
- Voltage (V)
- Instantaneous Power (kW)
- Power Factor (PF)
- Frequency (Hz)

This can be 3 parameters from 1 meter, or 1 parameter per meter from 3 meters.

The SDM1-AMR also has the facility to take 2 pulsed inputs for legacy meters such as water, heat or electricity meters that do not have Modbus RS485 communications.

Examples of Monitoring Setups

Below are some examples of how the SDM1-AMR can be wired in conjunction with other meters to read parameters accordingly:

1 Electricity Meter - 3 Parameters

Parameters:

Meter 1: Total Active Energy (Σ kWh)

Meter 1: Import Active Energy (kWh)

Meter 1: Export Active Energy (kWh)



3 Electricity Meters - 1 Parameter Per Meter

Parameters:

Meter 1: Total Active Energy (Σ kWh)

Meter 2: Total Active Energy (Σ kWh)

Meter 3: Total Active Energy (Σ kWh)



Specification

Mounting	DIN rail (DIN 43880)
Sealing	IP51 indoor
Operating temperature	-5°C to +65°C*
Storage temperature	-25°C to +75°C*
Auxiliary Power Supply	85-264VAC, 100-370VDC
Power Consumption	250mA Bic Transmitting
Network	Vodafone O2 NB-IoT / LTE-M
Band 158	868.13MHz
Band 20	869.525MHz
Comms Compatibility	Modbus RS485 RTU
Sim Size	3FF
Comms Baud Rate	1200, 2400, 4800, 9600 (auto-sensing)