

KARLBORGS

M2M2-70

Energy Meter Gateway for Danfoss AK-SM 800/800A

M2M2-70 is a gateway that enables electrical energy meters from multiple manufacturers to be integrated with the Danfoss AK-SM 800 / 800A.

The gateway reads energy meters over Modbus RTU and presents them to the System Manager as a Carlo Gavazzi EM210 meter, enabling seamless integration in Danfoss systems.

Compatibility:

Danfoss: *AK-SM 800 / 800A series*

Energy meters: *See page 2.*

Find latest documentation on karlborgs.com/produkter/m2m2

Technical Specification:

Interfaces: *1x Ethernet*

1x CANbus

2x RS-485

Power Supply: *12-24 V DC, < 1 W*

Dimensions: *70x90x32 mm*

Mounting: *DIN-rail*

Protection: *IP20*

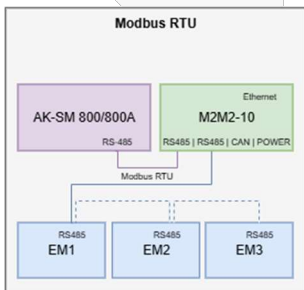
Certificates: *CE, RoHs*

Usage:

M2M2-70 connects energy meters to a Danfoss AK-SM 800 / 800A using Modbus RTU.

Energy meters are connected to the RS-485 master interface, while the System Manager is connected to the RS-485 slave interface.

The gateway automatically polls the configured meters and exposes them to the System Manager as virtual Carlo Gavazzi EM210 devices.



LED Status	
LED	Meaning
Green	Device powered
Blue	Config. WiFi active
Green status	Communication OK
Red	Communication error



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Commissioning

1. Access configuration

Press the button on the gateway to enable configuration WiFi.

Connect to the WiFi network created by the device and open: <http://192.168.10.1>

This opens the web interface.

2. Configure Modbus settings

Set RS-485 (master) baudrate and serial settings to match the connected meters.

3. Scan for meters

Use Network Scan in the Modbus Config page to detect connected devices.

4. Add meters

Add detected meters and select the correct meter type.

Meters can be added manually or copied from the scan results.

5. Configure System Manager

Connect RS-485-S to the Danfoss System Manager. Typical settings:

Mode	Baudrate	Settings
Modbus 1 (SLV disabled)	38400	8E1
Modbus 1 (SLV enabled)	19200	8E1

M2M2 slave ID must be set to 0.

After configuration verify communication in the Poller Status page.

Meters with status "Communication OK" are correctly integrated.

Supported Energy Meters *(For full updated list, see karlborgs.com/produkter/m2m2)*

ABB – B23, B24, D13

Carlo Gavazzi - EM21, EM24, EM210, EM330, EM340, EM530, EM540, WM12, WM14, WM14 ADV, WM15

Schneider Electric - iEM2435, iEM2455, iEM3150, iEM3250, iEM3350, iEM3155, iEM3255, iEM3355, iEM3400, iEM3500

Wago – 4PS, 2PU CT

Other supported manufacturers - Socomec, Rayleigh, Northern Design, Lettel, OTMetric, Polier