



CMe3100

M-Bus Gateway TCP/IP



Your benefits

- Intelligent link between M-Bus devices and system:
The CMe3100 M-Bus metering gateway fulfils all requirements in terms of flexibility and versatility and makes data integration easier than ever before
- Flexible meter reading:
Reading of the measured values by the time-saving online query via the web platform or on site
- Unique capabilities:
Whereas previously it was difficult to connect an M-Bus system via Modbus TCP, JSON-RPC or REST, the CMe3100 enables integration into peripheral systems, e. g. a building management system, without additional devices
- Preferred M-Bus splitter:
The CMe3100 supports the complete M-Bus standard, and splitting all bus participants to two further systems via wired M-Bus is easy
- Infrared interface for modular extensions:
Metering gateway can be used for the connection of additional measuring points (→ investment protection)

Properties

- Data can be sent to FTP and https server
- Different executions with support for 8, 32, 64, 128, 256 or 512 devices available
- Various templates available for sending meter data
- Integration of wireless M-Bus participants (T & C mode) with CMi-Box
- DIN mounted, modular and expandable – future-proof solution
- Various extension modules (infrared interface) available
- Supports static and dynamic IP addressing
- Configuration changes and ad hoc read-out can be carried out remotely
- M-Bus protocol according to EN 13757-3
- Two M-Bus slave outputs for splitting the system to further systems
- Flexible extension system TCP, JSON-RPC, DLMS/REST

Applications

- Fast and simple measurement data acquisition incl. integrated statistical functions
- Integration of measurement data in (building) management systems or other peripheral systems
- Complete gateway integration based on e.g. DLMS or REST

Integration M-Bus Gateway

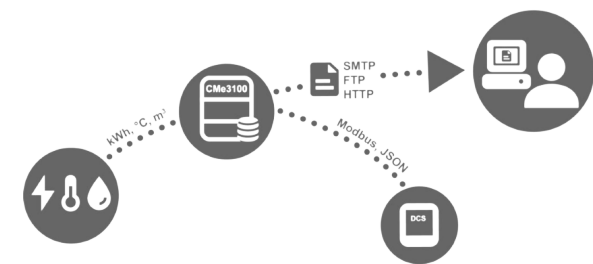


Fig. 1: Measurement data acquisition and integration in SCADA system

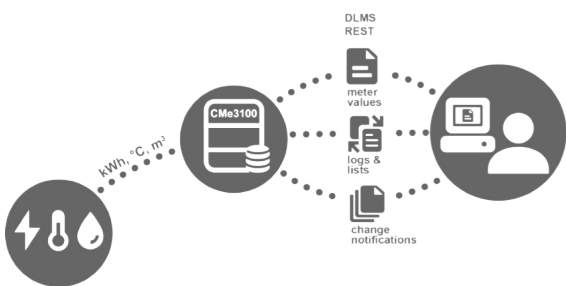


Fig. 2: Gateway integration via DLMS / REST server

Technical Data

	M-Bus Metering Gateway	Extension modules for CMe3100			
Mechanics	CMe3100	CMeX10	CMeX11	CMeX12S	CMeX13S
Dimensions (HxBxD)	90 x 70 x 64 mm (4 DIN modules)	90 x 36 x 65 mm (2 DIN modules)		90 x 108 x 65 mm (6 DIN modules)	
Weight	app. 190 g	app. 100 g		app. 220 g	
Installation	Hat rail (EN 50022), 35 mm	Hat rail (EN 50022), 35 mm			
Casing material	Polyamide	Polyamide			
Protection class	IP20	IP20			

	M-Bus Metering Gateway	Extension modules for CMe3100			
Terminals	CMe3100	CMeX10	CMeX11	CMeX12S	CMeX13S
Power supply	L, N screw cramp cable 0 - 2,5 mm ² 0,5 Nm tightening torque	L, N screw cramp cable 0,75 - 2,5 mm ² 0,5 Nm tightening torque		L, N, earth screw cramp cable 0,75 - 2,5 mm ² 0,5 Nm tightening torque	
M-Bus	Pin terminal solid wire Ø 0,6 - 0,8 mm	Pin terminal solid wire Ø 0,6 - 0,8 mm		Pin terminal solid wire Ø 0,6 - 0,8 mm + screw cramp cable 0,25 - 2,5 mm ² 0,5 Nm tightening torque	
Ethernet	RJ-45	Not available			
RS232	Not available	Not available		RJ-45	
USB	Typ A (Master Port) / Typ mini B (Slave Port)	Not available			

	M-Bus Metering Gateway	Extension modules for CMe3100			
Electrical	CMe3100	CMeX10	CMeX11	CMeX12S	CMeX13S
Nominal voltage	100 - 240 V AC / ± 10 % / (50/60 Hz)	100 - 240 V AC / ± 10 % / (50/60 Hz)			
Power consumption (max.)	<15 W	<3 W		<25 W	
Power consumption (nom.)	<5 W	M-Bus loads x 0,07 W + 1,5 W			
Installation category	CAT 3	CAT 2			

	M-Bus Metering Gateway	Extension modules for CMe3100			
Ethernet-Specifications	CMe3100	CMeX10	CMeX11	CMeX12S	CMeX13S
Velocity	Auto 10/100 MBit	Not available			
Duplex	half/full Duplex	Not available			
Configuration	Web-Browser	Not available			

	M-Bus Metering Gateway	Extension modules for CMe3100			
M-Bus-Specifications	CMe3100	CMeX10	CMeX11	CMeX12S	CMeX13S
M-Bus standard	EN 13757	EN 13757			
M-Bus baud rate	300, 2400 Bit/s	300, 2400 Bit/s			
Maximum connected M-Bus loads (each 1,5 mA)	32 (modularly expandable up to 1056)	32	64	128	256
Maximum cable length	1000 m ¹⁾	1000 m ¹⁾			
Max. load capacitance	100 nF/km, max. 90 ohm	100 nF/km, max. 90 ohm			
Bus voltage (nom.)	28 V DC	28 V DC		42 V DC	
IR interface for extension modules	Yes	Yes			
Extension possibilities (Additional M-Bus loads)	32, 64, 128, 256	Yes. max. of 5 CMe modules side by side			

1) The maximum possible network reach (entire cable length) as well as the distance to the M-Bus end devices depends greatly on the network topology, the number of connected devices, the cross-section of the used cables and the transfer rate.

	M-Bus Metering Gateway	Extension modules for CMe3100			
Ambient conditions	CMe3100	CMeX10	CMeX11	CMeX12S	CMeX13S
Operating temperature range	-25 to + 55 °C	-30 to + 55 °C			
Storage temperature range	-40 to + 85 °C	-40 to + 85 °C			
Humidity	5 - 90 % (non condensing)	5 - 90 % (non condensing)			
Assembly location	Indoor (opt. with IP67 housing for outdoor)	Indoor (opt. with IP67 housing for outdoor)			

	M-Bus Metering Gateway	Extension modules for CMe3100			
Approvals	CMe3100	CMeX10	CMeX11	CMeX12S	CMeX13S
EMC	EN 61000-6-2, EN 61000-6-3, FCC 47 CFR				
Safety	EN 62368-1 2018, UL 62368-1:2014 [Ed.2], CSA C22.2 62368-1:2014 [Ed.2]				