



# M-Bus Metering Gateway:

CMe3100

# Extension Modules:

CMeX10-CMeX11

CMeX12S-CMeX13S

## Your benefits

- Intelligent link between system and M-Bus devices:  
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).

## Features

- 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

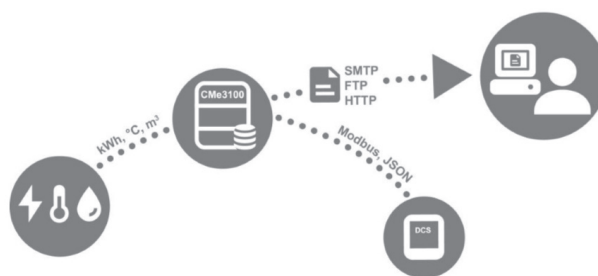


Fig. 1: Measurement data acquisition and integration in SCADA system

## Application

- 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

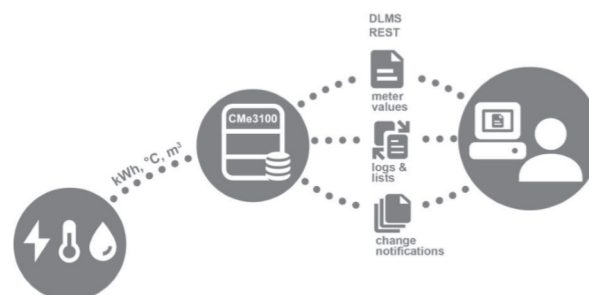


Fig. 2: Gateway integration via DLMS / REST server

# Technical Data

	M-Bus Metering Gateway	Extension modules for CMe3100			
	CMe3100	CMeX10	CMeX11	CMeX12S	CMeX13S
<b>Mechanics</b>					
Dimensions (HxBxD)	90x70x64 mm (4 DIN modules)	90x36x65 mm (2 DIN modules)		90x108x65 mm (6 DIN modules)	
Weight	190 g	approx. 100 g		approx. 220 g	
Installation	Hat rail (EN 50022), 35 mm		Hat rail (EN 50022), 35 mm		
Casing material	Polyamide		Polyamide		
Protection class	IP20		IP20		
<b>Terminals</b>					
Power supply	L, N Screw terminal cable 0 - 2.5 mm <sup>2</sup> 0.5 Nm tightening torque L, N	L, N Screw terminal cable 0.75 - 2.5 mm <sup>2</sup> 0.5 Nm tightening torque		L, N, Erde Screw terminal cable 0,75 - 2,5 mm <sup>2</sup> 0,5 Nm tightening torque	
M-Bus	Screw terminal, 0,25 - 1.5 mm <sup>2</sup>	Pin terminal solid wire Ø 0.6 - 0.8 mm		Pin terminal solid wire Ø 0.6 - 0.8 mm and Screw terminal cable 0.25 - 2.5 mm <sup>2</sup> 0.5 Nm tightening torque	
Ethernet	RJ45	Not available			
RS232	Not available	Not available		RJ45	
USB	Typ A (Master Port) / Typ mini B (Slave Port)	Not available			
<b>Electrical</b>					
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		
<b>Ethernet-Spezifikationen</b>					
Geschwindigkeit	Auto 10/100 MBit		not available		
Duplex	half/full Duplex		not available		
Konfiguration	Web-Browser		not available		
<b>M-Bus-Specifications</b>					
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*		1000 m*		
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 Maximum of 5 CMe modules side by side		
<b>Ambient conditions</b>					
Operating temperature range	-25 to +55 °C		-30 to +55 °C		
Storage temperature range	-40 bis +85 °C		-40 bis +85 °C		
Humidity	5% - 90% (non condensing)		5% - 90% (non condensing)		
Place of installation site	Indoor (optional with IP67 casing for outdoor installation)		Indoor (optional with IP67 casing for outdoor installation)		
<b>Approvals</b>					
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]				

\* 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.