



## CM2100

M-Bus Gateway LTE



### Your benefits

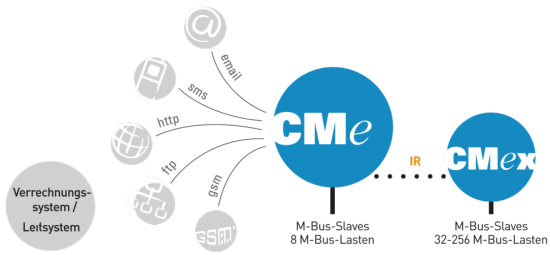
- Automated data transmission (push operation) or dial-up connection with subsequent transparent M-Bus readout (pull operation):  
**Perfectly equipped for any application**
- Remote configuration or configuration change via SMS or configuration profile from the web server:  
**Reduces commissioning costs and configuration errors**
- IR interface for modular extension:  
**No need to replace the M-Bus GSM/GPRS Master when connecting additional measuring points, investment protection**
- 100-240 V AC mains power required:  
**No extra power supply necessary**
- Operating status display via LED:  
**Easy on-site analysis and troubleshooting**

### Applications

- Remote supply and remote reading of M-Bus end devices over GSM/GPRS

### Properties

- Built-in M-Bus data centre (memory size app. 1,4 MB) – reading interval of the meter and transmission interval of the M-Bus meter data can be configured
- M-Bus meter data can be sent to ftp server, web server or as an email
- Different templates available for the type of meter data transmission
- Solution for integration of M-Bus meter data into billing systems available (GWFFRead Smart)
- Remote configuration changes and remote ad-hoc-readout can be carried out at any time
- Device monitoring via digital I/O module (CMEx40, M-Bus-Slave) with option of SMS alarms
- DIN mounted, modular and expandable - future proof solution
- Several extension modules (additional M-Bus loads) which are mounted to the right (IR interface) of the module are available
- M-Bus protocol according to EN 13757-3
- Transfer rates M-Bus: 300, 2400 Bit/s
- M-Bus short-circuit protection
- Operating indicator with LED



# Technical Data

	M-Bus GSM/GPRS Master	Extension Modules for CMe2100			
Mechanics	CMe2100	CMeX10	CMeX11	CMeX12S	CMeX13S
Dimensions (HxWxD)	90x36x65 mm [2 DIN-Modules]	90x36x65 mm [2 DIN-Modules]		90x108x65mm [6 DIN-Modules]	
Weight	app. 120 g	app. 100g		app. 220g	
Installation	Hat rail TS35 (EN 50022) / DIN mounted	Hat rail TS35 (EN 50022) / DIN mounted			
Casing material	Polyamide	Polyamide			
Protection class	IP20	IP20			

	M-Bus GSM/GPRS Master	Extension Modules for CMe2100			
Terminals	CMe2100	CMeX10	CMeX11	CMeX12S	CMeX13S
Power supply	L, N screw clamp cable 0,75 - 2,5 mm <sup>2</sup> 0,5 Nm tightening torque	L, N screw clamp cable 0,75 - 2,5 mm <sup>2</sup> 0,5 Nm tightening torque		L, N, Protective Earth screw clamp cable 0,75 - 2,5 mm <sup>2</sup> 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 and screw terminal cable 0,25 - 2,5 mm <sup>2</sup> 0,5 Nm tightening torque	
RS232	-	-		RJ-45	

	CMe3000	Extension Modules for CMe2100			
Electrical	CMe3000	CMeX10	CMeX11	CMeX12S	CMeX13S
Nominal voltage	100...240VAC / ± 10% / (50/60Hz)	100...240VAC / ± 10% / (50/60Hz)			
Power consumption (max.)	2,5 W	3 W		25 W	
Power consumption (nom.)	1 W	1,5 mA x M-Bus-Loads + 1 W			
Installation category	CAT 4	CAT 3			

	M-Bus GSM/GPRS Master	Extension Modules for CMe2100			
GSM/GPRS	CMe3000	CMeX10	CMeX11	CMeX12S	CMeX13S
GPRS class	Up to 12	-			
Band	850/900/1800/1900 MHz	-			

	M-Bus GSM/GPRS Master	Extension Modules for CMe2100			
M-Bus specifications	CMe3000	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)	8	32	56	128	256
Maximum cable length	1000 m <sup>1)</sup>	1000 m <sup>1)</sup>			
Maximum load capacitance	1.5 µF	1.5 µF			
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)	Yes Maximum of 4 CMe-modules side by side	Yes Maximum of 4 CMe-modules side by side			

## Integration

Transparent M-Bus readout via public fixed IP address	TCP	-
Transparent M-Bus readout via dial-up connection	GSM CSD	-
E-Mail	SMTP	-
FTP	Standard FTP client	-
HTTP	«Standard HTTP and HTTPS client, POST & GET»	-

## Ambient conditions

Operating temperature range	-20 to +55 °C	-30 to +55 °C
Storage temperature range	-40 to +85 °C	-40 to +85 °C
Humidity (non condensing)	80% at temperatures up to 31 °C, decreasing linearly to 50% at 40 °C	80% at temperatures up to 31 °C, decreasing linearly to 50% at 40 °C
Pollution degree	2	2

## Approvals

EMV	EN 61000-6-2, EN 61000-6-3	EN 61000-6-2, EN 61000-6-3
Safety	EN 61010-1, CAT 4	EN 61010-1, CAT 3

<sup>1)</sup>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.