



M-Bus TCP/IP Master:

CMe3000

Extension Modules:

CMeX10-CMeX11

CMeX12S-CMeX13S

Your benefits

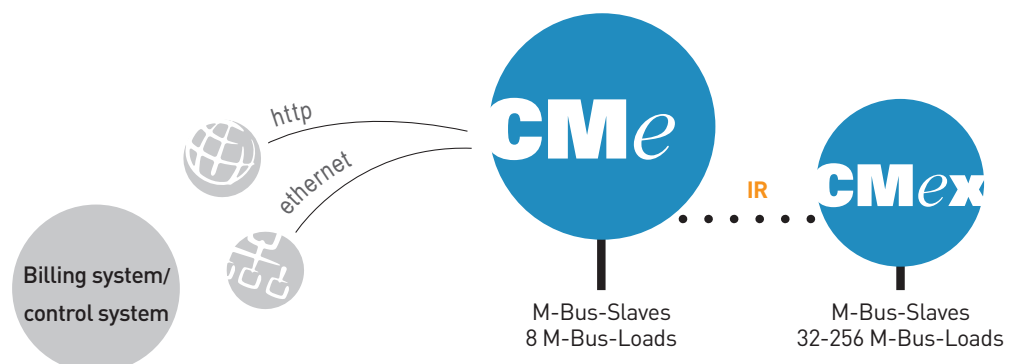
- Transparent mode of operation:
Unchanged transfer of read-out data to the communication device
- TCP/IP interface for communication with readout infrastructure:
Ease of installation, especially when M-Bus measuring instruments are distributed over several floors or buildings
- IR interface for modular extension:
No need to replace the M-Bus TCP/IP Master when connecting additional measuring points, investment protection
- 100-240VAC mains power required:
No extra power supply necessary
- Operating status display via LED:
Easy on-site analysis and troubleshooting

Application

- Remote supply and remote reading of M-Bus end devices over Ethernet

Features

- Signal converter from M-Bus to TCP/IP
- 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
- Intelligent Watchdog functionality to enable stable operation during a long time
- Supports static IP addressing as well as dynamic IP addressing (DHCP)
- Internal HTTP web server for configuration with any web browser - no additional software required
- Readout via virtual COM ports - existing PC software can be used
- M-Bus protocol according to EN 13757-3
- Transfer rates M-Bus: 300, 2400 Bit/s
- M-Bus short-circuit protection
- 100-240VAC power supply
- Operating indicator with LED



Technical Data

	M-Bus TCP/IP MASTER		Extension Modules for CMe3000			
	CMe3000		CMeX10	CMeX11	CMeX12S	CMeX13S
Mechanics						
Dimensions (HxWxD)	90x36x65mm (2 DIN-Modules)		90x36x65mm (2 DIN-Modules)		90x108x65mm (6 DIN-Modules)	
Weight	app. 100g		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			
Terminals						
Power supply	L, N Screw terminal cable 0,75 - 2,5mm ² 0,5Nm tightening torque		L, N Screw terminal cable 0,75 - 2,5mm ² 0,5Nm tightening torque		L, N, Erde Screw terminal cable 0,75 - 2,5mm ² 0,5Nm tightening torque	
M-Bus	Pin terminal solid wire Ø 0,6 - 0,8mm		Pin terminal solid wire Ø 0,6 - 0,8mm		Pin terminal solid wire Ø 0,6 - 0,8mm and Screw terminal cable 0,25 - 2,5mm ² 0,5Nm tightening torque	
Ethernet	RJ-45		Not available			
RS232	Not available		Not available		RJ-45	
Electrical						
Nominal Voltage	100...240VAC / ± 10% / (50/60Hz)		100...240VAC / ± 10% / (50/60Hz)			
Power consumption (max.)	2,5W		3W		25W	
Power consumption (nom.)	1W		1,5mA x M-Bus-Loads + 1W			
Installation category	CAT 3		CAT 3			
Ethernet specifications						
Speed	Auto 10/100 MBit		Not available			
Duplex	Half/Full duplex					
Configuration	Via internal HTTP web server with any web browser					
Readout	Virtual COM port or IP address					
M-Bus specifications						
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 1.5mA)	8		32	64	128	256
Maximum cable length	1000m*		1000m*			
Maximum load capacitance	1.5µF		1.5µF			
Bus voltage (nom.)	28VDC		28VDC		42VDC	
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			
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	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						
EMC	EN 61000-6-2, EN 61000-6-3		EN 61000-6-2, EN 61000-6-3			
Safety	EN 61010-1, CAT 3		EN 61010-1, CAT 3			

* 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.