

CMe3000

M-Bus Gateway for Fixed Network



The CMe3000 is a flexible and cost-effective M-Bus Gateway for Fixed Network. It is ready to use with all ABB DIN-mounted electricity meters and any M-Bus meter following the M-Bus standard protocol. The CMe3000 uses an internal web interface which allows it to be updated remotely. The flexible and versatile design makes it simply the most powerful TCP/IP M-Bus master on the market.

Ready to use

The CMe3000 requires no configuration in the field, which reduces both installation costs and the risk of handling errors.

Standard open protocols

The standard open protocol design enables fast integration into existing billing and reporting systems. Transparent M-Bus communication with TCP/IP works with any software supporting the M-Bus standard.

Future proof

The product has an intelligent Watchdog functionality to enable stable operation during a long time.

Flexible

The flexible design with the IR optical port makes it possible to add expansion modules on demand. For example, add a CMeX10 Series M-Bus Master to connect up to 256 extra meters. New expansion modules are constantly developed to meet new market demands.

Cost effective

The CMe3000 provides some of the most cost-effective solutions for DIN-mounted meter installations. The quality and the number of options available serve to minimise the overall cost of the product over the course of its use.

Technical data

Mechanics

Casing material	Polyamide
Protection class	IP20
Dimensions	35 × 90 × 65 mm (2 DIN modules)
Weight	100 g
Mounting	Mounted on DIN rail (DIN 50022) 35 mm

Electrical connection

Supply voltage	Screw terminal. Cable 0.75-2.5 mm ² , 0.5 Nm tightening torque
M-Bus master port	Pin terminal. Solid wire 0.6-0.8 Ø mm
Network	RJ45 (Ethernet)

Electrical characteristics

Nominal voltage	100-240 VAC (+/- 10%)
Frequency	50/60 Hz
Power consumption (max)	<2.5 W
Power consumption (nom)	<1 W
Installation category	CAT 3

General

Software/firmware update	Web interface
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Environmental specification

Operating temperature range	-20 °C to +55 °C
Operating humidity max	80 % RH at temperatures up to 31 °C, decreasing linearly to 50 % RH at 40 °C
Operating altitude	0-2000 m
Pollution degree	Degree 2
Usage environment	Indoors, can be extended with IP67 enclosure for outdoor use
Storage temperature range	-40 °C to +85 °C

User Interface

Green LED	Power
Red LED	Error
Yellow LED	Status ethernet
Push button	Factory reset
Configuration	Web interface (HTTP)

M-Bus

Interfaces	IR, integrated M-Bus Master
Maximum number of M-Bus devices (software limit)	256
Transparent M-Bus	TCP/IP (software limit does not apply to Transparent M-Bus mode)

Integrated M-Bus Master

M-Bus standard	EN 13757
M-Bus baud rate	300 and 2400 bit/s
Nominal voltage	28 VDC
Maximum unit loads	8T/12 mA (can be extended using CMeX10-13S Series)
M-Bus search modes	Primary, secondary
Maximum cable length	1000 m (100 nF/km, maximum 90 Ω)

Fixed Network (ethernet)

Speed and duplex	Auto 10/100 Mbit Half/Full duplex
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Approvals

EMC	EN 61000-6-2, EN 61000-6-3
Safety	EN 61010-1, CAT 3

