

CMe 2100

DIN-Mounted GSM/GPRS M-Bus Master

The CMe2100 is a flexible and cost-effective GSM/GPRS M-Bus master. It is ready to use with all ABB DIN-mounted electricity meters and any M-Bus meter following the M-Bus standard protocol. The CMe2100 uses standard open protocol for fast and easy integration. The CMe2100 is configurable by SMS and can receive software updates over the air. Its flexible and versatile design makes it simply the most powerful GSM/GPRS M-Bus master on the market.

READY TO USE

CMe2100 is a ready to use DIN-mounted GSM/GPRS M-Bus master with no configuration required in the field. The usability reduces both installation costs and the risk of handling errors. The CMe2100 delivers immediate installation status and starts logging meter data directly after power up.

STANDARD OPEN PROTOCOLS

The standard open protocol design allows fast integration into existing billing and reporting systems. Transparent M-Bus communication with GSM and TCP works with any software supporting the M-Bus standard. The CMe2100 can send meter values using FTP, HTTP and email. The email report feature prevents firewall and IT-structure implementation problems.

FLEXIBLE

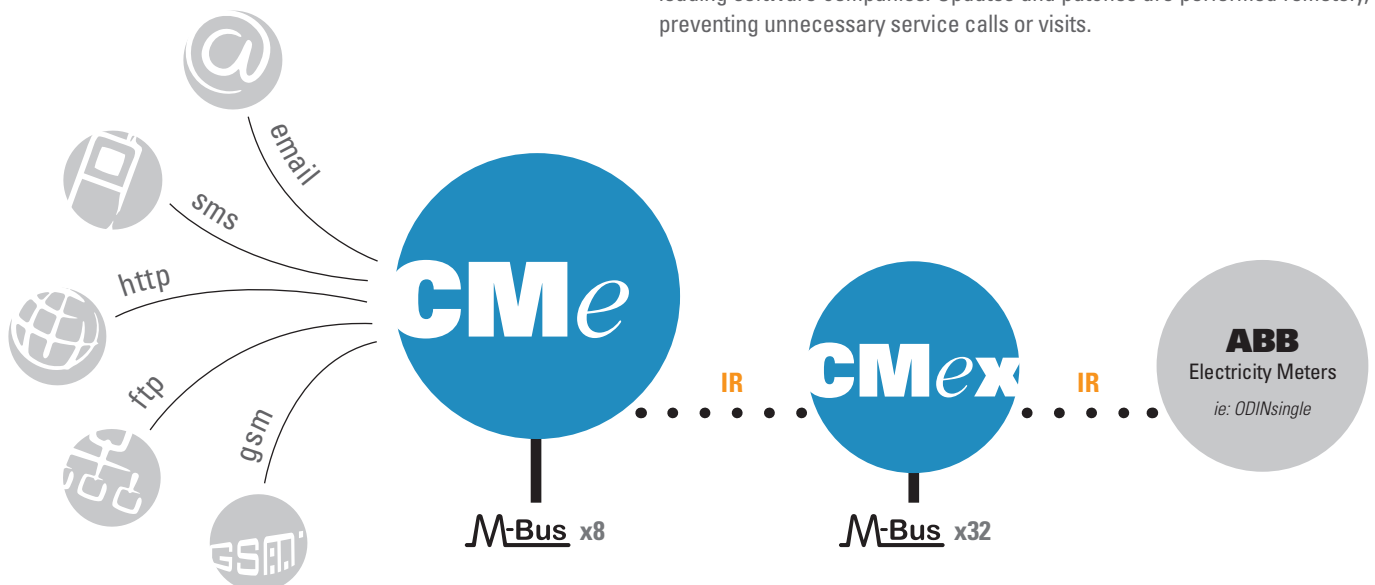
The flexible design with the IR optical port makes it possible to add expansion modules on demand. For example, add a CMeX10 Series M-Bus Extender to connect up to 256 extra meters. New expansion modules are constantly developed to meet new market demands.

COST EFFECTIVE

The CMe2100 provides some of the most cost-effective solutions for DIN-mounted meter installations. The quality and the number of options available serve to minimize the overall cost of the product over the course of its use.

FUTURE PROOF

The CMe2100 is built on standard SUN Java™ platform technology, a worldwide standard. Core platform and libraries are designed and tested by leading software companies. Updates and patches are performed remotely, preventing unnecessary service calls or visits.



Mechanics

Casing material	Polyamide
Protection class	IP20
Dimensions	100 x 65 x 36 mm
Weight	120 g
Connection M-Bus	Pin terminal. Solid wire 0.6-0.8 Ø mm
Power supply	Screw terminal. Cable 0-2.5 mm², 0.5 Nm tightening torque

Electrical

Nominal voltage	100-240 VAC
Voltage range	-10 % to +10 % of nominal voltage
Frequency	50/60 Hz
Power consumption (max)	<2.5 W
Power consumption (nom)	<1 W
Installation category	CAT 4

GSM/GPRS

GPRS Class	Up to 12
Band	850/900/1800/1900 MHz

Environmental

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

User interface

Green LED	Power
Red LED	Error
Yellow LED	GSM status
Push button	Factory reset

M-Bus

M-Bus standard	EN 13757 Full M-Bus decoder implemented
M-Bus baud rate	300 and 2400 Bit/s
Transparent M-Bus	Listening server on TCP and GSM data
Maximum connected M-Bus meters	8 (Can be extended using CMeX10 Series)
Maximum cable length	1000 m
IR Interface	Yes
Pass Through	No
Compatibility	All standard M-Bus meters, all ABB meters with IR interface, CMeX Series products

General

Data storage	~1.4 MByte data storage for meter data and custom report configuration.
Real time clock backup	12 h (Number of hours real time clock resumes running without power.)
Real time clock accuracy	<2 s/day
Script engine	Intelligent script engine for active content generation
Firmware update	Using GSM/GPRS/HTTP
Software update	Using GSM/GPRS/HTTP

Integration

Transparent M-Bus static IP	TCP
Transparent M-Bus	GSM CSD/raw M-Bus data
E-mail	SMTP
FTP	Standard FTP client
HTTP	Standard HTTP and HTTPS client, POST & GET
Configuration	SMS, HTTP, FTP, GSM CSD, Telnet

Approvals

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