# M-CME2100 GSM/GPRS M-Bus Master

The CME2100 is a flexible and cost-effective GSM/GPRS M-Bus master. It is ready to use with any M-Bus meter following the M-Bus standard protocol and often used with Prodion AMR client. 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.

**Features**

- Ready to User
- Standard Open Protocols; Transparent M-Bus, Email, HTTP, FTP
- Flexible; Easily Extended
- Cost Effective; All Typical Features in a Single Package
- Future Proof; Built-on Sun Java Platform, Automatic Updates
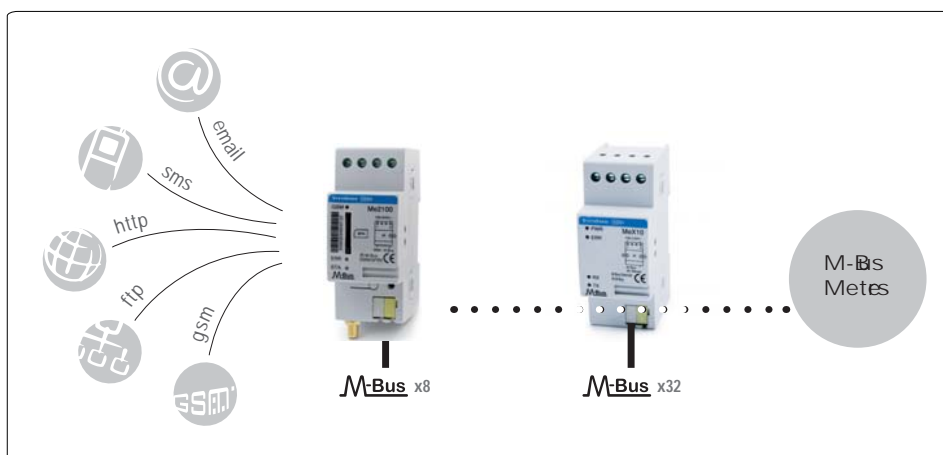
**Model Type**

| Model | Description |
|---|---|
| **M-CME2100** | GSM/GPRS M-Bus Master |

**Technical Data**

| | |
|---|---|
| Power Supply | 100-240VAC +/-10% 50/60Hz |
| Power Consumption | <2.5W (max)<br><1W (nominal) |
| GPRS Class | Up to 12 |
| Band | 850/900/1800/1900 MHz |
| M-Bus Standard | EN13757 Full M-bus Decoder Implemented |
| M-Bus Baud Rate | 300 and 2400 bit/s |
| Transparent M-Bus | Listening Server in TCP and GSM Data |
| Maximum Devices | 8 (can be extended using MEX Series Extenders) |
| Maximum Cable Legth | 1000m |
| IR Interface | Yes |
| User Interface | Green LED - Power<br>Red LED - Error<br>Yellow LED - GSM Status<br>Push Button - Factory Reset |
| Data Storage | ~1.4MByte data storage for meter data and custom report configuration |
| Real Time Clock Backup Time | 12 hours |
| RTC Accuracy | <2/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 over TCP/IP (static IP required) |
| | Transparent M-bus via GSM CSD/raw M-bus Data |
| | Email via SMTP |
| | FTP usign Standard FTP Client |
| | HTTP/HTTPS using POST & GET |
| Configuration | SMS, HTTP, FTP, GSM CSD, Telnet |
| Operating Temp | -20..+55°C |
| Storage Temp | -40°..+85°C |
| Operating Humidity | 80% rH up to 31°C, decreasing linear;y to 50% RH at 40°C |
| Agency Approvals | EMC: EN 61000-6-2, EN 61000-6-3 |
| | Safety: EN61010-1, CAT4 |
| Mounting | DIN-rail |
| Housing | IP20 Polyamide |
| Dimensions | W65 x H100 x D36mm |
| Weight | 120g |

**Standard Open Protocols**

The standard open protocol design allows fast integration into existing billing and reporting systems such as Prodion AMR or other systems. Transparent M-Bus communication with GSM and TCP works with any software supporting the M-Bus standard. The Me2100 can send meter values using FTP, HTTP and email. The email report feature prevents firewall and IT-structure implementation problems.



**Typical Network Diagram with Prodion Back Engine Software**

The M-Bus is a low cost, 2-wire field bus system for reading and remote powering of consumption meters for heat, gas, water, electricity. The physical layer and basic elements of the protocol are defined in the european standard EN 13575.

PRODION VIEW MANAGER
PRODION VIEW SERVER

**SYXTHSENSE PRODION BACK-ENGINE**
- Central Back-Engine for Data Collection and Historical Data Storage
- Advanced Client-Server Architecture
- Building, Process Data and Metering Data
- Alarm and Historical Logging Data Management
- Site and Device Management
- Graphical Trending and Reporting
- Tenant Bill Generation and Management
- Active Web Pages / Server

http://
201.120.1.1
Internet

http://
TCP/IP

GPRS Mobile
Network

M-Bus

Me3000
TCP/IP M-Bus
Module

Me2100
GPRS/M-Bus
Module

Mex40
Relay/
DI-Module

EMK Electricity
Meters

MC601
Heat/Cool
Meters

MC401 Heat
Meters

MTK Water
Meters

M-Bus Meters

WZK/WZW
Water Meters

Mex10 M-Bus
Network Extender
(max. 32 M-Bus devices)

WZCD
Heat
Meters

Ma10
°C/rH
Sensor