

CMi2110_{G3}

Integrated MCM for L+G UH50, Gateway for Mobile Network



CMi2110 is mounted inside a Landis+Gyr UH50 heat meter to perform meter readouts and deliver meter value reports. The product uses standard open protocol for fast and easy integration with any existing system, is configurable by SMS and can receive software updates over the air.

READY TO USE

Mounted inside the Landis+Gyr UH50 meter, the CMi2110 can handle up to 8 external connected M-Bus slaves. The CMi2110 requires no configuration in the field, which reduces both installation costs and the risk of handling errors. The CMi2110 unit delivers immediate installation status and starts logging meter data directly after power up.

STANDARD OPEN PROTOCOLS

The standard open protocol design enables 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 CMi2110 can send meter values using FTP, HTTP and email. The email report feature prevents firewall and IT-structure implementation problems.

FLEXIBLE

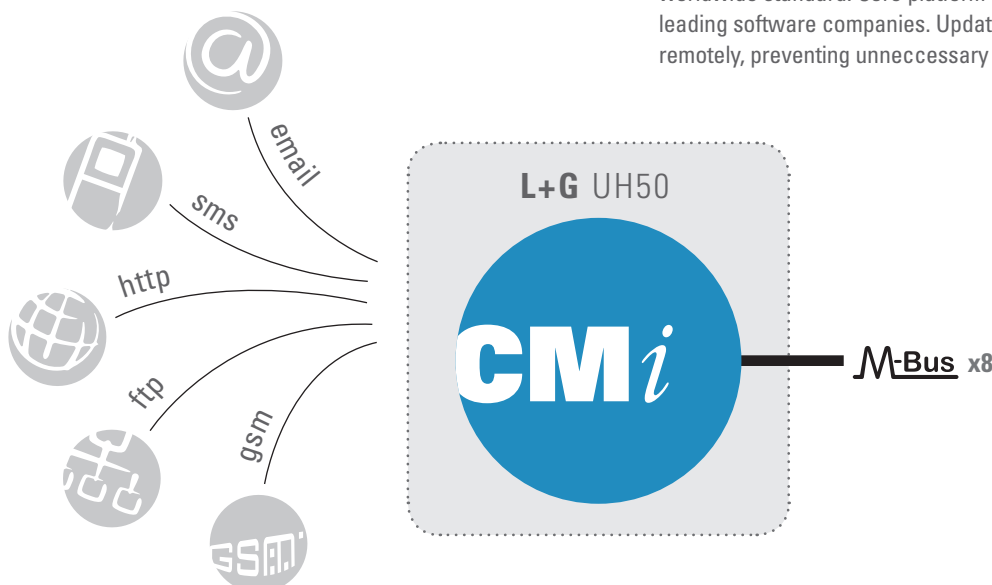
The CMi2110 has a flexible design with many integration and communication possibilities, which allows a wide range of customer implementations. Special needs can be met by adding new functionality to an existing installation using the remote update facility.

COST EFFECTIVE

The CMi2110 provides one of the most cost-effective solutions for district heating on the market. The integrated solution reduces the amount of equipment necessary in the field, which lowers both installation and initial setup costs. 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 CMi2110 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 can easily be performed remotely, preventing unnecessary service calls or on site visits.



Mechanics

Protection class	IP54
Dimensions (w x h x d)	85 x 38 x 25 mm
Weight	30 g
Mounting	In Landis+Gyr UH50 module slot
Antenna	Built-in, or optionally external via SMA-f
SIM card	Slide, standard size

Electrical connections

Supply voltage	WZU-AC110/230-50 or WZU-ACDC24-50
Connection M-Bus	Push-pull connector, cable area 0.2-0.75 mm ²
USB slave port	Type micro B
Network	Mobile (Radio)

Electrical characteristics WZU-AC110/230-50

Nominal voltage	100-240 VAC (+/- 10%)
Frequency	50/60 Hz
Power consumption (max)	<6 W
Power consumption (nom)	<1 W
Installation category	CAT 2

Electrical characteristics WZU-ACDC24-50

Nominal voltage AC	12-35 VAC
Nominal voltage DC	12-48 VDC
Frequency	50/60 Hz (or DC)
Power consumption (max)	<6 W
Power consumption (nom)	<1 W
Installation category	CAT 2

Environmental specifications

Operating temperature	-20 °C to +55 °C
Operating humidity max	5 % to 90 %, non-condensing
Operating altitude	0-2000 m
Pollution degree	Degree 2
Usage environment	Indoors
Storage temperature	-40 °C to +85 °C

User interface

Green LED	Power
Red LED	Error
Yellow LED	GSM status
Blue LED	USB acitve
Push button	Factory reset
Configuration	SMS, HTTP, GSM CSD, Telnet

M-Bus

Interfaces	Integrated M-Bus Master
Maximum number of M-Bus devices (software limit)	128
Transparent M-Bus	GSM and TCP/IP (software limit does not apply to Transparent M-Bus mode)
Decryption	No

Integrated M-Bus Master

M-Bus standard	EN 13757, full M-Bus decoder implemented
M-Bus baud rate	2400 and 9600 bit/s
Nominal voltage	28 VDC
Maximum unit loads	8T/12 mA (in addition to the L+G UH50). Canbe extended with CMEx10-13S Series.
M-Bus search modes	Primary, secondary
Maximum cable length	1000 m (100 nF/km, maximum 90 Ω)

General

Real time clock backup	12 h
Real time clock accuracy	<2 s/day
Script engine	Intelligent script engine for active content generation
Software/firmware update	Using GSM/GPRS/HTTP
Measurement reports	HTTP, FTP, SMTP (e-mail), SMS

Data storage (examples)

Number of meters: 1	15 minute values: ~200 days, Hourly values: ~800 days
Number of meters: 32	15 minute values: ~6 days, Hourly values: ~25 days
Number of meters: 64	15 minute values: ~3 days, Hourly values: ~12 days
Number of meters: 128	15 minute values: ~1 day, Hourly values: ~6 days

Mobile network

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

Integration

Meter implementation	Landis+Gyr UH50
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Approvals

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