



# CMi2140

*The true smart grid meter*

The CMi2140 is mounted inside Kamstrup kWh-meter with module slot to create a flexible and cost-effective smart grid meter. The CMi2140 uses standard open protocol for fast and easy integration with any existing system. The CMi2140 is configurable by SMS and can receive software updates over the air. A function for reporting powerloss instantaneously makes it truly a smart grid component. Its flexible and versatile design makes it simply the most powerful integrated GSM/GPRS terminal for electricity meters on the market.

## READY TO USE

The CMi2140 is mounted inside a Kamstrup kWh-meter with module slot. It requires no configuration in the field, which reduces both installation costs and the risk of handling errors. The CMi2140 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 CMi2140 can send meter values using FTP, HTTP and email. The email report feature prevents firewall and IT-structure implementation problems.

## FLEXIBLE

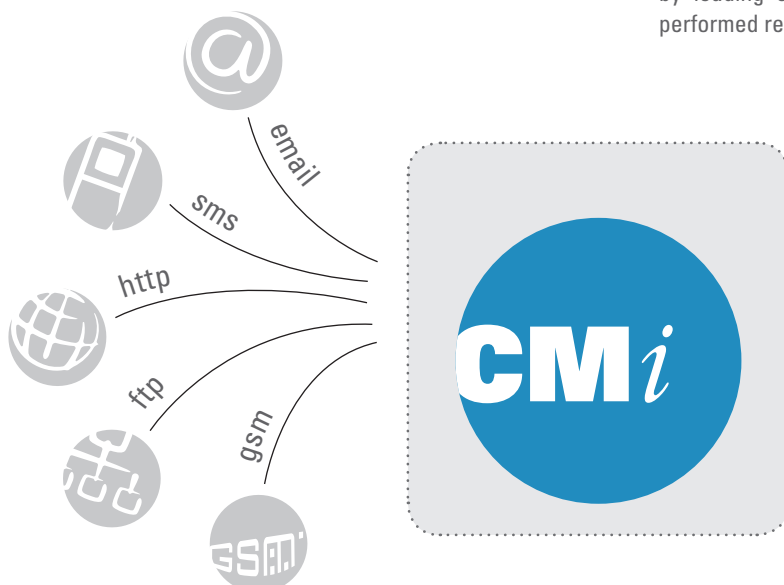
Existing and new Kamstrup kWh-meter models are compatible with the CMi2140 (see meter implementation). Breaker functionality, load watch and many more functions give the user a wide range of possibilities.

## COST EFFECTIVE

The CMi2140 provides one of the most cost-effective solutions for electricity and multi-energy 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 CMi2140 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.



### Mechanics

Protection class	IP52
Dimensions (w x h x d)	93 x 42 x 20 mm
Weight	40 g
Mounting	In Kamstrup kWh meter
Antenna	Built-in, or optionally external via SMA-f
SIM card	Slot and e-sim

### Electrical connections

Supply voltage	Supplied from Kamstrup meter
Network	Mobile (Radio)

### 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 4

### Environmental specifications

Operating temperature	-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
Resistance to water and dust	Indoor
Storage temperature	-40 °C to +85 °C

### User interface

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

### Integration

Transparent M-Bus, DLMS	TCP, GSM CSD/Raw M-Bus data
Measurement reports	HTTP, FTP, SMTP (e-mail)

### 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

### Mobile network

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

### Meter internal interface

Meter implementation	Kamstrup 162J, Kamstrup 382J, Kamstrup 382M, Kamstrup 351B
Maximum number of connected meters	1

### Approvals

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