

CMi6140

Integrated NB-IoT meter module for Kamstrup MULTICAL 403/603/803

CMi6140 is an integrated meter connectivity module mounted inside a Kamstrup MULTICAL 403/603/803 that deliver meter data to a receiving system via a NB-IoT network. The product is easily configured through Elvaco OTC mobile app or via DM-system, has several different message formats and is ideal for applications where long range is required.



Technical specification

Mechanics

Dimensions (w x h x d)	90 x 35 x 12 mm
Weight	20 g
Mounting	In module slot of Kamstrup Multical® 403/603/803
External antenna connector	MCX (female)
SIM card	Slide, size nano

Electrical connections

Supply voltage	HC99303 230 VAC high power supply HC99305 D-cell battery IoT HC99306 C-cell battery IoT 24 VAC/VDC High Power SMPS
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Electrical characteristics

Nominal voltage	3.5 VDC
Power consumption (max)	300 mA
Power consumption (sleep mode)	8 µA
Battery lifetime	> 10 years (ECO) Hourly readings, transmission 1 / day

Environmental specifications

Operating temperature	+5 °C to +55 °C
Operating humidity	0 to 93 % RH, no condensation
Operating altitude	0-2000 m

Mobile network

Transmit power	23.0 dBm
Receiver sensitivity	-135 dBm
Band	20, 8, 3
3GPP	Release 14 (NB2)

User interface

Meter push button	Start-up, reboot, send value
Configuration	NFC via Elvaco OTC app, Elvaco Evo DM-system or third party DM-system Preconfig on delivery Display operation

GUI

Meter data

Storage	>10 000 readings
Readout interval	5 min
Report interval	15 min
Meter data format	M-Bus, JSON, SenML/CBOR
Protocol	MQTT-SN

Device management

Function	2-way, FOTA
Protocol	LWM2M

Approvals

EMC	EN 301489-1, EN 301489-52
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