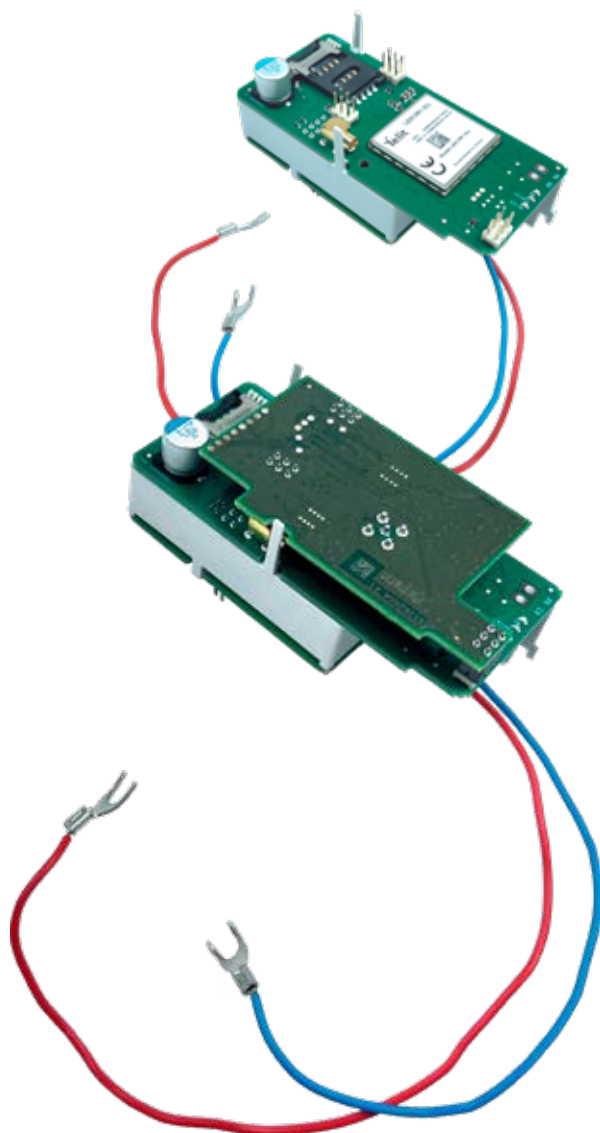


Data sheet

GSM9i 4G/RF module

- 2G and 4G module for fast and stable reading of the electricity meter
- Plug-and-play installation with clear information about the signal strength
- Status/pulse input
- SMS reading of meter and GSM signal strength
- Integrated RF Concentrator



Application

GSM9i-4G supports both 2G (GSM/GPRS), 4G (LTE) and SMS ensuring a fast and reliable connection to the metering point. The module is mounted in Kamstrup's direct electricity meters of type K and forward and in Kamstrup's CT meters of type B and forward.

The quality of the installation is ensured by means of informative Light Emitting Diodes (LEDs) indicating the signal strength, among other things. Likewise, the signal strength can be read by SMS making it possible to check installations in closed metal cabinets.

The module has a connector on the concentrator board (top) for an RF antenna and a connector on the 4G board (in the middle) for a 4G antenna.

With this module, you can collect data from several meters at the same time in one single call. The module is based on the GSM9i platform and has extended the functionality with RF which in addition to the original functionality also functions as an RF Concentrator on the licence frequencies [444 MHz] or communicates with Kamstrup heat, water and cooling meters on the EU frequency in the 434 MHz area.

Connection diagram



Antenna connection for 4G antenna on the GSM9i-4G and GSM9i-4G/RF module



Antenna connection for the RF antenna on the GSM9i-4G/RF module

Technical data

Antenna

RF antenna with MCX plug
 LTE antenna with MCX plug
 See the OMNIA® antenna guide

2G (GSM/GPRS)

Dual-band 900-1800 MHz
 Class 4 900 MHz, 2 W
 Class 1 1800 MHz, 1 W
 GPRS class 8, class B 4G (LTE)
 Penta Band 800/900/1800/2100/2600 MHz
 3GPP release 9 Compliant
 Class 3 (0.2 W, 23 dBm)

RF

Frequency	Licence band (444.xxx MHz) or EU frequencies (434.xx MHz)
Output power	Up to 500 mW (configurable)

Electrical data

Supply	From the electricity meter
Power consumption	
– idle	< 0.35 W
– transmission	< 2 W

Status / pulse input (isolated switch)

Mechanical data

Dimension (wxhxd)	41x41x93 mm
Temperature, storage	-40°C - +85°C
Temperature, operation	-40°C - +85°C
Relative humidity	< 95%, non-condensing
Mounting	In the module area of the electricity meter
Density	IP51 when mounted in electricity meter

Technical data

Marking/approvals

CE marking	
RoHS directive	
EN 61000-6-1	EMC directive
EN 61000-6-2	EMC directive
EN 61000-6-3/A1	EMC directive
EN 61000-6-4/A1	EMC directive
EN 301 489-1/52	General EMC and ERM requirements for radio equipment/ ERM requirements for GSM and E-UTRA
EN 301 511	RED. Specific requirements for GSM
EN 301 908-1/13	RED. General requirements for IMT cellular radio network/ Radio equipment directive: Specific requirements for E-UTRA
EN 62368-1	Security requirements
EN 62311	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields
TA-2012/187 + TA-2012/188	ICASA, South Africa

Ordering

Description

GSM9i 4G/RF modul

Type No.

681M00000000

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