

Data sheet

GSM8i/RF 3G module

- 2G/3G 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

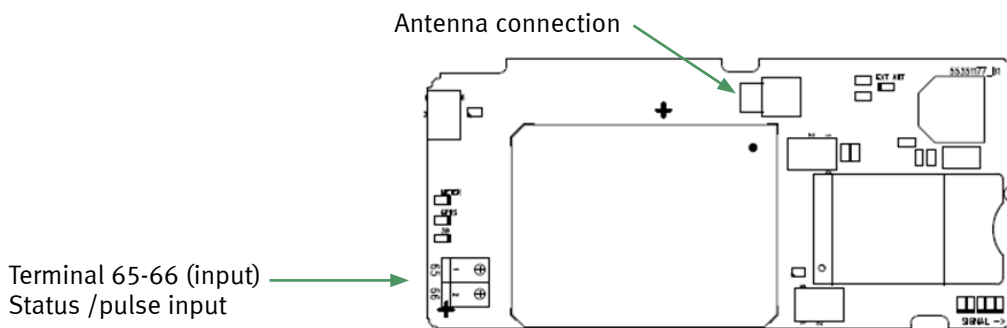
The GSM8i/RF 3G module supports both 2G (GSM/GPRS), 3G (UMTS/HSPA) and SMS ensuring a fast and reliable connection to the metering point. The module is mounted in Kamstrup's direct electricity meters of type K and forward and in Kamstrup's CT meters of type B and forward.

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 an internal antenna, which is sufficient for most installations, but it also has a connector for the mounting of an external antenna in particularly demanding areas.

With this module, you can collect data from several meters at the same time in one single call. The module is based on the GSM8i 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



Technical data

Antenna

External Triband PCB antenna with MCX connector.

2G (GSM/GPRS/EDGE)

Dual-band 900-1800 MHz

Class 4 900 MHz, 2 W

Class 1 1800 MHz, 1 W

GPRS Class 12, class B

EDGE Class E2 900 MHz, 0.5 W

EDGE Class E2, 1800 MHz, 0.4 W

3G (UMTS/HSPA)

Dual-band 900-2100 MHz

Class 4 900 MHz, 2 W

Class 3 2100 MHz, 0.25 W

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

EN 50470-1

EN 301220-1

EN 60950-1

EN 301489-1

EN 301489-7

EN 301489-24

EN 301511

EN 301908-1

EN 301908-2

TA-2012/187 + TA-2012/188

EMC directive

Electricity measuring equipment

R&TTE (EMC & RF, 25-1000 MHz)

Information technology equipment – Safety

R&TTE (general EMC requirements)

R&TTE (GSM & DCS)

R&TTE (CDMA)

R&TTE (RF spectrum)

R&TTE (RF spectrum)

R&TTE (RF spectrum)

ICASA, South Africa

Ordering

Description

Single module

In meter

Type No.

6818xxxxxxx (top number 681xxxxxxx)

6850053.31

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