

Data sheet

ZigBee® module

For Kamstrup electricity meters generation M and OMNIPOWER

- Market-leading smart home communication
- Two-way communication between utility and consumer
- Compatible with a wide range of energy displays and smart home equipment
- Integrated data flash for wireless upgrades
- Integrated antenna



Application

ZigBee® is a wireless communication approach which is often used within building automation. The ZigBee® plug-in module makes it possible for other ZigBee® units to communicate with the Kamstrup electricity meters generation M and OMNIPOWER.

The module can be used for sending consumption data wirelessly to, for example, an energy display or an integrated electricity meter in a system in the smart home. In this way, you can monitor your energy consumption and gain a better understanding of it. You can react to your consumption pattern, for example by turning off the light if your electricity consumption is too high, and thereby save both energy and money.

Existing generation M and OMNIPOWER electricity meters can be upgraded with a ZigBee® plug-in module without the visit of an authorised electrician.

Technical data

Electrical specifications

Supply	From the electricity meter
Power consumption	< 50 mW

Mechanical specifications

Dimensions (WxHxL mm)	67x18x49
Mounting	In the module area of the electricity meter
Density	IP51 when installed in the electricity meter
Storage temperature	-40 °C - +85 °C
Operating temperature	-10 °C - +70 °C
Relative humidity	< 95 % non-condensing

ZigBee® specifications

Frequency	2400 to 2485.5 MHz
Standard	IEEE 802.15.4
Outdoor range at free line of sight	up to 1600 m
Indoor range/range in rural areas	up to 50 m
Sensitivity	-101 dBm @ 1 % data package error
Protocol	ZigBee® protocol version 2. Stack profile 2 (ZigBee® PRO)
Profile	Smart Energy version 1.1
Safety	ZigBee® level 5 – AES128 with 32 bit MIC/MAC
Connection	Maximum number of connections is 6. Maximum number of units in trust center is 40.

Available meter registers

Electricity meter values		
OBIS	Import	Export
1.8.0	Active energy A+	Active energy A-
3.8.0	Reactive energy R+	Reactive energy R-
1.7.0	Actual active power P+	Actual active power P-
3.7.0	Actual reactive power Q+	Actual reactive power Q-
32.25	Voltage phase 1	Voltage phase 1
52.25	Voltage phase 2	Voltage phase 2
72.25	Voltage phase 3	Voltage phase 3
31.25	Current phase 1	Current phase 1
51.25	Current phase 2	Current phase 2
71.25	Current phase 3	Current phase 3
0.128.1	Pulse input	Pulse input

Ordering

ZigBee® module with display, consumer plug-in

6664200

The module is equipped with

- Integrated antenna
- Integrated data flash for wireless upgrades

Note that the module is only sold together with a display as the pairing between the module and the display is factory-made.

ZigBee® module

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