QUNDIS™

ADVANCED MEASURING SOLUTIONS.

Network node Q node 5

The network node Q node 5 receives and processes the data from consumption metering devices within the Q AMR system.

The network node works extremely well in more complex building environments.

Integration in the high-end system Q AMR via the PC radio module WTZ.RM permits the wireless readout of AMR systems, monitoring during installation and determination of the optimum installation point for the network node.

Network nodes of the type RNN5000M0x are battery-operated. There is a mains-operated version RNN5000M1x available.

Functions

❱ Reception and storage of data from the consumption metering devices
❱ Automatic set-up of a network comprising up to 12 x Q node 5 (up to max. 500 consumption metering devices)
❱ Distribution of all relevant consumption values to all Q node 5 within a network
❱ Copy mode to transfer data (device list incl. passwords and statistic values) of a node within a network to a new node
❱ Delete mode (in installed state) to remove devices to be replaced from the system list
❱ IrDA teach and delete mode to add or remove new devices to or from a system and to synchronise the device list.
❱ Firmware update via USB adapter

The network nodes Q node 5 are made up of the following components:

Voltage supply: Battery for RNN5 000M 0x Mains adapter for RNN5 000M 0x		
Transmitter / receiver for Q AMR networks	Memory 500 metering devices	M-Bus (Slave)
		IrDA (optical)
		RS232 (RNN50 00M1x)
Backup battery		

Transmitter and receiver are used for recording the data from consumption metering devices and forwarding these to other network nodes in the same network. The transmitter is used for communication with other network nodes. The data memory contains the measuring data from the consumption metering devices. It is protected against temporary power failure, for instance during mains power failure or replacement of the main battery, by the backup battery.

Type summary

The network node Q node 5 is part of the Q AMR system and can only be used with this.

Type	Power supply
RNN5 000M 0x	Battery
RNN5 000M 1x	Mains power

Accessories	
RNNP H001 0010	USB programming adapter

Further notes

Further notes about the Network node Q node 5 can be found in the installation and operating manual as well as in the Q AMR system manual.

M-Bus connection

The M-Bus can be connected permanently (fixed installation) to each network node with the aid of a connector. The connector is included in the scope of supply. There is an additional plug connector available for temporary connection (e.g. during service).

Optical IrDA interface

Every network node Q node 5 is equipped with an IrDA interface. This is permanently active and used for servicing with commissioning tools or for data exchange with other IrDA-capable QUNDIS products. If the network node itself is to take over the function of the IrDA-Master (e.g. during data exchange with a metering device), the IrDA-Master mode must be started manually.

Technical data

Energy supply / power

Type RNN5000M0x Current supply main and backup battery Lifetime of main battery Lifetime of backup battery	Rated voltage: DC 3.6 V > 5 years (with factory settings) > 10 years
Type RNN5000M1x Rated voltage	AC 100..240 V 50/60 Hz
Frequency band	(868,3 +/- 0,3) MHz
Transmission power	< 14 dBm
Duty cycle	< 1 %

Ambient conditions

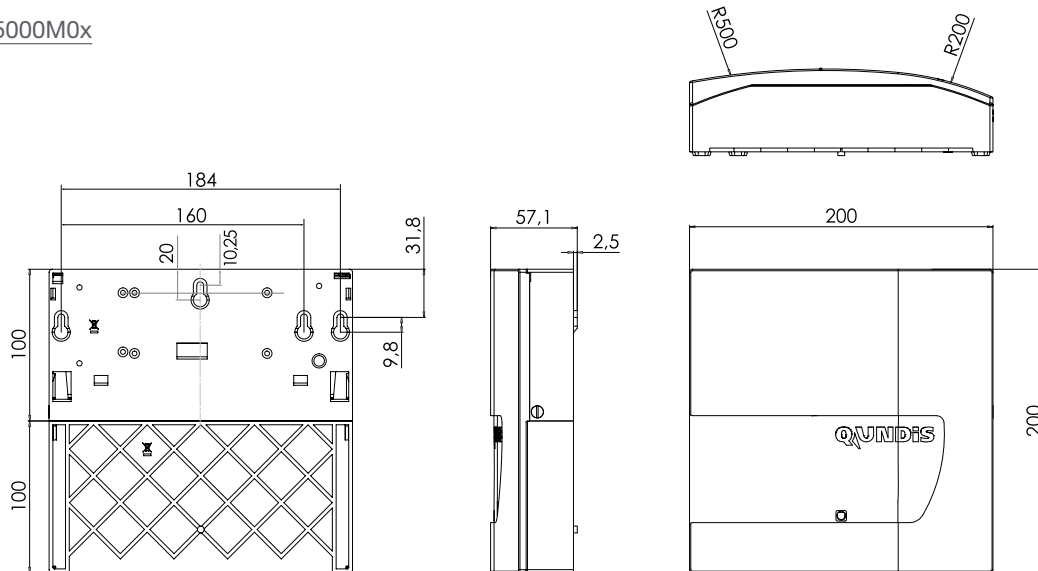|	
Transport	-25°C to +70°C, relative air humidity: max. 95 % without condensation
Storage	-5 °C to +45 °C, relative air humidity: max. 95 % without condensation
Use	-5 °C to +45 °C, relative air humidity: max. 95 % without condensation

Dimensions

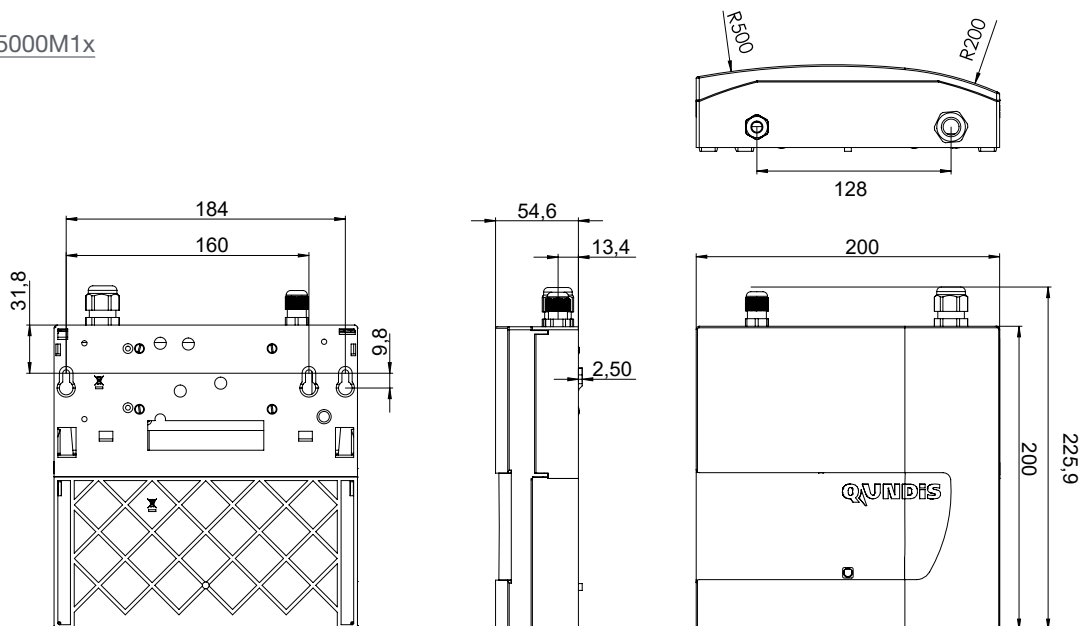|	
Dimensions	see drawing
Weight RNN5000M0x: RNN5000M1x:	gross: 0.760 kg, net: 0.648 kg gross: 0.745 kg, net: 0.633 kg

Standards and norms

CE conformity	yes
Protection rating	IP 20
Safety class RNN5000M0x: RNN5000M1x:	III II
Electromagnetic compatibility	EN 301 489-1, EN 301 489-3
Type-tested and conform with	RED directive

Dimensional drawing

RNN5000M0x

RNN5000M1x