Data sheet

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Q gateway 5

Q gateway 5 is a powerful device that combines the monitoring of all meters and network nodes within a property through automatic remote data transmission.

It collects the consumption data from up to 2,500 M-Bus meters* and transmits it via 2G / 3G / 4G mobile radio transmission to the QUNDIS smart metering platform Q SMP. From there, all data is automatically transmitted via email or SSH FTP.

The device is factory-fitted with a SIM card. All configuration operations of the gateway can be managed via the Q SMP.

Q gateway 5 of the type RNG5 xxxR 2xxx are battery-powered. There is a mains-operated version RNG5 xxxR 1xxx available for daily readout.

In addition to the housing variant for indoor use, we also offer a housing variant for harsh environmental conditions with a higher degree of protection IP65.

* Details according to the Gateway Service Description

Functions

Q gateway 5 represents a solution that supports fully automated, secure internet connection via 2G / 3G / 4G network and secure, bidirectional radio networking in the smart meter subsystem.

Metering data storage, smart meter management & control, Q gateway 5 configurations & diagnostics is realized remotely and very simply using only the web browser in your office, powered by the cloud based Q SMP Head end software.

Do everything right from your office.
Gateways of the type RNG5 xxxR 2xxx achieve a service life of more than 5 years, quite simply by using high-performance batteries combined with an extremely low power consumption. Thanks to the comprehensive range of features supported, the Q gateway 5 becomes the ultimate solution in applications and projects which require total energy autonomy.
The system contributes to a significant saving in time, effort as well as costs, and the quality of service helps to increase overall customer satisfaction.

Type summary

Type*	Power supply
RNG5 xxxR 2xxx	Battery
RNG5 xxxR 1xxx	Mains power

Type*	Housing variant
RNG5 xx2R xxxx	Indoor
RNG5 xx1R xxxx	for harsh environmental conditions

* x = any option code

Key features

- Wireless M-Bus 868 MHz
- Excellent ISM radio reception sensitivity
- 2G / 3G / 4G mobile radio transmission
- Safe mobile data transfer in the ISM and GSM bands
- Highest possible wireless connectivity by national and international roaming
- Automatic selection of the optimum network guarantees maximum battery service life
- Battery power supply, designed for up to 10 years – depending on the operating scenario, 5 years guaranteed according to terms and conditions QUNDIS Gateway-Service-Description (GSD-II valid as of 01.01.2020)
- Integrated GSM- and ISM-antennas
- Pre-installed SIM card and self-configuration of key parameters
- Indoor wall-mount
- Simple on-site installation
- Management via Q SMP (QUNDIS Smart Metering Platform)

General information & user interfaces

- LC display
- LED bi-colour optical indicator (red/green)
- Buzzer: 4 kHz, 75 dB

Technical data

Standards and norms

EU Conformity	
CE	QUNDIS GmbH hereby declares that the Q gateway 5 complies with Directives 2014/53/EU (RED) and 2011/65/EU (RoHS). The full text of the EU Declaration of Conformity is available at the following internet address: https://qundis.com/service/downloads-and-information/eu-declaration-of-conformity/
Protection rating RNG5 xx2R xxxx RNG5 xx1R xxxx	IP42 according to EN 60529 IP65 according to EN 60529
Protection class RNG5 xxxR 2xxx RNG5 xxxR 1xxx	III according to EN 61140 II according to EN 61140
Electromagnetic compatibility: Interference immunity and interference emission	EN 301 489-1, EN 3014 89-3
Security	EN 62368-1

ISM Performance

Wireless M-Bus - supported mode	S mode (EN 13757-4)
Output power	max. 14 dBm
RSSI signal strength measurement	yes
AES encryption	128 bit
Frequency band	(868,3 +/- 0,3) MHz

2G / 3G / 4G performance

Frequency band	Maximum RF output power
2G 9 00 MHz; 1800 MHz	Class 4 (33 dBm +/- 2 dB)
3G 900 MHz (B8); 2100 MHz (B1)	Class 3 (24 dBm + 1/-3 dB)
4G 700 MHz (B28A); 800 MHz (B20); 900 MHz (B8); 1800 MHz (B3); 2100 MHz (B1); 2600 MHz (B7)	Class 3 (23 dBm +/- 2 dB)
GSM- and ISM-antennas	Fully integrated high performance GSM- and ISM-antennas

Power supply type RNG5 xxxR 2xxx

Battery type	Lithium metal (not rechargeable)
Operating voltage	3,0 V
Battery service life	Designed for up to 10 years – depending on the operating scenario, 5 years guaranteed according to terms and conditions QUNDIS Gateway-Service-Description (GSD-II valid as of 01.01.2020)

Power supply type RNG5 xxxR 1xxx

Rated voltage	AC 100..240 V 50/60 Hz

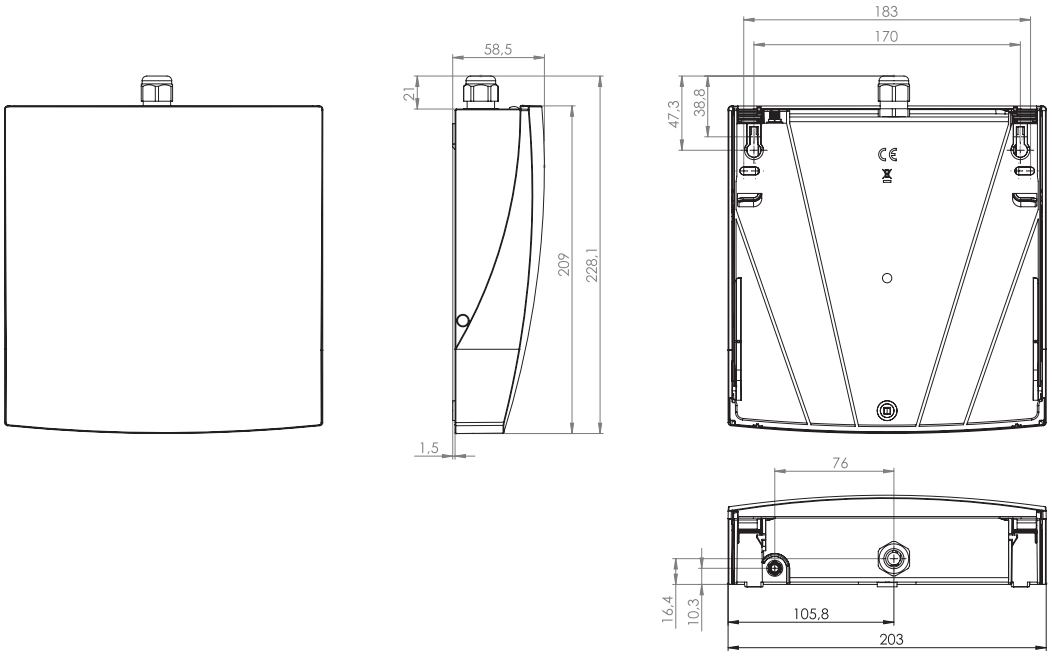
Material

Dimensions (WxHxD)	203 mm x 209 mm x 58,5 mm
Weight RNG5 xxxR 2xxx RNG5 xxxR 1xxx	1105 g 691 g
Housing	Polycarbonate (PC) + ABS plastic material
Mounting material	2 dowels S6
	2 Torx 20 screws 4,0 mm x 40 mm
	1 seal

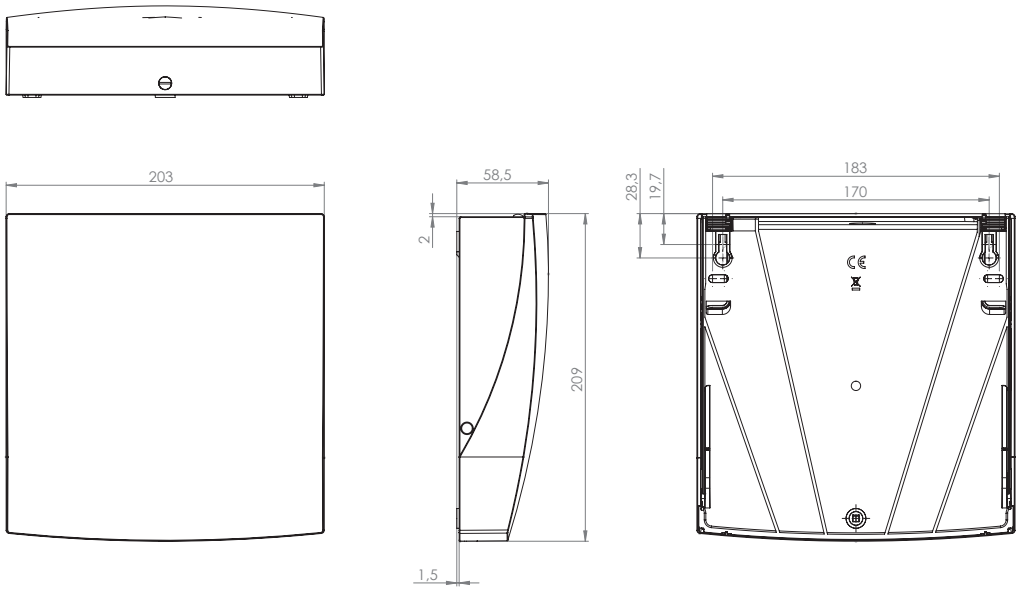
Ambient conditions

Transport	-25 °C ... 70 °C, max. 95 % without condensation
Storage	-5 °C ... 45 °C, max. 95 % without condensation
Use	IP42: -5 °C ... 55 °C, max. 95 % without condensation IP65: -20 °C ... 55 °C, max. 95 % without condensation

Dimensional drawing type RNG5 xxxR 1xxx



Dimensional drawing type RNG5 xxxR 2xxx



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