



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	Type*	Housing variant
RNG5 xxxR 2xxx	Battery	RNG5 xx2R xxxx	Indoor
RNG5 xxxR 1xxx	Mains power	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, for 5 years (depending on the operating scenario)
- ▶ Integrated GSM & 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

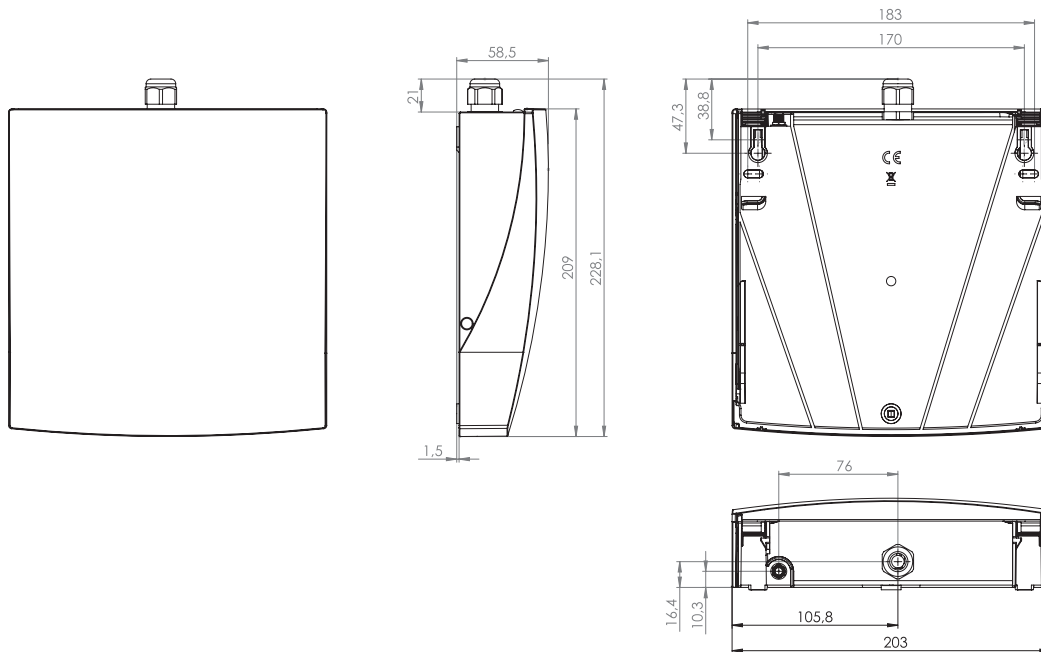
- ▶ LC display
- ▶ LED bi-colour optical indicator (red/green)
- ▶ Buzzer: 4 kHz, 75 dB

Technical data

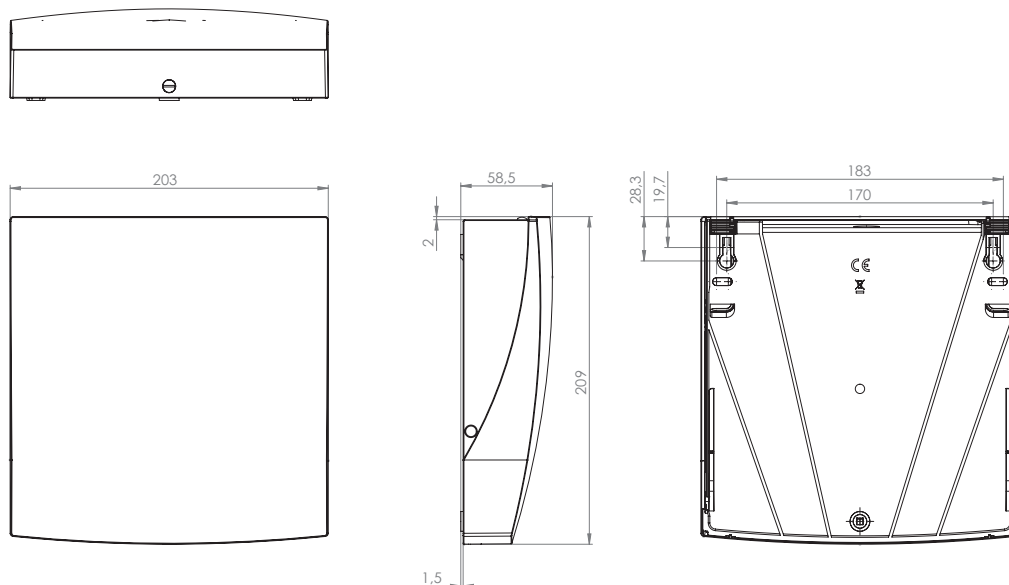
Standards and norms

EU Conformity	
	 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.de/service/downloads-und-information/ce-erklaerungen/
Protection rating	RNG5 xx2R xxxx RNG5 xx1R xxxx
Protection class	RNG5 xxxR 2xxx RNG5 xxxR 1xxx
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 & ISM Antenna	Fully integrated high performance ISM and GSM antennas
Power supply type RNG5 xxxR 2xxx	
Battery type	Lithium metal (not rechargeable)
Operating voltage	3,0 V
Battery service life	5 years (depending on the operating scenario)
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
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 to +70 °C, max. 95 % without condensation
Storage	-5 °C to +45 °C, max. 95 % without condensation
Use	IP42: -5 °C to +55 °C, max. 95 % without condensation IP65: -20 °C to +55 °C, max. 95 % without condensation

Dimensional drawing type RNG5 xxxR 1xxx



Dimensional drawing type RNG5 xxxR 2xxx



✉ **QUNDIS GmbH**
Sonnentor 2
99098 Erfurt/Germany
☎ +49 (0) 361 26 280-0
☎ +49 (0) 361 26 280-175
✉ info@qundis.com
www.qundis.com

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