Data sheet

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# Q gateway 5.5 direct

Q gateway 5.5 direct is the optimal solution for the simple and cost-effective changeover from Q walk-by systems to remote readout via Q AMR.

New systems can also be equipped at any time. The gateway receives all QUNDIS measuring devices in C-mode as well as wM-Bus compatible, uni-directional measuring devices from other manufacturers in the direct reception range. A total of up to 1,000 measuring devices* per gateway can be received directly and transmitted to the QUNDIS smart metering platform Q SMP via encrypted 2G / 3G / 4G mobile radio transmission.

The device is equipped with a SIM card at the factory. The configuration of the Q gateway 5.5 direct can be done via the Q SMP.

Q gateway 5.5 direct of the type RNG5 xxxT 2xxx are battery-operated. The mains-operated version RNG5 xxxT 1xxx is available for daily readout.

In addition to a variant for indoor use, QUNDIS offers a variant for extended ambient conditions with protection rating IP65.

* Details according to the service descriptions for gateway services

## Features and functions

The Q gateway 5.5 direct combines automated secure internet connection via 2G / 3G / 4G mobile radio and secure bidirectional radio networking in the smart meter subsystem.

The storage of consumption data and status data, intelligent management and control of measuring devices, configuration and diagnosis of the Q gateway 5.5 direct are cloud-based and controlled via the Q SMP. Only a web browser is required for use.

By using high-performance batteries and extremely low power consumption, gateways of the type RNG5 xxxT 2xxx achieve a service life of up to 10 years. This makes the Q gateway 5.5 direct to the ultimate solution for applications and projects that require complete energy autonomy. The system contributes to significant savings in time, effort and cost, and the quality of the services leads to an increase in customer satisfaction.

- Wireless M-Bus 868 MHz
- excellent ISM radio reception
- 2G / 3G / 4G mobile transmission
- secure mobile data transfer via mobile communications
- highest possible wireless connectivity through national and international roaming
- automatic selection of the optimal network guarantees maximum operating time
- Battery operation, designed for up to 10 years - depending on the operating scenario, 5 years guaranteed in accordance with the Terms and Conditions QUNDIS Gateway Service Description (GSD-II valid from 01.01.2020)
- integrated GSM and ISM antennas
- pre-installed SIM card and independent configuration of key parameters
- wall mounting indoors
- easy installation at the site
- management via Q SMP (QUNDIS Smart Metering Platform)

## Type overview

| Type* | Power supply |
|---|---|
| RNG5 xxxT 2xxx | Battery |
| RNG5 xxxT 1xxx | Mains connection |

| Type* | Housing variant |
|---|---|
| RNG5 xx2T xxxx | Indoor |
| RNG5 xx1T xxxx | for extended ambient conditions |

* x = variable option code

## General information and user interfaces

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

# Technical data

QUNDIS GmbH hereby declares that the Q gateway 5.5 direct 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: www.qundis.com

| Ambient conditions | | |
|---|---|---|
| Protection rating | RNG5 xx2T xxx<br>RNG5 xx1T xxx | IP42 according to EN 60529<br>IP65 according to EN 60529 |
| Protection class | RNG5 xxxT 2xx<br>RNG5 xxxT 1xx | III according to EN 61140<br>II according to EN 61140 |
| Transport | | -25 °C ... 70 °C, < 95 % r.F. (without condensation) |
| Storage | | -5 °C ... 45 °C, < 95 % r.F. (without condensation) |
| Usage | IP42<br>IP65 | -5 °C ... 55 °C, < 95 % r.F. (without condensation)<br>-20 °C ... 55 °C, < 95 % r.F. (without condensation) |

| Standards | |
|---|---|
| Interference resistance and interference emission | EN 301 489-1, EN 301 489-3 |
| Security | EN 62368-1, EN 62311 |
| RoHS compliant | EN IEC 63000 |

| ISM version | |
|---|---|
| Wireless M-Bus - supported mode | C/T-Mode (EN 13757-4) |
| Output power | none |
| RSSI signal strength measurement | yes |
| Encryption | Security Mode 5 and 7 according to EN 13757-7,<br>Security Profile A and B according to OMS specification |
| Radio frequency | EN 300 220-2<br>C-Mode (868,95 +/- 0,25) MHz |

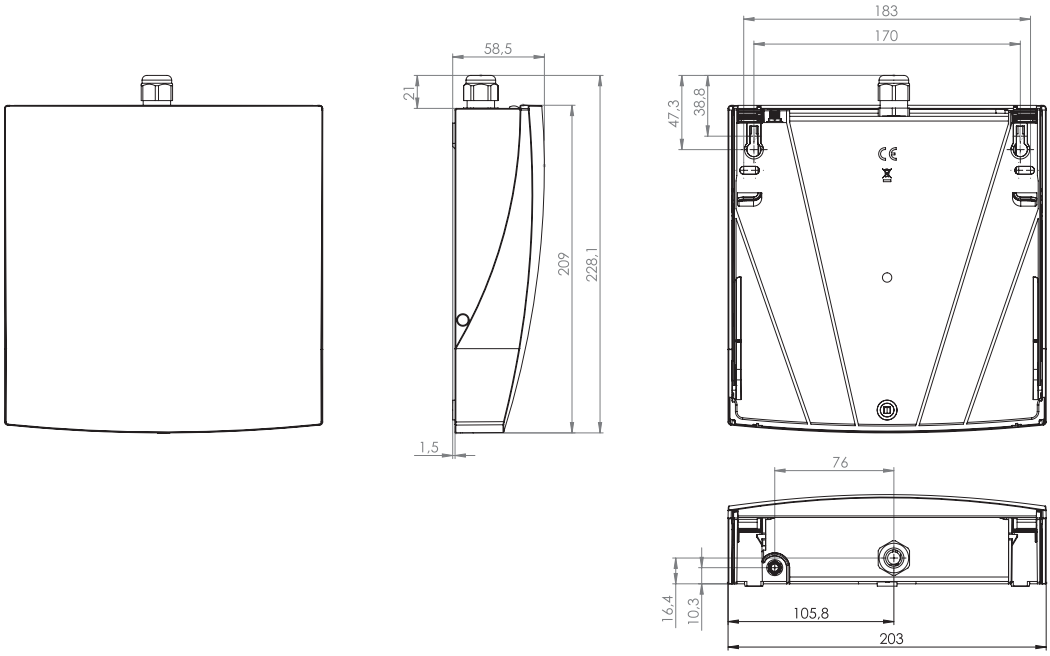
| 2G / 3G / 4G version | |
|---|---|
| Radio frequency | Maximum output power |
| 2G 900 MHz; 1800 MHz | Class 4 (33 dBm +/- 2 dB) |
| 3G 900 MHz (B8); 2100 MHz (B1) | Class 3 (24 dBm + 1/-3 dB) |
| 4G 700 MHz (B28A); 800 MHz (B20); 900 MHz (B8); 1800 MHz (B3); 2100 MHz (B1); 2600 MHz (B7) | Class 3 (23 dBm +/- 2 dB) |
| GSM and ISM antennas | fully integrated high-performance GSM and ISM antennas |

| Supply type RNG5 xxxT 2xxx | |
|---|---|
| Battery type | Lithium metal (non-rechargeable) |
| Nominal voltage | 3,0 V |
| Battery life | designed for up to 10 years - depending on the operating scenario, 5 years according to QUNDIS gateway service service agreement description (GSD-II valid from 01.01.2020) guaranteed |

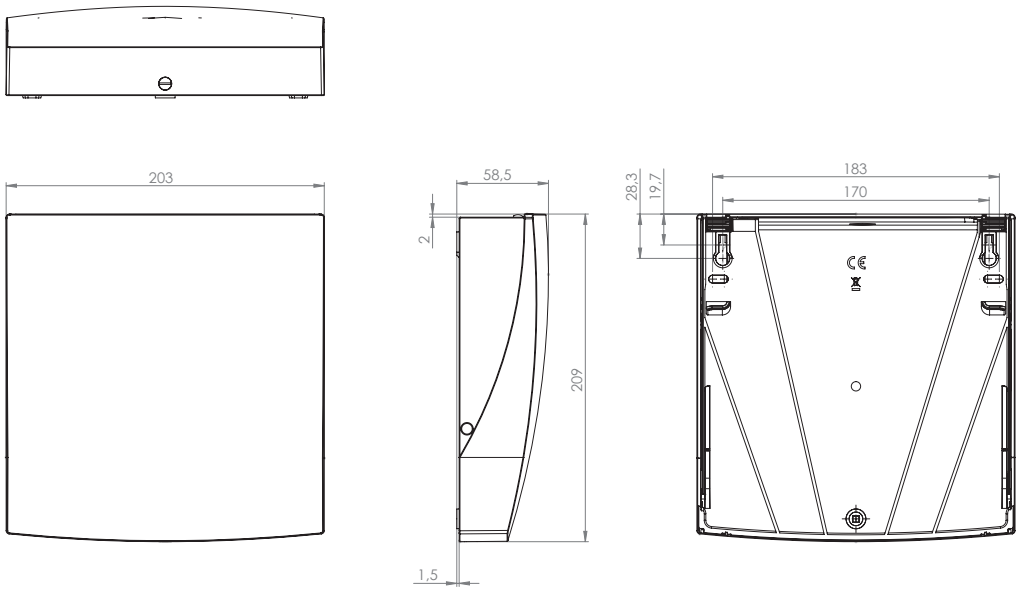
| Supply type RNG5 xxxT 1xxx | |
|---|---|
| Nominal voltage | AC 100..240 V 50/60 Hz |

| Material | | |
|---|---|---|
| Dimensions (WxHxD) | | 203 mm x 209 mm x 58,5 mm |
| Weight | RNG5 xxxT 2xxx<br>RNG5 xxxT 1xxx | 1105 g<br>691 g |
| Housing material | | Polycarbonat (PC) + ABS plastic |
| Mounting material | | 2 dowel S6<br>2 Torx 20 screws 4.0 mm x 40 mm<br>1 Seal |

## Dimensional drawings type RNG5 xxxT 1xxx




## Dimensional drawings type RNG5 xxxT 2xxx





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