



RNG5

Network Gateway for AMR Systems

APPLICATION

The Honeywell Home RNG5 gateway collects the consumption data remotely from the associated RNN5 node (collector) stations within the AMR System (Automatic Metering Readout System) and transmitting the data via mobile GPRS / EDGE to a centralized server. The data is sent from the server in an encrypted format to the customer via email.

The RNG5 gateway works with the RNN5 (or RNN4) nodes for wireless data readout from different devices within the AMR system. Up to 5 AMR networks can operate within one RNG5. Up to a total of 2.500 measuring devices (Heat Cost Allocators, Heat- and Water-Meters and RF-Modules - in total up to 500 units per RNN5 node) can be recorded and integrated with one single RNG5 gateway.

The RNG5 gateway operates within the HSMP Portal (HONEYWELL Home Smart Metering Platform). This HSMP Portal compiles the data received from the AMR network. It provides options and choices for transferring the data to the customer, the functionality for setup of gateway parameters and coordinates the different gateways in various customer locations.

Typical applications for the RNG5 are:

- Apartment blocks
- Office buildings
- Business Centres

SPECIAL FEATURES

- Highest possible wireless connectivity by national and international roaming
- Safe mobile data transfer in the ISM and GSM bands
- Integrated GSM & ISM antennas
- Quad-band GSM/GPRS/EDGE (850, 900, 1800 and 1900 MHz)
- Automatic selection of the optimum network guarantees maximum battery servelife
- Pre-installed SIM card and self-configuration of key-parameters
- Management via HSMP (HONEYWELL Home Smart Metering Platform)
- Wireless M-Bus 868MHz
- Simple on-site installation
- Indoor wall-mount
- Tamper detection and alarming
- High-precision temperature-compensated RTC with calendar, deviation < 2 ppm



GENERAL INFORMATION & USER INTERFACES

- RNG5-STD Battery power supply
- RNG5-230V 230 VAC power supply
- LC display
- LED bi-colour optical indicator (red/green)
- Push button with cap
- SIM card holder: hinged, 8-way
- SIM card detection switch
- SIM card type: Mini SIM - DATA transfer enabled
- Tamper contact
- Buzzer: 4 kHz, 75 dB

TECHNICAL DATA

ISM/SRD Performance	
Wireless M-Bus - supported mode:	S, T and C mode (EN13757 - 4: 2012)
Selectivity and blocking performance:	at 32K - 100K kcps baud rate: -108 dBm
Output power:	+ 14dBm (25mW)
Mobile GSM/GPRS/EDGE Performance	
Frequency bands:	850/900/1800/1900 MHz
GSM/DCS output:	for GSM 850 and E - GSM: Class 4 (2W) for DCS and PCS: Class 1 (1W)
GPRS:	GPRS multi - slot class: 10, multi - slot class 12 supported PBCCH support: Yes coding schemes: CS1 to CS4
EDGE:	E - GPRS multislot class: 10, multislot class 12 supported PBCCH support: Yes coding schemes: MCS5 to MCS9
GSM & ISM Antenna:	Fully integrated high performance ISM and GSM antennas

Power supply	
RNG5-STD:	Power supply 3,6 V battery, not rechargeable
RNG5-230V:	230VAC Power supply
Dimensions	
Dimensions:	203 mm x 203 mm x 58 mm
Weight:	930 g
Housing:	ABS + PC V1 plastic material
Installation:	wall mount with 4x ø3mm screws and dowels
Operating temperatures	
Operating temperature:	-20 °C to +60 °C
Storage temperature:	-20 °C to +60 °C
Temperature Humidity:	90% RH @ 60°C

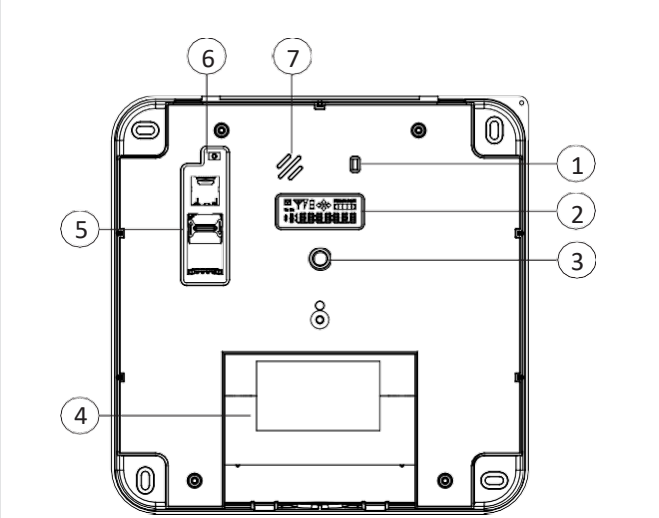
CE Norms and Standards

EU conformity:	Yes
Protection Rating:	IP30
Protection class:	
RNG5-STD:	III
RNG-230V:	II
Electromagnetic compatibility:	EN 301489-1 EN 301489-3 EN 301489-7

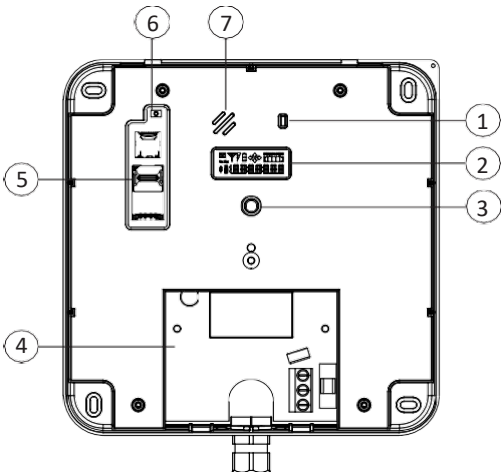
Fully type approved conforming with R&TTE directive.

CONSTRUCTION

RNG5-STD

Overview	Components
 <p>The diagram shows the internal layout of the RNG5-STD device. It features a central display (2) and a red button (3) at the top. Below the display is a SIM card holder (5) and a battery (4). On the left side, there is an opening detection sensor (6) and a buzzer (7). The device is housed in a rectangular plastic enclosure with mounting points for screws.</p>	1 LED 2 Display 3 Red button 4 Battery 5 SIM card holder 6 Opening detection 7 Buzzer

RNG5-230V

Overview	Components
	1 LED
	2 Display
	3 Red button
	4 230VAC
	5 SIM card holder
	6 Opening detection
	7 Buzzer

METHOD OF OPERATION

RNG5 gateway should be installed centrally within the building or an individual floor of a building. Care should be taken to ensure that the received GPRS and AMR network signal strength are adequate to give reliable service.

Service Period

RNG5-STD:

- Read-Out Tariff: 4 times permonth
- Operating time: 5 years (depending on set operation scenario)
- After that period the RNG5-STD unit has to be replaced

RNG5-230V:

- Read-Out Tariff: Daily
- Operating time: 5 years
- After that period the service contract has to be replaced

TRANSPORTATION AND STORAGE

Keep parts in their original packaging and unpack them shortly before use.

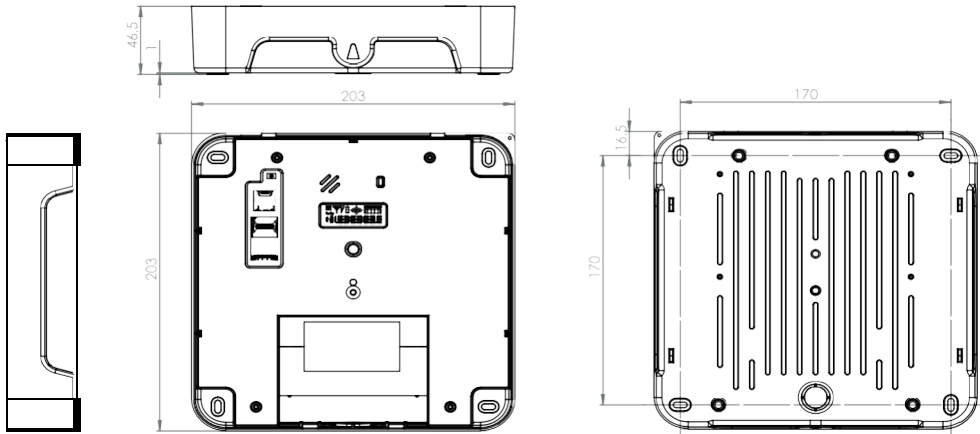
The following parameters apply during transportation and storage:

Parameter	Value
Environment:	clean, dry and dust free
Min. ambient temperature:	-20 °C
Max. ambient temperature:	60 °C
Ambient temperature:	90 % RH @ 60°C

DIMENSIONS

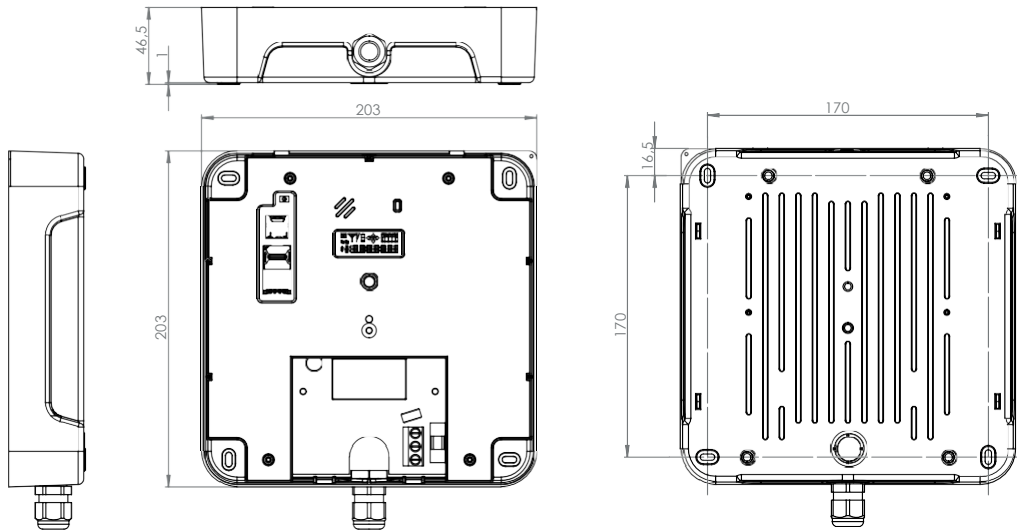
RNG5-STD

Overview



RNG5-230V

Overview

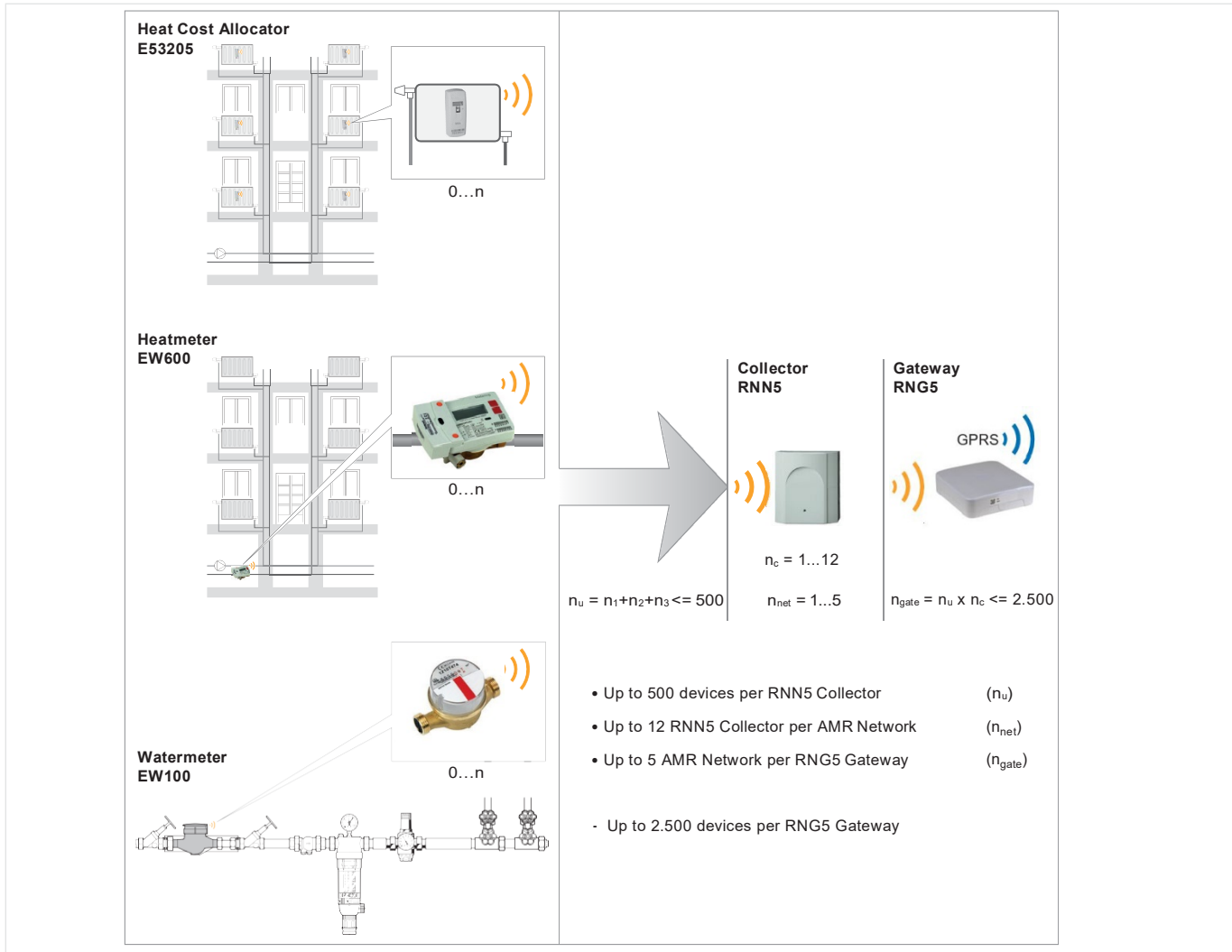


AMR SYSTEM OVERVIEW

The EW100 Water Meter, the EW600 Heat Meter and the E5353205 Heat Cost Allocator can be integrated into various type of system.

For example the AMR Network is illustrated down below.

For further variants of systems (M-Bus etc.) pls contact your HON account manager



ORDERING INFORMATION

The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.

Options

OS-No.:	Description:	EAN Code:
RNG5-STD	RNG5 Gateway (Battery supply)	40 29289 08160 5
RNG5-230V	RNG5 Gateway (230VAC supply)	40 29289 08305 0
Associated Products		
RNN5-STD	G5 Network node (Battery supply)	50 25121 38142 0
RNN5-230V	G5 Network Node (230VAC supply)	40 29289 08304 3



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