

M-bus RF gateway

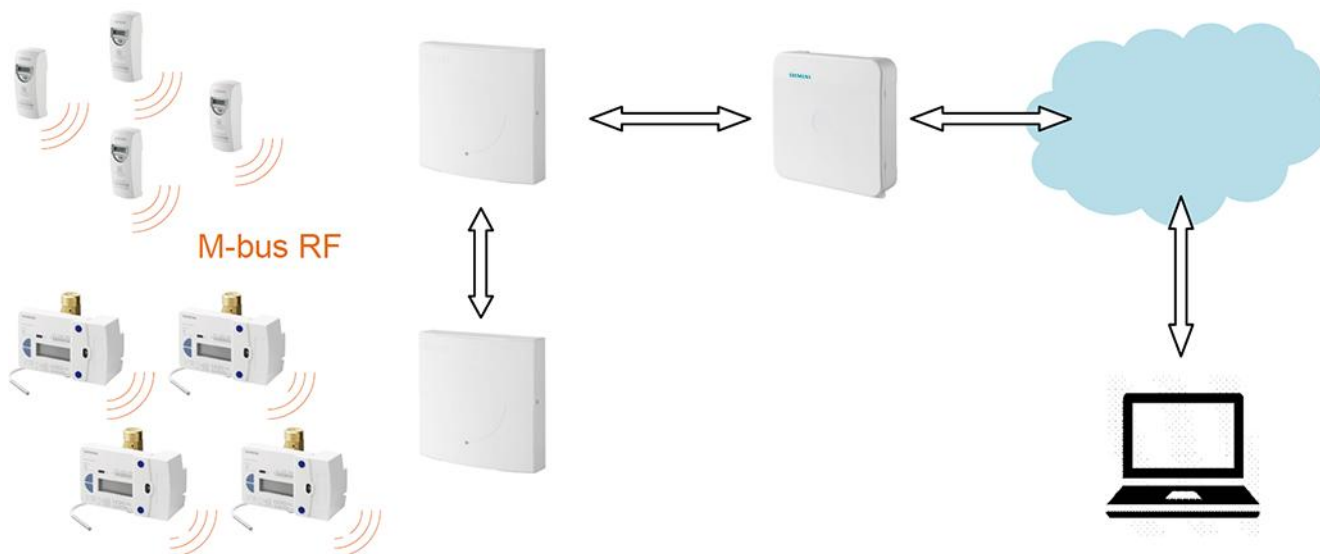
WTT563-0C0000



The M-bus RF gateway collects meter data from an RF network and periodically transmits it via GSM/GPRS/EDGE to the portal. The data is automatically transmitted from there to the appropriate customers.

- Easy commissioning
- Autonomous operation over 5 years (battery-powered and communication via GSM/GPRS/EDGE)
- One-time cost for gateway and communications
- SIM card preinstalled
- Read out 4 times a month
- Monitors all meters and network nodes
- Reads a total of max. 2500 meters per gateway

Features



The M-bus RF gateway WTT563.. collects consumption data from the entire network and transmits it a maximum of 4 times a month via the portal to a defined client.

Reads a max. 2,500 meters per gateway.

Meter data is securely transmitted to the portal in the GSM band. Data transmission via GSM/GPRS/EDGE (Quad-Band 850, 900, 1,800 and 1,900 MHz) as well as connectivity through national and international roaming transmits data to the corresponding service throughout Europe at no extra charge.

Battery-powered means no additional installation required (service life of 5 years) and GSM/GPRS/EDGE communication.

Use

The M-bus gateway WTT563.. is a component of an M-bus network. It is used to conveniently read out meter data from a remote location.

The gateway periodically (max. 4 times a month) reads consumption data from the network node and transmits it without delay. As a result, no data is stored on the gateway.

The gateway purchase price is not limited to the product (hardware), but also includes communication (roaming fees) between the gateway and portal for 5 years.

Functions

Communication

One gateway reads and manages up to 5 networks with up to 500 meters each.

Data security – network

An individual log in and password protect each network from unauthorized access.

Data security – GSM/GPRS/EDGE transmission

The IPSec VPN tunnel with AES-256 encryption provides secure mobile data transmission between the gateway and the mobile provider's Access Point (APN),

Restrictions

The gateway has a service life of 5 years and must be replaced after that period.

Technical and mechanical design

The gateway consists of 2 housing components: The base for wall mounting and a removable cover.



- 1 LCD
- 2 Red button
- 3 LED
- 4 Summer
- 5 SIM card
- 6 Tamper identification
- 7 Battery

The gateway has no local interface.
 The gateway is configured in full via the portal.

Display

The gateway features an LCD to display various parameters and error codes.

Type summary

The following products are available:

Designation	Order number	Type
SM/GPRS/EDGE battery-powered gateway	S55563-F146	WTT563-0C0000

Items supplied

Operating and installation instructions in various languages as well as 4 M3 x 30 mm screws, 4 dowels, and a safety seal are included with the gateway.

Equipment combinations

The WTT563.. gateway is compatible with the following products:

Type	Designation
WTT561-AA1100	Battery-powered network node
WTT16	Battery-powered network node (version 2.0 or higher)
WTT16.232	Battery-powered network nodes and RS-232 interface (version 2.0 or higher)
WTT16	Mains-powered network node (version 2.0 or higher)
WTT16.232	Mains-powered network nodes and RS-232 interface (version 2.0 or higher)

Product documentation

The following product documentation is available:

Topic	Title	Document ID
Operating and installation instructions	Operating and Installation Instructions WTT563 M-bus RF gateway	A6V10897697
Operating instructions	SGCP user's guide	A6V10897380

The operating and installation instructions can be downloaded on the Internet (Siemens Download Center) at:

<http://www.siemens.com/btproduct?WTT563-0C0000>.

Languages

The operating and installation instructions are available in the following languages:

Bulgarian, German, English, Finnish, French, Greek, Italian, Croatian, Lithuanian, Dutch, Norwegian, Polish, Rumanian, Slovakian, Slovenian, Spanish, Czech, Turkish, and Hungarian.

Related documents such as environmental declarations, CE declarations, etc., can be downloaded at the following Internet address:

<http://siemens.com/bt/download>

Notes

Commissioning

Firmware updates, reading of meter data, or configuring gateways occurs exclusively via the portal.

Maintenance

The device is maintenance free.

Disposal



The device is considered an electronic device for disposal in accordance with the European Guidelines and may not be disposed of as domestic garbage.

- Dispose of the device through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.
- Dispose of empty batteries in designated collection points.

Warranty

Technical data on specific applications are valid only together with Siemens products listed under "Equipment combinations". Siemens rejects any and all warranties in the event that third-party products are used.

Power supply	
Battery type	Lithium battery (cannot be replaced)
Battery power	3.6 V
Battery life	Min. 5 years

Display	
Display	7-segment LCD

Technical and mechanical design

ISM/SRD	
Wireless M-bus (supported mode)	S-mode
Selectivity and blocking performance	108 dBm Package failure rate: 1%
Output	+14 dBm (25 mW)
Measurement of RSSI signal strength	Yes
AES encryption	128 bit
Frequency band	(868.3 +/- 0.3) MHz

Mobile GSM/GPRS/EDGE	
Frequency bands	850/900/1800/1900 MHz
GSM/DCS output	For GSM 850 and E-GSM: Class 4 (2 W) For DCS and PCS: Class 1 (1 W)
GPRS	GPRS multislots class: 10 Multislots class 12 supported PBCCH support: Yes Coding scheme CS1 to CS4
EDGE	E-GPRS multislots class: 10 Multislots class 12 supported PBCCH support: Yes Coding scheme MCS5 to MCS9
GSM and ISM antenna	Integrated

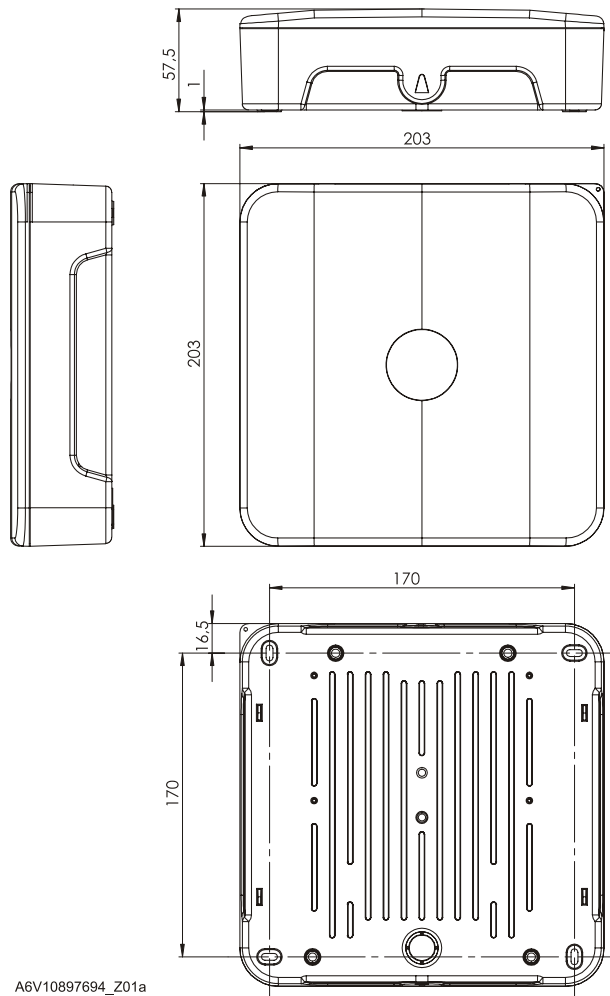
Safety class and degree of protection	
Protection class	III
Degree of protection of housing	IP30

Environmental conditions	Operation	Transportation	Storage
	EN 60721-3-3	EN 60721-3-2	EN 60721-3-1
Temperature	-5...45 °C	-25...70 °C	-5...45 °C
Humidity	< 90% r.h. (non-condensing)	< 90% r.h. (non-condensing)	< 90% r.h. (non-condensing)
Mechanical conditions	3M2	2M2	1M2
Max. altitude	Min. 700 hPa (corresponding to max. 2000 m above sea level)		

Standards, directives and approvals	
Product standards	EN 60950-1 Information technology equipment
EU Conformity (CE)	A5W00022555 *)
Environmental compatibility	The product environmental declaration A6V10901536 *) contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal).
*) Documents can be downloaded at http://siemens.com/bt/download .	

External features	
Dimensions	203 x 203 x 58 mm (refer to "Dimensions" [→ 7])
Housing material	ABS + PC V1 plastic
Housing color	RAL9016 (traffic white)
Weight	1260 g (including package inserts)

Dimensions in mm



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