



Water



Gas

# GWF



## RCM<sup>®</sup>-H200 868 MHz

GWFcoder<sup>®</sup> MP radio module wM-Bus



### Your benefits

- Performance driven design:  
**Up to 600 m range depending on environment**
- Real Plug & Play:  
**Backward compatible for all meter types with GWFcoder<sup>®</sup> MP. Easy and fast on-site installation with auto interface-detection (no programming required)**
- Use of Wireless M-Bus acc. EN 13757-4 (OMS<sup>®</sup>):  
**Interoperability with different system partners**
- Custom-tailored RF Mode:  
**Up to 15 years battery lifetime**

### Applications

- Simple readout of water and gas meters with GWFcoder<sup>®</sup> MP registers without necessity to access buildings
- Easy and comfortable readout of measuring points with difficult access and within harsh environments
- «Drive-by» and Fixnetwork (Smart Metering)

### Properties

- Battery powered, wireless M-Bus radio module
- Radio transmission in license free 868 MHz frequency band
- Split execution: Water proof design for pit installations (protection class IP68)
- Compact execution: Protection class IP67
- Transmission of data protocol wM-Bus acc. EN 13757-4 (OMS<sup>®</sup> Gen. 4, Issue 4.2.1)
- Simple installation and automatic start-up after connecting to meter
- Transmissions of register values:
  - Drive-by: Hourly value and monthly key date value
  - Drive-by Privacy: Monthly key date value
  - Fixnetwork: 15 minute value and monthly key date value
- AES128 encrypted wireless protocol, security mode 5 (security profile A) or 7 (security profile B)
- For all meter types with GWFcoder<sup>®</sup> MP register and ECO interface
- Split-connection (cable) to the meter – remote installation
- Free route selection – no call-up required
- Migratable from drive-by system to fixed network application for smart metering
- In combination with the portable radio receiver device «MEx Mobile» up to 250 water and gas meters can be read out within 30 minutes.
- Contactless NFC configuration interface
- CE, UKCA and ICASA approved

### Options

- RCM<sup>®</sup>-H200 compact (IP67) – radio builds one unit with water meter
- RCM<sup>®</sup>-H200 split (IP68) – remote installation away from (flooded) water meter

# Configuration

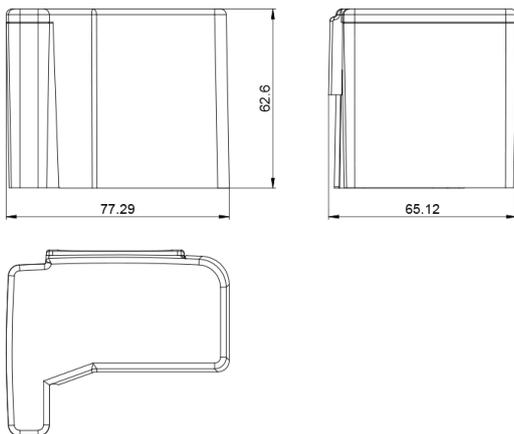
	Configuration 1: Drive-by	Configuration 2: Drive-by Privacy	Configuration 3: Fixnetwork
Data actuality	1 h	Monthly key date value	15 min
Transmission interval	During day: 20 s During night: 2 min	During day: 20 s During night: 2 min	1 min

## Configurable parameters

Configuration interchangeable (Drive-by, Drive-by Privacy or Fixnetwork (Smart Metering))

Warnings, all enabled or all disabled: Continuous flow / Leak (only medium water), Backflow, Pipe burst (meter size has to be configured on site), No usage over a period of 30 days

## Dimension Diagram



## Radio-Start behavior

RCM®-H200 split:	3 min after the connection of the GWFcoder® MP meter
RCM®-H200 compact:	3 min after the flow of 5 liters

# Technical Data

Specifications	Radio module RCM®-H200
Meter interface	Multiprotocol MP (ECO)
Supported meters	Water meter: All with GWFcoder® MP register Gas meter: BGZcoder® MP and BGZcoder® MP AE5 (requires connection module ACM 5.1.1 ECO)
Frequency band	Tx: 868,95 MHz (C1)
Transfer protocol	Wireless M-Bus acc. EN 13757-4 (OMS® Gen. 4, Issue 4.2.1)
Modulation	FSK
Radiated power	max. 14 dBm (25 mW)
Range	Depending on environment (up to 600 m)
Directive	CE: 2014/53/EU UKCA: Radio Equipment Regulations 2017 No. 1206
Approval	CE, UKCA and ICASA
Protection class	Split execution: IP68 Compact execution: IP67
Cable length	1 m
Cable extension	max. 20 m
Weight	180 g

Power supply	
Battery	1 x Lithium 3,0 V (not replaceable)
Typical battery lifetime	Up to 15 years (depending on environment and configuration conditions)

Ambient conditions	
Operational temperature	-15 to +55 °C
Storage temperature	-15 to +65 °C
Relative humidity	0 to 100 % (submersible)

Information data package (Wireless M-Bus)	Data Example
Manufacturer <sup>1)</sup>	GWF
Radio ID	30124789
Medium <sup>1)</sup>	Water
Version <sup>1)</sup>	6.0
Meter number <sup>1)</sup>	23215678
Current absolute meter reading <sup>1)</sup> Drive-by: Hourly value Fixnetwork: 15 minute value Drive-by Privacy: Will not be transmitted	00359,768 m <sup>3</sup>
Absolute meter reading (key date) <sup>1)</sup>	00343,417 m <sup>3</sup>
Date-key date reading	01.05.2023
Remaining battery lifetime	Days / Semester
Warnings	Low battery, continuous flow / leak, backflow, pipe burst, no usage or day- or night-mode active
Status <sup>1)</sup>	Manipulation

1) This data is read directly from the GWFcoder® MP register.

## Applications

