



## RCM<sup>®</sup>

868 MHz Wireless M-Bus  
GWFcoder<sup>®</sup> Radio Module



### Your benefits

- Performance driven design:  
Up to 600 m range depending on environment
- Real Plug & Play:  
Backward compatible, easy and fast on-site installation with auto interface-detection (no programming required)
- Use of Wireless M-Bus (OMS<sup>®</sup>):  
Interoperability with different system partners
- Custom-tailored RF Mode:  
Up to 15 years battery lifetime

### Application

- Simple readout of water and gas meters with GWFcoder<sup>®</sup> 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)

### Features

- Battery powered, wireless M-Bus radio module
- Radio transmission in license free 868 MHz frequency band
- Water proof design for pit installations (protection class IP68)
- Transmission of data protocol by wireless M-Bus acc. EN 13757-4 (OMS<sup>®</sup>)
- Simple installation and automatic start-up after connecting to meter
- Transmission of latest register value as well as monthly key date value
- AES128 encrypted wireless protocol
- For all meter types with GWFcoder<sup>®</sup> register and SCR(IEC) interface
- Free route selection – no call-up required
- Additional information available (e.g. continuous flow, backflow, pipe burst, manipulation) available for MTKcoder<sup>®</sup> MP
- Migratable from walk-by/drive-by system to fixed network application
- CE approved
- In combination with the portable radio receiver device «MEx Mobile» up to 250 water and gas meters can be read out within 30 minutes.

### Options

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

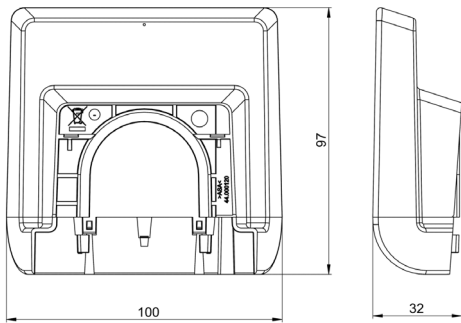
	Configuration 1: Walk-by / Drive-by	Configuration 2: Fix Network
Data actuality	24 h	15 min (MTKcoder <sup>®</sup> MP, BGZcoder <sup>®</sup> / MP / MP AE5) 24 h (MTKcoder <sup>®</sup> [≤ 2006] / Bulk gas [≤ 2012])
Transmission interval	15 s	1 min

#### Configurable parameters (by RF or IR)

Configuration interchangeable (Drive-by or Fix Network)

Alarm settings On/Off/Reset

## Dimension Diagram



## Radio-Start behavior

- RCM<sup>®</sup>split: 3 minutes after the connection of the GWFCoder<sup>®</sup>-meter
- RCM<sup>®</sup>compact: 3 minutes after the flow of 5 liters

## Technical Data

Specifications	Radio module RCM <sup>®</sup>
Meter interface	SCR(IEC) Protocol 62056-21 / Multiprotocol MP
Frequency band	TX: 868,95 MHz (T1)
Transfer protocol	Wireless M-Bus acc. EN 13757-4 (OMS <sup>®</sup> )
Modulation	FSK
Radiated power	10 mW
Range	Depending on environment (up to 600 m)
Compliance with standard	EN 300 220
Approval	<b>CE</b>
Protection class	IP68
Cable length	Standard 1,4 m
Cable extension	max. 25 m
Weight	300 g

Power supply	
Battery	2 x Lithium 3,6 V (not replacable)
Typical battery lifetime	15 years (depending on environment)

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

Information data package	Data Example
Manufacturer*	GWf
Radio ID	30124789
Medium*	Water
Version*	6.0
Meter number*	13215678
Absolute meter reading* (daily or 15 min values)	00359,768 m <sup>3</sup>
Absolute meter reading (key date)*	00343,417 m <sup>3</sup>
Date-key date reading	30.04.2013
Remaining battery lifetime	Days / Semester
Warnings	Low battery
Status*	Manipulation

\* This data is read directly from the GWFCoder<sup>®</sup> register.

## Applications

