RCM®

868MHz Wireless M-Bus
GWFcoder® Radio Module

M-Bus wireless

OMS®

Our strength:
Your benefit

- Performance driven design:
  Up to 600m 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®):
  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® 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 868MHz frequency band
- Water proof design for pit installations (protection class IP68)
- Transmission of data protocol by wireless M-Bus acc. EN 13757-4 (OMS®)
- 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® 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® 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.
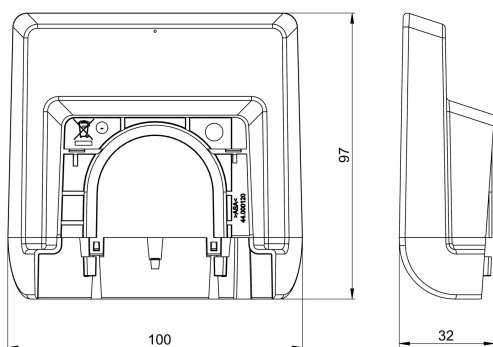
Options

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

	Configuration 1: Walk-by / Drive-by	Configuration 2: Fix Network
Data actuality	24 h	15 min
Transmission interval	15 s	1 min

Configurable parameters (by RF or IR)
Configuration interchangable (Drive-by or Fix Network)
Alarm settings On/Off/Reset

Dimension Diagram

Radio-Start behavior

RCM®split: 3 minutes after the connection of the GWFcoder®-meter

RCM®compact: 3 minutes after the flow of 5 liters

Technical Data

Specifications	Radio module RCM®
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®)
Modulation	FSK
Radiated power	10mW
Range	Depending on environment (up to 600m)
Compliance with standard	EN 300 220
Approval	CE
Protection class	IP68
Cable length	Standard 1,4m
Cable extension	max. 25m
Weight	300g

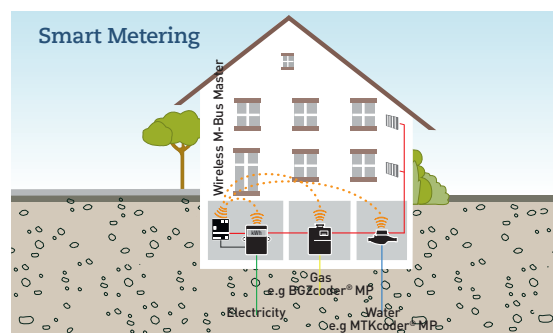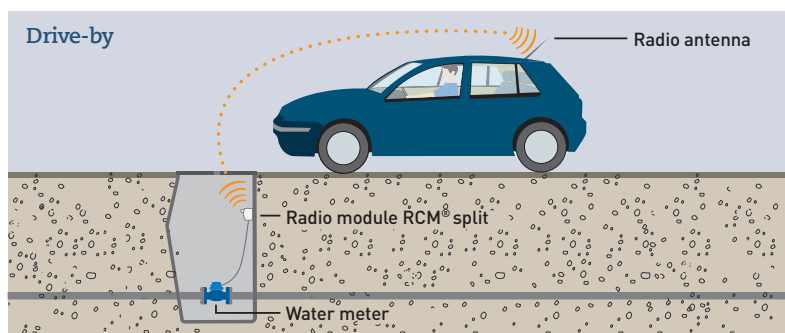| Power supply	
Battery	2 x Lithium 3,6V (not replacable)
Typical battery lifetime	15 years (depending on environment)

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)	$00359,768m^3$
Absolute meter reading (key date)*	$00343,417m^3$
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® register.

Applications

GWF