Water Heat / Cooling Gas

M-Bus / SCR / SCR MP

GWFcoder® -Interface

Your benefits

- Interface multiplication:
  Multiple use of meter data
- Use of a GWFcoder® meter with SCR (IEC) interface in an M-Bus network:
  Meter data can be made available to the end customer
- Labeled connection terminals:
  Simple on-site installation

Applications

- With the interface, water and gas meters equipped with GWFcoder® registers can be read by the utility for billing purposes as well as by the building technology system for energy optimization.

Properties

- Data Compatibility – For the M-Bus master, the interface behaves like a GWFcoder® meter with integrated M-Bus.
- Polarity-independent connection of GWFcoder® meters to the interface.
- DIN rail mounting.
- GWFcoder® meters with SCR (IEC) interface provide both an SCR (IEC) and an M-Bus interface simultaneously when used with the interface.

  The interface automatically reads the GWFcoder® register at predefined intervals and stores the current data record in its internal memory. When a readout is performed via the M-Bus or the SCR (IEC) interface, the data is immediately available and transmitted to the master.

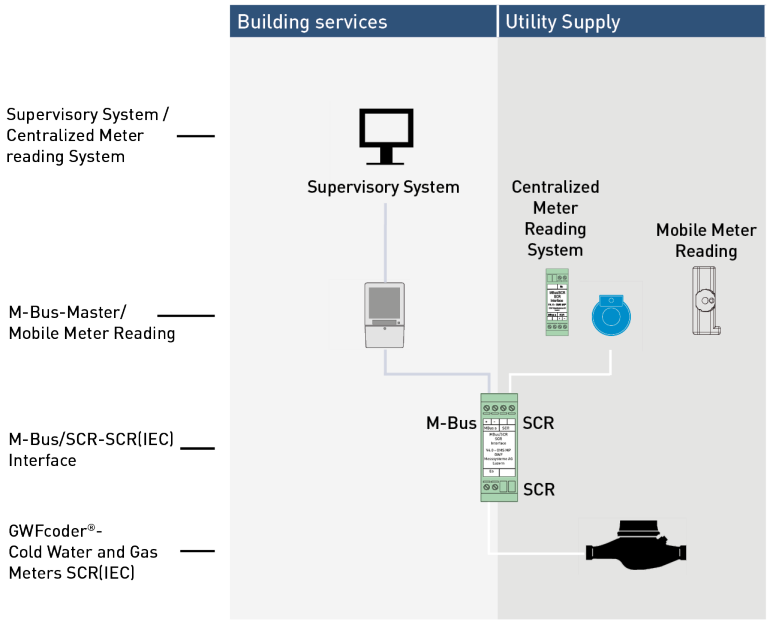
GWF AG
Obergrundstrasse 119
6005 Lucerne, Switzerland

T +41 41 319 50 50
info@gwf.ch, www.gwf.ch

Technical support:
T +41 41 319 52 00, support@gwf.ch

Last updated: 05.03.2026

Components



General Operating Behavior

- The start-up time after power ON is max. 15 seconds. The interface automatically reads the data from the GWFcoder® register.
- After successful readout of the GWFcoder® register, the interface can be selected and read out by the M-Bus master.
- The readout software must support interpretation of the GWFcoder® data record. The data record is compatible with the data record of GWFcoder® meters with integrated M-Bus. This data record is already supported by most providers.

Readout Interval

- The meter reading is updated in the interface after each readout and additionally every 15 minutes.
- If the meters are read cyclically within the M-Bus network, a pause of at least 15 seconds must be observed at the end of each cycle.
- The readout interval of the interface must not be less than 15 seconds.

Commissioning

- During commissioning, the baud rate for “M-Bus a” and “M-Bus b” must be verified and, when using primary addressing, the address must be parameterized. The secondary address is read directly by the interface from the GWFcoder® register.
- “M-Bus a” must be connected, as the interface is powered via this connection.
- After replacing a meter, “M-Bus a” must be restarted (power OFF/ON), and the meter list of both M-Bus networks must be updated in the readout software.
- After replacing the interface, the baud rate and, if applicable, the primary address must be reconfigured.

Technical Data

Data Transmission – M-Bus	
Baud rate M-Bus a	2400 Baud (Standard) or 300 Baud
Baud rate	1–250
Secondary address	GWFcoder® meter number – 8 digits, numeric

Data Transmission – SCR / IEC	
Compatibility	Wall module, CL socket, radio module RCM-PI 2, CL-SCR interface, RS232-SCR interface From version ≥ 4.2: RCM®split, RCM®-LRW...

M-Bus Load	
Load	M-Bus a: 5 M-Bus unit loads (7.5 mA – supply)

Installation
The interface can be installed at the M-Bus master or at the meter.

Maximum Cable Length	
SCR connection cable	150 m
M-Bus connection cable	Depending on network configuration

Dimensions and Weight	
Dimensions	25x78x47 mm
Weight	approx. 50 g

Operating Conditions	
Temperature	-10 bis +60 °C
Schutzklasse	IP40

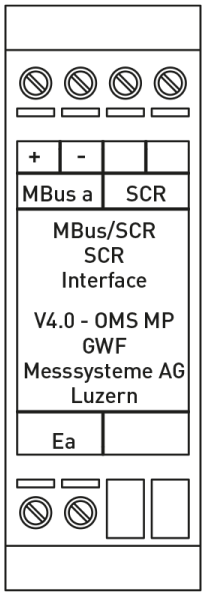
Interfaces
M-Bus according to EN 13757
Inductive via SCR / protocol IEC 62056-21

Mounting Type
DIN rail mounting

Supported Meters
GWFcoder® cold water and gas meters with SCR (IEC) interface

Meter Connection Scheme

Meter Type		Connection Wires
MTKcoder® IP67	Without approval, CE conformity (MID)	white, brown
MTKcoder® IP68	Without approval, CE conformity (MID)	black, red (cut green wire)
MTKcoder® MP IP67	CE conformity (MID)	white, brown
MTKcoder® MP IP68	CE conformity (MID)	black, red (cut green wire)
WPDKcoder WSDKcoder Meitwin mit GWFcoder® WPVD mit GWFcoder®	Without approval	black, red (cut brown wire)
Meistream mit GWFcoder® Meistream Plus mit GWFcoder® Meitwin mit GWFcoder® WPV-MS mit GWFcoder®	CE conformity (MID)	white, brown
Meistream mit GWFcoder® MP Meistream Plus mit GWFcoder® MP Meitwin mit GWFcoder® MP WPV-MS mit GWFcoder® MP	CE conformity (MID)	black, red (cut green wire)



Connection and Signal Transmission / Interface	
M-Bus a +/-	M-Bus master according to EN 13757-2, supervisory system After power ON, the interface requires 15 seconds to become operational. Power supply via “M-Bus a”.
SCR	M-Bus master according to EN 13757-2, supervisory system After power ON, the interface requires 15 seconds to become operational.
Ea	GWFcoder® register (polarity-independent)