



Water



Heat / Cooling



Gas

GWF

M-Bus / M-Bus / 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:
Easy on-site installation

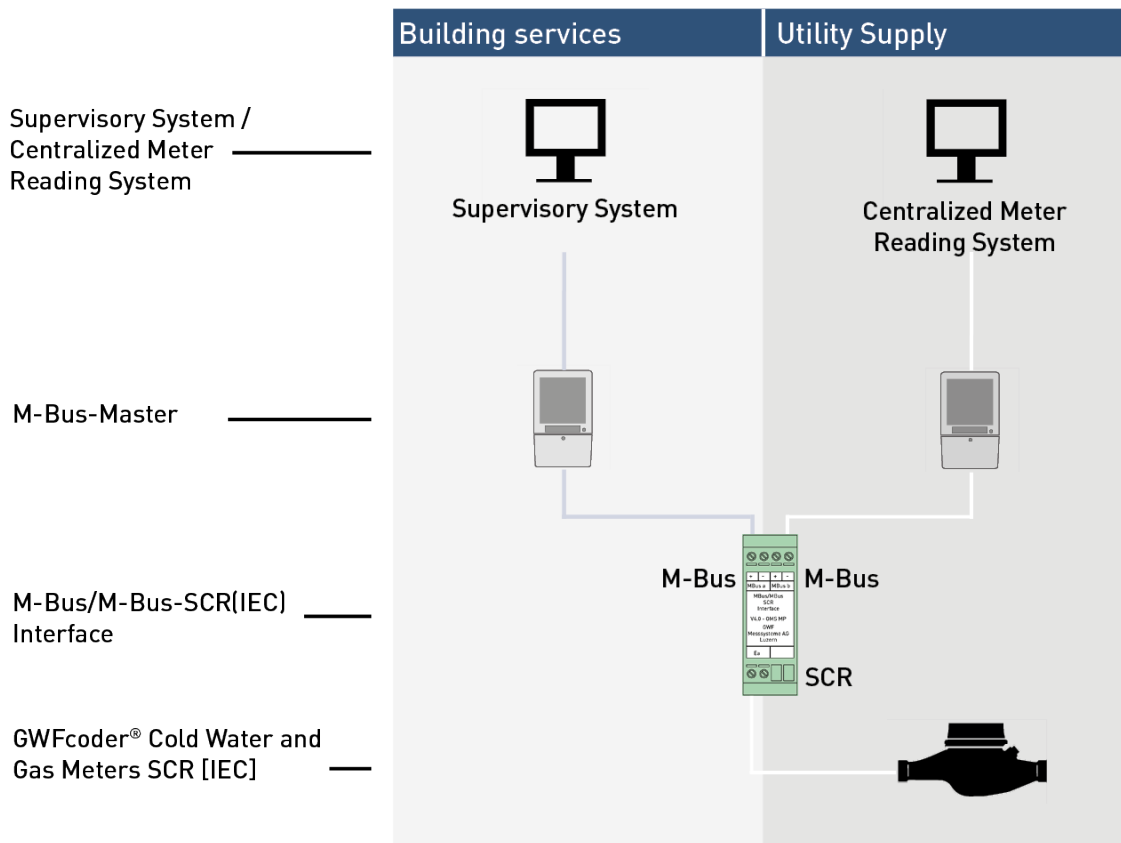
Applications

- With the interface, water and gas meters equipped with GWFcoder® registers can be read by the utility for billing purposes and by the building management 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
- With the interface, a GWFcoder® meter with SCR (IEC) interface can be integrated simultaneously into two separate M-Bus networks. The interface automatically reads the GWFcoder® register at predefined intervals and stores the current data set in the internal memory. When a readout via M-Bus is performed, the data are immediately available and transmitted to the master.

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 M-Bus b	2400 Baud (Standard) or 300 Baud
Primary address M-Bus a	1–250
Primary address M-Bus b	1–250
Secondary address	GWFCoder® meter number – 8 digits, numeric

M-Bus Load

Load	M-Bus a: 5 M-Bus unit loads (7.5 mA – supply)
Load	M-Bus b: 2 M-Bus unit loads (3 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
Protection class	IP40

Interfaces

M-Bus according to EN 13757

Inductive via SCR / protocol IEC 62056-21

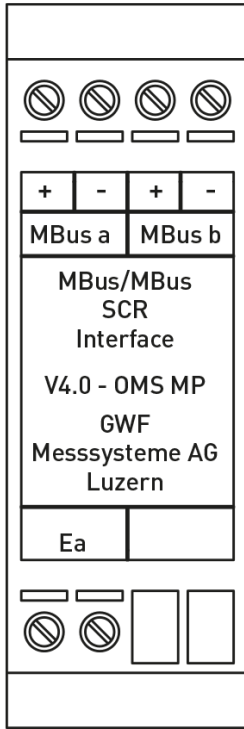
Mounting Type

DIN rail mounting

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)
WPKcoder WSDKcoder Meitwin mit GWFcoder® WPVD mit GWFcoder®	Ohne Zulassung	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 +/-	<p>M-Bus master according to EN 13757-2, supervisory system</p> <p>After power ON, the interface requires 15 seconds to become operational. Power supply via "M-Bus a".</p>
M-Bus b +/-	<p>M-Bus master according to EN 13757-2, supervisory system</p> <p>After power ON, the interface requires 15 seconds to become operational.</p>
Ea	GWFCoder® register (polarity-independent)