

## OPERATING INSTRUCTION

## GMF 732 IR RS485-BUS-Sensor

CO<sub>2</sub> – Sensor with infrared light absorption Sensor



GMF 732 IR

### Important!

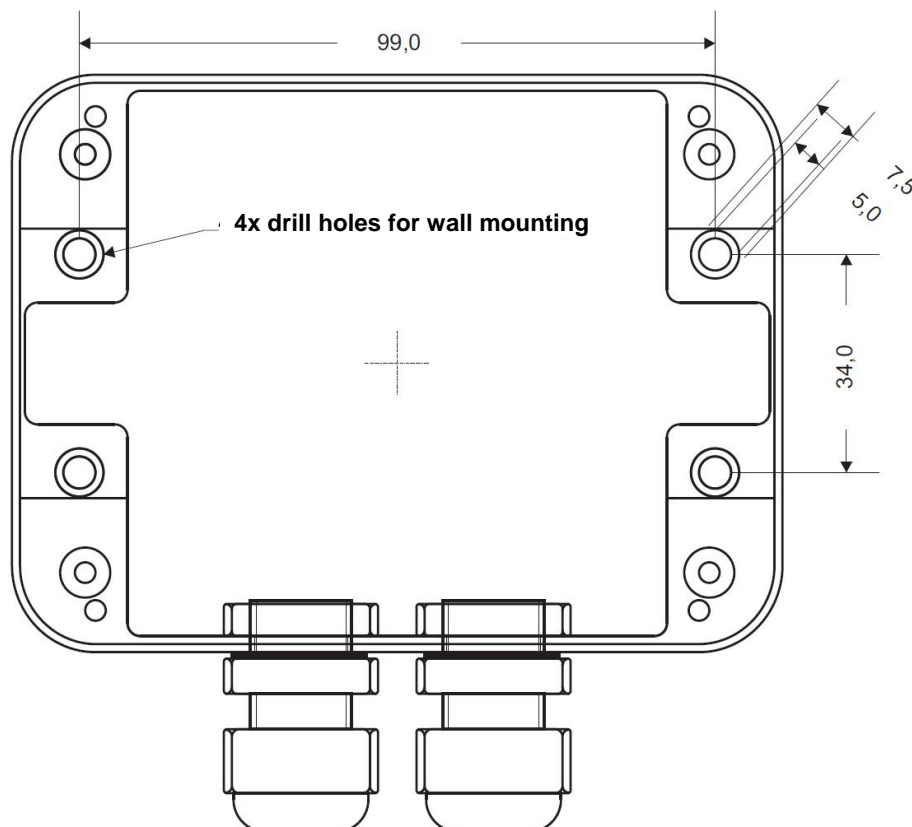
The handling of the device requires the knowledge and observance of this manual.

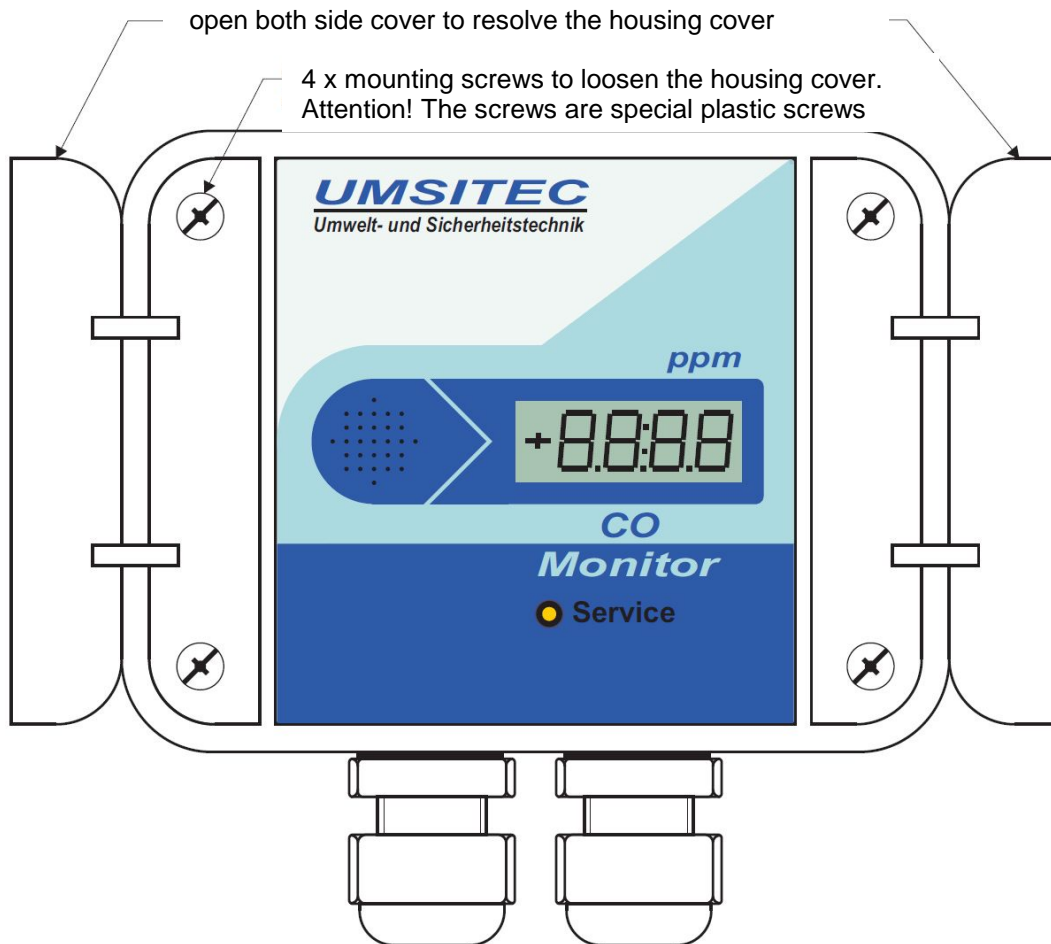
### Sensor Technology

The sensor GMF 732 E is powered with infrared light absorption sensors. The sensor signal is processed digitally and is available as information for reading via RS 485 BUS and analysis via a BUS center.

### Mounting

The sensor is usable for surface wall mounting.





## Sensor connection

The gas sensor GMF 432 E can be operated with an unregulated DC voltage of 12-35V.

For connection, the shielded cable JY (St) 2x2x0.8 mm is used.

The wire colors can be assigned as follows:

Terminal 1: +24V	=> red
Terminal 2: RS485 Terminal A	=> white
Terminal 3: RS485 Terminal B	=> yellow
Terminal 4: 0V	=> black
Terminal 5: shield cable bushing	=> drain wire

The drain wire in the cable is connected to the shield.

**CAUTION:** When installing, make sure that bare wire and the bare drain wire be covered with insulation and can not come into contact with the circuit.

## Maintenance

The sensor is preset at the factory with calibration gas.  
Regular maintenance is required to obtain its functionality.

## Maintenance aids

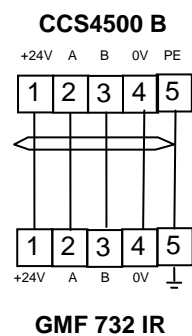
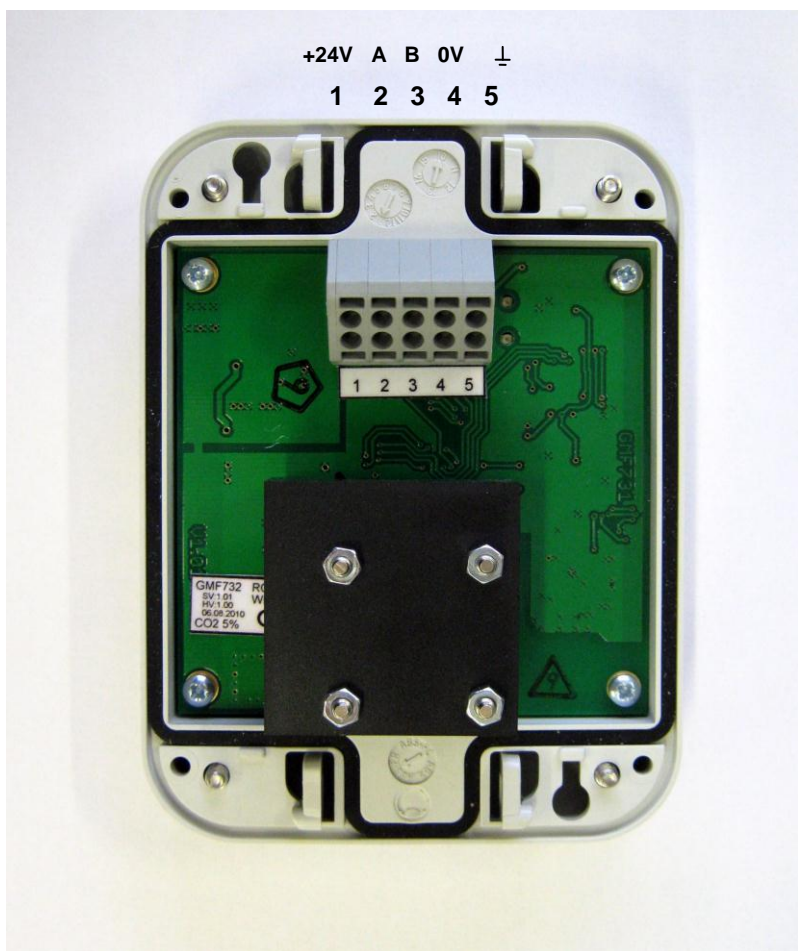
Operating element "Service Handy 3"  
Test gas ((known CO-concentration)  
Gas feed adapter  
Flow controller, flow meter 0-1 liters / min

## Justage

The sensor can be calibrated using any known gas concentration:

1. For this, the Service Handy 3 is logged on the sensor.
2. Use test gas adapter for feeding test gas (about. 0,2 l/min)
3. Via Service-Handy 3 the sensor is calibrated to the gas concentration

## Connection diagram



**GMF 732 IR**

## Specification: GMF 732 IR

Suitability:	residential and office areas
Measuring principle:	infrared light absorption, 2 wavelenght
Gas type:	CO
Measuring range:	CO: 0..10.000 ppm or 0..5vol%
Accuracy:	<+-1% of measuring range
Response time T90:	< 30 sec
Temperature range:	-20..+55°C (ambient)
Humidity range:	5..95% RH
Pressure range:	700-1300 hPa
Housing:	glass reinforced plastic, LxWxD: 118x120x50mm
Protection type:	housing: IP66, sensor: IP44
Gas entry:	diffusion
Output signal:	digital via RS 485 BUS
Life time:	>5 years (warranty: 2 years)
CE-conformity:	emission: residential area, immunity: industrial area
Weight:	270g
Supply:	12..30 V DC
Connection line:	up to 1200 m: JY (ST) Y 2x2x0,8 mm <sup>2</sup>
Current consumption:	56mA @ 12 V DC 47mA @ 14 V DC 40mA @ 16 V DC 36mA @ 18 V DC 33mA @ 20 V DC 30mA @ 22 V DC 28mA @ 24 V DC 26mA @ 26 V DC 25mA @ 28 V DC 24mA @ 30 V DC

## Commissioning

The setting of the sensor must be checked during commissioning by a test gas feeding.

## Maintenance

Maintenance is required at certain intervals for maintaining the function security. The maintenance interval can be seen from the test sticker on the controller. There is a maximum of 1 year.

## Außerbetriebnahme

Is the sensor for longer than 4 weeks out of operation, it must be checked after a week uptime using test gas or be recalibrated.

Status January 2011

Subject to technical changes