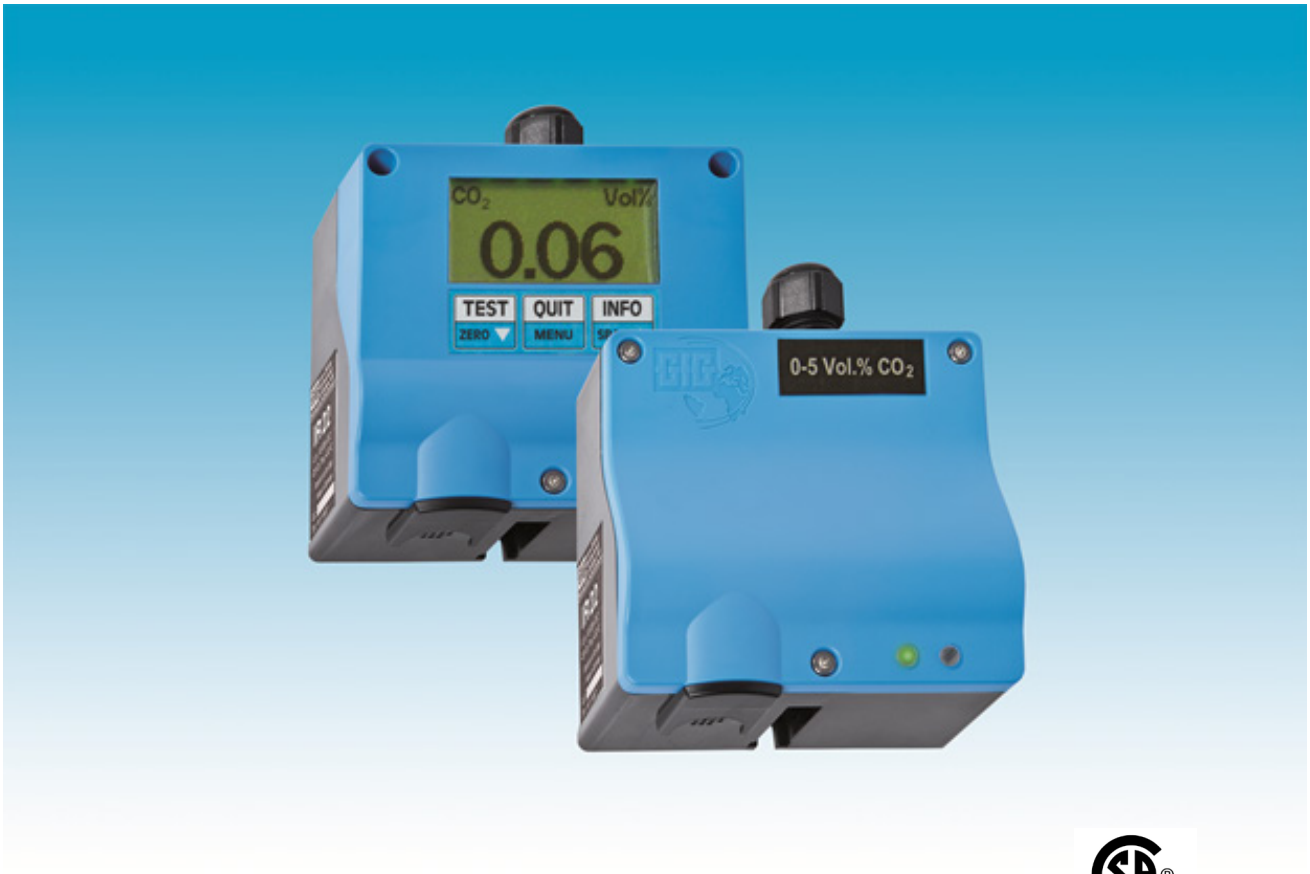
IR 22 Transmitter

For carbon dioxide (CO2) and combustible gases (HC)



- Long service life of the infrared (NDIR) sensor
- Extremely stable, low maintenance
- Cost effective single-man adjustment
- Output 4-20 mA or RS485 Modbus

GfG Instrumentation

Technology for people and the environment

IR 22 Transmitter: The cost-efficient solution

The IR 22 transmitter combines the proven infrared measurement method to detect carbon dioxide or combustible gases (HC) with the innovative technique of the new 22 series transmitters. This new GfG transmitter generation has been developed and manufactured according to SIL standards.

The comprehensive user menu and the versatile setting options make this transmitter series quite flexible and adaptable to all individual requirements. Precise measurement results at various environmental conditions, as well as the large dynamic measurement range of a few ppm up to 5 % volume CO_2 or 100% LEL.

Signal processing

The transmitter includes the complete electronic system for the signal processing and fail-safe forwarding of the measurement signal to the controller. The embedded software of the IR 22 linearises the measurement signal and compensates for environmental influences.

Therefore, when temperature variations are caused by the weather or changes of the humidity, the measured values will be accurate.

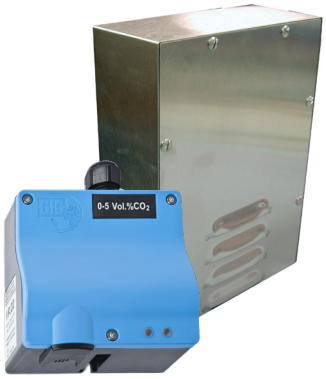
IR 22 transmitter and GMA 200-MW4 controller

In addition, the transmitter provides the option to transfer service, maintenance and error messages to a connected GfG gas measurement controller. The IR 22 transmitter sends the signals either through an analog 4-20 mA current interface or a digital (RS485) Modbus interface.

Flexibility for any application

The IR 22 transmitter includes the sensor, status LEDs, either an analog or a digital interface, "Zero button" to adjust the zero point, and a test socket and potentiometer for the sensor calibration.

In addition, the IR 22 can be ordered with backlit graphical display. The display shows the current gas concentration, allows access to service functions, enables operation using a membrane keypad and includes optical and acoustical signal transmitters.



IR 22 transmitter with weather protective casing

Technical data

IR 22 Transmitter

Gases and measurement ranges:
Carbon dioxide with different measurement ranges from ppm up to 50% vol.
Combustible gases of up to 100% LEL

Measuring principle:
Infrared sensor

Sampling method:
Diffusion or supplied with calibration adapter

Response time t_{90}:
t_{Alarm} < 50 seconds

Output signal:
Analog: 4-20 mA
Digital: RS485 Modbus

Voltage supply:
12-30 V DC

Environmental conditions:
Temperature
-13°F to +122°F / -25°C to +50°C

Air humidity
0 to 95 % RH non-condensing

Ambient pressure
70-130 kPa

Certifications:
IP 54 - Plastic material
c-CSA-us
CAN/CSA-C22.2 No. 61010-1-12 + Amd 1 - 18
UL 61010-1 (2012)

Weight:
4.4 to 5.3 oz (125 .. 150g) or
6 to 7 oz (170 .. 195g) for display version

Dimensions:
3.8 x 4.75 x 2 in / 96 x 120 x 49 mm (L x W x H)

Expected average sensor sensor life:
> 5 years

Specifications subject to change without notification

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