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GasDetection
Technologies

Transmitter IR22

For carbon dioxide (CO_2) and combustible gases (HC)

- Long service life of the sensors
- High profitability and low subsequent costs
- Stable plastic housing (IP54)
- Cost-efficient one man on site adjustment
- LOW-POWER version

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Transmitter IR22: The cost-efficient alternative

The transmitter IR22 combines the proven infrared measurement method to detect carbon dioxide or combustible gases (HC) with the innovative technique or our new transmitter series 22. This new GfG transmitter generation has been developed and manufactured according to SIL standards. You set standards for most modern gas warning transmitters regarding long service life, user friendliness and cost efficiency.

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 most different environmental conditions , as well as the large dynamic measurement range of a few ppm up to 10 Vol.-% CO_2 as well as 100% LEL allow a wide field of application, e.g. in cooling systems or breweries, for the ambient air monitoring in laboratories up to industrial applications.

Signal processing

The spray water protected 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 IR22 linearises the measurement signal and compensates environmental influences. Thus, also in case of temperature variations caused by the weather or changes of the air humidity, the measured values would be correctly transmitted. In addition, the transmitter provides the option to transfer service, maintenance and error messages to a connected GfG gas measurement controller. The transmitter IR22 transmits the signals either via an analogue (0.2 - 1 mA / 4 - 20 mA) current interface or a digital (RS485) Modbus interface.

Transmitter IR22 ad Controller GMA200-MW4

In order to bridge long distances between the controller and the transmitter, a special low power IR22 variant will be available to you. Through this technique, it would be possible to provide up to 16 transmitters with only one cable even after a bus cable with a length of 1200m.

Variants for any application

IR22 with sensor, status LEDs and either an analogue or a digital interface, "Zero button" and a magnet interface to adjust the zero point, test socket and potentiometer for the sensor calibration.

In addition, the IR22 can optionally be delivered with backlit graphic display to display the current gas concentration and to visualise comprehensive service functions, operation via a membrane keypad and optical and acoustical signal transmitters. Retrofitting is possible at any time.

Calibration adapter

For a regular function control, it is possible to use a calibration adapter for a safe gas injection, which would guarantee the availability.

Transmitter IR22 with weather protection

Technical data

Transmitter IR22

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

Measuring principle:
Infrared sensor

Gas supply:
Diffusion or gassing with Calibration adapter

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

Expected average service life of the measurement cell:
>5 years

Temperature range, air humidity and ambient pressure:
-25°C .. +50°C
0 .. 95 % rel. humidity not condensed
70 .. 130 kPa

Output signal:
Analogue: 0.2 .. 1 mA or 4 .. 20 mA
digital: RS485 Modbus

Voltage supply:
12 .. 30 Volt DC

Housing:
Plastic material (IP54)

Weight:
125 .. 150g or
170 .. 195g (for display version)

Dimensions:
96 x 120 x 49 mm

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