



Transmitter IR22 D with display and horn

For monitoring
combustible gases (HC)
and CO₂



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The IR22 D infrared transmitter uses the adsorption spectra of gases for targeted monitoring of specific combustible gases and CO₂. The measurement method allows reliable monitoring even under difficult conditions, such as a low percentage of oxygen in the ambient air.

Selective and insensitive

Not only is the method highly selective, it is also extremely insensitive to sensor toxins and, unlike for example catalytic sensors, can monitor the concentration of combustible gases even when there is little or no oxygen in the gas mixture.

Communicates analog and digital

The measured values and status information of the IR22 D can be transmitted either analog (4-20 mA or 0.2-1 mA) or digital (RS-485). This allows not only the use in combination with any

GfG controller, but also the connection to programmable logic controllers (PLC).

Protection level and display elements

The compact housing for wall mounting is protected against splash water and dust (IP54). It has a 2.2" display with integrated horn and two status LEDs. The display shows the gas type and unit as well as the current measured value. Backlit green in measuring mode, the display changes to red in the event of an alarm. An acoustic warning signal sounds at the same time. The status LEDs are used to indicate operational readiness (green) and special states (yellow).

One-man calibration and adjustment

All service and maintenance work can be performed by a single technician. A calibration adapter facilitates regular function checks. It ensures the safe

and steady supply of test gas during maintenance.

Variants for every requirement

The basic version of the IR22 is sufficient for many applications. If a measured value display on site is desired, there is also a variant with display and acoustic alarm.

IR22 Basic variant

IR22 D with display to show the current measured value

In combination with GfG's powerful controllers, both variants are the right choice for a wide range of use cases.

Overview of the gases and measuring ranges:

Other gases on request.

» Carbon dioxide (CO ₂)	0 to 1.0 % by volume 0 to 5.0 % by volume 0 to 10.0 % by volume 0 to 25.0 % by volume 0 to 50.0 % by volume
» Methane (CH ₄)	0 to 100 % LEL 0 to 5.0 % by volume
» Difluormethane/R32 (CH ₂ F ₂)	0 to 100 % LEL 0 to 14.0 % by volume
» Propane (C ₃ H ₈)	0 to 100 % LEL 0 to 2.0 % by volume

IR22 D transmitter with one cable entry for analog connection



IR22 D Technical Data:

Measuring principle: infrared (IR)

Measuring ranges ¹: 0 to 100 % LEL
0 to 50 % by volume

Gas supply: Diffusion or gassing
per calibration adapter

Lifetime of the sensor: > 5 years

Response time: t₉₀ < 50 s

Temperature: -25 to +50 °C

Humidity: 0 to 95 % r. h.
(non-condensing)

Air pressure: 80 to 130 kPa

Output signal: Analog: 0.2-1 mA or 4-20 mA
Digital: RS-485

Power supply: 12 to 30 V DC

Housing: Plastic

Protection class: IP54

Dimensions: 96 x 123 x 49 mm
(W x H x D)

Weight: 170 - 195 g¹

Approvals / Certifications:

Functiona

Safety (SIL): DIN EN 61508-2: 2011

¹ Sensor dependent

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