

# EC22 D Transmitter

**Toxic gases, hydrogen and oxygen safely in view**



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If toxic gases, hydrogen or oxygen need to be monitored outside hazardous areas and the current measured value needs to be displayed on site, the EC22 D transmitter is a reliable and economical solution. In combination with GfG's proven controllers, the transmitter can be used in a wide variety of applications thanks to a large selection of sensors.

The EC22 D operates according to the proven electrochemical measuring principle, which is characterized by a linear signal, energy efficiency and high sensitivity. It is ideal for selectively monitoring toxic gases, hydrogen or oxygen.

## Communication and service

Signal transmission uses either 4-20 mA industry standard (alternatively also with 0.2-1 mA) or uses the digital RS-485 interface (Modbus RTU). Test gas for function control and sensor adjustment can be safely supplied using a calibration adapter. All maintenance work can be carried out by a single person.

## Overview of the gases and SI levels:

Other gases on request.

	1001	1002		1001	1002		1001	1002
» Ammonia	(NH <sub>3</sub> )	2   3	» Fluorine	(F <sub>2</sub> )	1   2	» Hydrogen sulfide	(H <sub>2</sub> S)	1   2
» Chlorine	(Cl <sub>2</sub> )	1   2	» Carbon monoxide	(CO)	2   3	» Silane	(SiH <sub>4</sub> )	-   -
» Chlorine dioxide	(ClO <sub>2</sub> )	-   -	» Ozone	(O <sub>3</sub> )	2   3	» Nitrogen dioxide	(NO <sub>2</sub> )	1   2
» Hydrogen chloride	(HCl)	1   2	» Oxygen	(O <sub>2</sub> )	2   3	» Nitric oxide	(NO)	1   2
» Hydrogen cyanide	(HCN)	1   2	» Sulfur dioxide	(SO <sub>2</sub> )	1   2	» Hydrogen	(H <sub>2</sub> )	-   -



EC22 D transmitter with display, touch keys and acoustic alarm

## Device protection and display

The compact housing for wall mounting is protected against splash water and dust (IP54). It features a 2.2 inch display with integrated alarm and two status LEDs. The display shows gas type and unit as well as the current measured value. In measuring mode it is backlit in green, the display changes to red in the event of an alarm. At the same time an acoustic warning signals. The status LEDs are used to indicated operational standby (green) and special states (yellow).

## Reliable measurement and low operating costs

The electronic system of the transmitter controls temperature the stabilization of the voltage, processing of the measured value output and detection of malfunctions at the measuring point. The built-in temperature compensation ensures the highest measuring accuracy. The long-life and inexpensive sensors keep the running costs low.

## Weather protection

A weather resistant housing not only protects transmitters against exposure to wind and weather, but also against contamination and excessive temperature caused by direct sunlight.



# Technical Data: EC22 D

**Measuring principle:** Electrochemical (EC)

**Detection range:** Sensor dependent

**Gas supply:** Diffusion or gassing per calibration adapter

**Expected sensor life:** 2-3 years \*

**Response time:** Sensor dependent

**Temperature:** -4 to +122 °F / -20 to +50 °C \*

**Humidity:** 0 to 95% r.h. \*

\* Depending on sensor and measuring range, sensor dependent

**Pressure:** 80 to 120 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:** 3.78 x 4.8 x 2 in /

96 x 123 x 49 mm

(W x H x D)

**Weight:** 6 to 6.9 oz / 170 to 195 g \*

**Approvals / Certifications:**

Functional Safety (SIL):

DIN EN 61508-2: 2011



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