



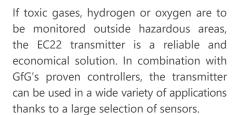
EC22 Transmitter

For monitoring toxic gases, H₂ and O₂



EC22 Transmitter

For monitoring toxic gases, H₂ and O₂



The EC22 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.

The EC22 hardware complies with the European Functional Safety Standard DIN EN 61508-2: 2011 for many gases. The SI levels (up to SIL3) in single-channel (1001) or redundant (1002) use are listed in the overview of gases.

Communication and service

Signal transmission is either by 4-20 mA industry standard (alternatively 0.2-1 mA) or digitally over the 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.



EC22 Transmitter with one cable gland for analog connection

Protection class and display elements

The compact housing for wall mounting is protected against splash water and dust (IP54). Two status LEDs are located on the front of the EC22 to indicate the operating status and faults as well as any service required.

Reliable measurement and low operating costs

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

Various models for different applications

The basic version of the EC22 is sufficient for many applications. If a measured value on site is needed, there is also a version with display and acoustic alarm.

EC22 Basic version for a wide range of electrochemical sensors

EC22 D With display and acoustic alarm

In combination with GfG's powerful controllers, both versions are the ideal choice for monitoring a wide range of gases.

Overview of gases and SI levels¹:

Other gases on request.

		1001	10
Ammonia	(NH ₃)	2	3
Chlorine	(Cl ₂)	1	2
Chlorine dioxide	(CIO ₂)	-	-
Hydrogen chloride	(HCI)	1	2
Hydrogen cyanide	(HCN)	1	2

		1001	100
» Fluorine	(F ₂)	1	2
» Carbon monoxide	(CO)	2	3
» Ozone	(O ₃)	2	3
» Oxygen	(O_2)	2	3
» Sulfur dioxide	(SO_2)	1	2

	1001	1002
(H ₂ S)	1	2
(SiH ₄)	-	-
(NO_2)	1	2
(NO)	1	2
(H_2)	-	-
	(SiH ₄) (NO ₂) (NO)	(H ₂ S) 1 (SiH ₄) − (NO ₂) 1 (NO) 1

EC22 Technical Data:

Measuring principle: Electrochemical (EC)
Measuring range: Sensor dependent
Gas supply: Diffusion or gassing

per calibration

adapter

Lifetime of

the sensor: 2-3 years²

Response time: Sensor dependent

Temperature: -20 to +50 °C ² **Humidity:** 20 to 95 % r. h. ² **Air pressure:** 80 to 120 kPa ²

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) 120 to 150 q²

Weight: 12 Approvals /

Certifications: Functional

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

GfG Asia Pacific Pte. Ltd.

33 Ubi Avenue 3, #06-21B | Vertex Building, Tower B | Singapore 408868 **Phone:** +65 6 227-4346 | **E-mail:** sales@gfg-asiapac.sg





 $^{^{\}rm 1}$ Depending on sensor and measuring range, $^{\rm 2}$ Sensor dependent