

EC28 Transmitter

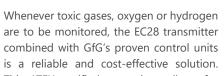
For Toxic Gases, O₂ and H₂ in Ex Zones





EC28 Transmitter

For Toxic Gases, O₂ and H₃ in Ex Zones



This ATEX-certified transmitter allows for safe use, even in potentially explosive atmospheres.

The hardware of the EC28 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

Communication is carried out via a 4 to 20 mA signal. The Smart Sensor technology enables quick and easy replacement of the sensor. Adjustments can be made using the RC2 remote control (one-man calibration).

Remote Control RC2 (optional)

Gases like ammonia and hydrogen are lighter than air. Transmitters with these sensors are therefore installed near the ceiling. To simplify servicing, these transmitters can be equipped with a permanently installed cable meaning that the RC2 remote control can be connected for maintenance



work and settings can be made from ground level. The display of the RC2 remote control shows the same information as would be shown by the EC28 versions with display. This makes inspection, maintenance and calibration much easier.

Reliable Measurement & Minimal Operating Costs

The sensor and built-in temperature compensation ensure the highest measuring accuracy. The long sensor service life and low maintenance requirements ensure minimal operating costs.

Variants for Every Application

The basic version of the EC28 is sufficient for many applications. For specific requirements, the EC28 is also available in a wide variety of versions:

EC28 basic version for a wide range

of electrochemical sensors **EC28 D** with display for showing the

current measured values

EC28 DA with display, bright LED

warning lights and integrated alarm horn

EC28 DAR with display, alarm horn and

relay for additional external

EC28 B with Modbus interface EC28 DB with Modbus interface

and display

alarm devices

EC28 DAB with Modbus interface,

display, bright LED lights and

integrated alarm horn

EC28 i intrinsically safe EC28 Di intrinsically safe and

with display

Together with GfG's sophisticated controllers, all versions of the EC28 are the perfect choice for detecting a wide range of gases.

Overview of Gases and SI Levels:

		1001	1002
» Ammonia	(NH ₃)	2	3
» Arsine	(AsH ₃)	-	-
» Bromine gas	(Br ₂)	-	-
» Chlorine	(Cl_2)	1	2
» Chlorine dioxide	(CIO_2)	2	3
» Hydrogen chloride	(HCI)	1	2
» Hydrogen cyanide	(HCN)	1	2

1001 1002 2 » Diborane (B,H,) » Ethylene oxide (C.H.O) 2 » Hydrogen fluoride (HF) » Carbon monoxide (CO) 2 3 » Ozon 2 3 (O₂) (COCI₂) » Phosaene » Phosphine (PH₂)

1001 1002 » Oxygen 2 3 » Sulphur dioxide (SO₂) 2 » Hydrogen sulphide (H₂S) 1 » Silane (SiH.) 1 2 (NO₂) 2 » Nitrogen dioxide 1 2 » Nitrogen monoxide (NO) 1 » Hydrogen

Technical Data EC28:

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

per calibration adapter

Lifetime of

Sensor dependent the sensor: Sensor dependent Response time: -20 to +50 °C

Temperature:

Humidity: 5 to 90 % r. h.1 80 to 120 kPa¹ Air pressure: **Output signal:** 4-20 mA 18 to 30 V DC **Power supply: Housing:** Plastic

Protection class: IP64

Dimensions: 115 x 203 x 55 mm

 $(W \times H \times D)$

Weight: 650 g

Approvals / **Certifications:**

Markings & Type

(a) II 2G Ex emb [ib] IIC T4 Gb of Protection:

-20 °C ≤ Ta ≤ +50 °C

Functional

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

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¹ Sensor dependent