EC28 Transmitter

For Toxic Gases, $\text{O}_2$ and $\text{H}_2$ in Ex Zones
EC28 Transmitter
For Toxic Gases, O₂ and H₂ in Ex Zones

Whenever toxic gases, oxygen or hydrogen are to be monitored, the EC28 transmitter combined with GfG’s proven control units is a reliable and cost-effective solution. 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 SIL levels (up to SIL3) in single-channel (1oo1) or redundant (1oo2) 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.

Technical Data EC28:

- **Measuring principle:** Electrochemical (EC)
- **Measuring range:** Sensor dependent
- **Gas supply:** Diffusion or gassing per calibration adapter
- **Lifetime of the sensor:** Sensor dependent
- **Response time:** Sensor dependent
- **Temperature:** -20 to +50 °C

- **Humidity:** 5 to 90 % r. h.
- **Air pressure:** 80 to 120 kPa
- **Output signal:** 4–20 mA
- **Power supply:** 18 to 30 V DC
- **Housing:** Plastic
- **Protection class:** IP64
- **Dimensions:** 115 x 203 x 55 mm (W x H x D)

- **Weight:** 650 g
- **Approvals / Certifications:**
  - Markings & Type: II 2G Ex emb [ib] IIC T4 Gb
  - Of Protection: -20 °C ≤ Ta ≤ +50 °C

Overview of Gases and SIL Levels:

- **Ammonia** (NH₃) 2 3
- **Arsine** (AsH₃) - -
- **Bromine gas** (Br₂) - -
- **Chlorine** (Cl₂) 1 2
- **Chlorine dioxide** (ClO₂) 2 3
- **Hydrogen chloride** (HCl) 1 2
- **Hydrogen cyanide** (HCN) 1 2
- **Diborane** (B₂H₆) 1 2
- **Ethylene oxide** (C₂H₄O) - -
- **Carbon monoxide** (CO) 2 3
- **Ozone** (O₃) 2 3
- **Phosgene** (COCl₂) - -
- **Phosphine** (PH₃) 1 2
- **Oxygen** (O₂) 2 3
- **Sulphur dioxide** (SO₂) - -
- **Hydrogen sulphide** (H₂S) 1 2
- **Silane** (SiH₄) 1 2
- **Nitrogen dioxide** (NO₂) 1 2
- **Nitrogen monoxide** (NO) 1 2
- **Silane** (SiH₄) 1 2

© GfG - Gesellschaft für Gerätebau mbH - 2021 | All information in this brochure is subject to technical changes due to further development. Transmitter EC28/DE/EN/03-2021/Printed in Germany.