Fixed gas detection systems

smart
GasDetection
Technologies

EC28 Transmitter

For Toxic Gases, O_2 and H_2 in Ex Zones

MADE IN
GERMANY

GfGsafety.com

EC28 Transmitter

For Toxic Gases, O_2 and H_2 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 SI 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).

EC28 with RC2 remote control

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 alarm devices
EC28 B	with Modbus interface
EC28 DB	with Modbus interface and display
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.

Technical Data EC28:

Measuring principle:
Electrochemical (EC)
Measuring ranges:
Depending on gas type and sensor
Gas supply:
Diffusion or gassing per calibration adapter
Expected service life of the measuring cell:
Depending on sensor
Response Time:
Depending on gas type and sensor
Temperature:

in Ex zones	-20 to +50 °C
outside Ex zones	-25 to +50 °C

Humidity:
5 to 90 % r. h.
Air pressure:
80 to 120 kPa
Output signal:
RS-485
Power supply:
18 to 30 V DC
Housing:
Plastic, antistatic
Protection class:
IP64
Weight:
650 g
Dimensions:
100 x 203 x 55 mm (W x H x D)
Approvals / Certifications:
Markings & Type of Protection:
⟨Ex⟩ II 2G Ex eb mb [ib] IIC T4 Gb CE0158
-20 °C ≤ Ta ≤ +50 °C
EU type examination certificate:
BVS 04 ATEX E 132 X
Functional Safety (SIL):
DIN EN 61508-2: 2011*
EMC Testing:
DIN EN 50270: 2015
Interference emission: Type class I
Interference immunity: Type class II

* sensor dependant

Overview of gases:

» *Arsine*	*(AsH_3)*	» *Ethylene oxide*	*(C_2H_4O)*	» *Sulphur dioxide*	*(SO_2)*
» *Bromin gas*	*(Br_2)*	» *Carbon monoxide*	*(CO)*	» *Hydrogen sulphide*	*(H_2S)*
» *Chlorine dioxide*	*(ClO_2)*	» *Ozone*	*(O_3)*	» *Nitrogen dioxide*	*(NO_2)*
» *Hydrogen cyanide*	*(HCN)*	» *Phosgene*	*($COCl_2$)*	» *Nitrogen monoxide*	*(NO)*
» *Diborane*	*(B_2H_6)*	» *Phosphine*	*(PH_3)*	» *Hydrogen*	*(H_2)*

Other gases on request

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