

CC28 Transmitter

For combustible gases and vapors in Ex zones





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For monitoring combustible gases and vapors in hazardous areas, the CC28 transmitter in combination with GfG's proven gas measurement controllers is a reliable and economical solution. Short response times ($t_{90} \le 9$ s; depending on gas type and sensor) allow fast warning of gases such as methane or propane.

The design is ATEX certified. With ignition protection types "d" (flameproof enclosure) and "e" (increased safety), safe use in Ex zone 1 is possible. In addition, the CC28 hardware complies with the European Functional Safety Standard DIN EN 61508-2: 2011 for many gases.

Communication and service

Signal transmission is based on the 4-20 mA industry standard. Smart Sensor technology enables fast and uncomplicated sensor replacement. Test gas can be added via calibration adapter.

RC2 remote control (optional)

Some combustible gases such as methane, hydrogen and ammonia are lighter than air. Transmitters with such sensors are therefore installed near the ceiling. To simplify servicing, these transmitters can be



CC28 with RC2 remote control

equipped with a permanently installed cable. This allows the RC2 remote control with display to be connected for maintenance work. Inspection, maintenance and adjustment are thus greatly simplified. Service can be performed by a single technician.

Reliable measurement and minimal operating costs

The chimney effect provides rapid detection of combustible gases and vapors. This leaves crucial seconds to initiate countermeasures. The built-in temperature compensation ensures highest measurement accuracy. The low maintenance requirements and long sensor service life keep operating costs to a minimum. Sensor wear is significantly reduced by the automatic shutdown (from 112 % LEL).

Variants for different applications

The basic variant of the CC28 is sufficient for many applications. For special requirements, the CC28 is also available in additional versions:

CC28 basic version for a wide range

of flammable gases

CC28 D with display to indicate the

current measured value

CC28 DA with display, LED warning lights

and alarm buzzer

In combination with GfG's high-performance controllers, all versions of the CC28 are a good choice for a wide range of combustible gases to be monitored.

1001 1002

2 3

2 3

2 3

3

3

1001 1002 1001 1002 » Acetone (C₃H₆O) 3 » Ethanol (C_2H_6O) 3 » Methanol (CH₄O) **Overview of gases** » Acetylene (C_2H_2) 2 3 » Ethyl acetate $(C_4H_8O_2)$ 3 » n-Nonane (C_9H_{20}) and SI levels: » Ammonia (NH₃) 2 3 » Ethylene (C_2H_4) 3 » Propane (C₃H₈) Other gases on request. » n-Butane / Isobutane (C₄H₁₀) 3 3 » Propyne » Hexane (C₆H₁₄) (C₃H₄) 3 » Diethyl ether (C₄H₁₀O) 3 » Isopropanol (C₃H₈O) » Propylene (C₃H₆) » Natural gas (HC mixture) 2 3 » Carbon monoxide (CO) 3 » Toluene (C_7H_8)

CC28 Technical Data:

» Ethane

Measuring principle: Catalytic

combustion (CC)

0 to 100 % LEL

0 to 4 vol%¹

Gas supply: Diffusion or gassing

with flow adapter

Lifetime of

Measuring ranges:

the sensor: 5 years²
Response time: 5 years^2

Temperature: -20 to +50 °C (Ex zone)

» Methane

-25 to +55 °C

(CH₄)

Humidity: 5 to 90 % r. h. Air pressure: 80 to 120 kPa

Output signal: 4-20 mA
Power supply: 15 to 30 V DC

Housing: Plastic **Protection class:** IP64

Weight: 700 g

Dimensions: 100 x 168 x 55 mm

» Hvdroaen

 $(W \times H \times D)$

Approvals / Certifications

Markings & type

of protection:

| Il 2G Ex demb [ib] IIC T4 Gb

-20 °C ≤ Ta ≤ +50 °C

 (H_2)

Functional

Safety (SIL): DIN EN 61508-2: 2011⁴

 (C_2H_6)

GfG Gesellschaft für Gerätebau mbH

Klönnestraße 99 | 44143 Dortmund | Germany

Phone: +49 231 56400-0 | **Fax:** +49 231 56400-895 | **E-mail:** info@gfg-mbh.com





¹ For ammonia only, ² Depending on operating conditions, ³ Depending on gas type and sensor, ⁴ Depending on sensor