



### **CC28 DA Transmitter**

# With display and alarm for flammable gases





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# DEKRA DEKRA

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For monitoring combustible gases and vapors in hazardous areas, the CC28 DA transmitter with display, LED alarm lights and buzzer in combination with GfG's proven gas measurement controllers is a reliable and economical solution. Short response times (t90  $\leq$  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 DA 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. If the CC28 DA has to be mounted in a difficult-to-access location, the optional RC2 remote control simplifies adjustment and service (one-man calibration).



CC28 DA with display, alarm LEDs and buzzer

#### Display, pushbuttons and alarm

The CC28 D transmitter has a 2.2 inch LC display and three pushbuttons. In normal operation, the display shows the measured value or information on faults or alarms. In addition, the operating parameters (sample gas, measuring range, limit values, etc.) can be called up via the pushbutton interface. The CC28 DA has highly visible, red LED alarm lights and an integrated, loud buzzer (90 dB). Costs for additional, Ex-protected alarm devices can thus be saved.

## 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.

## Overview of gases and SI levels:

Other gases on request.

		1001	100
» Acetone	$(C_3H_6O)$	2	3
» Acetylene	$(C_2H_2)$	2	3
» Ammonia	(NH <sub>3</sub> )	2	3
» n-Butane/Isobutane	$(C_4H_{10})$	2	3
» Diethyl ether	$(C_4H_{10}O)$	2	3
» Natural gas	(HC-Gemisch	) 2	3
» Ethane	$(C_2H_6)$	2	3

» Ethanol	(C <sub>2</sub> H <sub>6</sub> O)
» Ethyl acetate	(C <sub>4</sub> H <sub>8</sub> O <sub>2</sub> )
» Ethylene	$(C_2H_4)$
» Hexane	$(C_6H_{14})$
» Isopropanol	$(C_3H_8O)$
» Carbon monoxide	(CO)
» Methane	(CH <sub>4</sub> )

1001	1002	
2	3	
2		
2	3	
2	3	
2	: 3	
2		
2		

		1001	1002
» Methanol	(CH <sub>4</sub> O)	2	3
» n-Nonane	$(C_9H_{20})$	2	3
» Propane	(C <sub>3</sub> H <sub>8</sub> )	2	3
» Propyne	(C <sub>3</sub> H <sub>4</sub> )	2	3
» Propylene	(C <sub>3</sub> H <sub>6</sub> )	2	3
» Toluene	$(C_7H_8)$	2	3
» Hydrogen	(H )	2	3

## CC28 D Technical data:

Measurement method: Catalytic combustion (CC)

Measuring0 to 100 % LELranges:0 to 4 vol.-%1Gas supply:Diffusion or gassing with flow adapter

Lifetime of

the sensor:  $5 \text{ years}^2$ Response time:  $190 \le 9 \text{ s}^3$  **Temperature:** -20 to +50 °C (Ex zone)

-25 to +55 °C

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

**Dimensions:** 100 x 168 x 55 mm (W x H x D)

Weight: 800 g
Approvals /

**Certifications:**Markings & type

of protection: 

Il 2G Ex demb [ib] IIC T4 Gb

-20 °C ≤ Ta ≤ +50 °C

Functional

safety (SIL): DIN EN 61508-2: 2011<sup>4</sup>

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<sup>&</sup>lt;sup>1</sup> For ammonia only, <sup>2</sup> Depending on operating conditions, <sup>3</sup> Depending on gas type and sensor, <sup>4</sup> Depending on sensor