

# Transmitter EC28 DAR

for toxic gases, oxygen and hydrogen



- Gas concentration reading at transmitter display
- Ex-proof visual and audible alarm
- With relay for additional external alarms
- ATEX certified  $\text{Ex II 2 G Ex emb [ib] IIC T4}$
- One-man calibration at transmitter via touch keys or remote control
- Plug-in Smart Sensor
- Sensor replacement without opening housing

# Transmitter EC28 DAR

## Superior technology

Wherever gas hazards are to be expected, the transmitter EC28 DAR and GfG's proven control systems are the right choice for reliable surveillance. The ATEX-certified design provides the highest safety even in hazardous areas. LEDs indicate operation (green) or fault (red).

The transmitter EC28 DAR reads the current gas concentration at site on the display with a four-digit LCD for measurement values, messages and service. Adjustments and function tests are done directly with three touch keys under the transmitter display. Integrated buzzer and bright alarm LED make this transmitter a complete gas warning system. This avoids the cost for an Ex-proof buzzer and flashlight, and saves money for the wiring between controller and alarm. With an additional relay further alarm devices can be connected, e.g. to monitor different Ex-areas. The gas alarm does not only alert the control room but also the person at site.

## Smart sensors

Smart Sensor technology allows to install the transmitter or to replace a sensor within a few seconds – just plug the sensor into the transmitter. Adjustments are done directly at the transmitter via touch keys or with the remote control (one man calibration).

## Remote Control RC2

Ammonia and hydrogen are lighter than air. With the transmitter installed close to the ceiling you can provide permanently connected cable with plugs for the remote control, which allows the user to do all adjustments without having to climb a ladder. One remote control can be used for several transmitters. The remote control always shows the same reading as the transmitter. The remote control simplifies inspection, service and calibration considerably. In addition to this, the remote control reads the current gas concentration and can be used as an external display.

## Reliable detection and minimized cost of ownership

The sensor and integrated temperature compensation provide highest measurement accuracy. Low maintenance requirements and long sensor life reduce your cost of ownership.

## Versions

**EC28** basic unit without display.

**EC28 D** with display.

**EC28 DA** with display, bright alarm LED and integrated buzzer.

**EC28 B** with BUS-interface.

**EC28 DB** with display and BUS-interface.

**EC28 DAB** with display, BUS-interface, bright alarm LED and integrated buzzer.

**EC28 i** intrinsically safe model.

**EC28 Di** intrinsically safe and with display of actual gas concentration readings.



RC2 with EC28 DA

## Advantages at a glance

- Display of gas concentration at transmitter
- ATEX-approval
- Integrated Ex-proof visual and audible alarm
- Relay for external alarms
- Plug-in smart sensor for easy sensor replacement
- Long sensor life
- Low service requirement
- Permanent function display
- Calibration without opening housing

# Transmitter EC28 DAR Technical Data

## Detection principle:

Electrochemical sensor

## Ambient temperature:

-20°C .. +50°C

## Output signal:

4 - 20 mA

## Supply voltage:

15 - 30 V DC

## Weight:

800 g with display

## Dimensions:

100x193x55 mm (WxHxD)

## Casing protection:

IP64

## ATEX labelling:

ⒺII 2G Ex emb [ib] IIC T4

CE0158

## Touch keys:

3 keys for all adjustments / calibration, function test

## Display:

4-digit LCD for linearized measurement values and messages, service, LED for operation / fault

## Transmitter cable:

Shielded cable  
2/3/6 x 0.75mm<sup>2</sup>  
M 16 x 1,5



## Gases and Detection Ranges (ppm)

All detection ranges are scalable - except HF and O<sub>3</sub> (0 - 1 ppm)

Ammonia NH <sub>3</sub>	Chlorine Cl <sub>2</sub>	Chlorine dioxide ClO <sub>2</sub>	Hydrogen chloride HCl	Hydro cyanide HCN	Ethylene oxide C <sub>2</sub> H <sub>4</sub> O	Hydrogen fluoride HF	Carbon monoxide CO
0 - 200 0 - 500 0 - 1000	0 - 50 0 - 250	0 - 2	0 - 30 0 - 200	0 - 50 0 - 200	0 - 100	0 - 10	0 - 500 0 - 2000

Ozone O <sub>3</sub>	Phosgene COCl <sub>2</sub>	Oxygen O <sub>2</sub>	Sulphur dioxide SO <sub>2</sub>	Hydrogen sulphide H <sub>2</sub> S	Silane SiH <sub>4</sub>	Nitrogen dioxide NO <sub>2</sub>	Nitrogen monoxide NO	Hydrogen H <sub>2</sub>
0 - 1 0 - 5	0 - 2	0 - 30 Vol.-%	0 - 50 0 - 500	0 - 200 0 - 1000	0 - 50	0 - 50 0 - 200	0 - 300 0 - 1500	0 - 2000 0 - 1 Vol.-% 0 - 4 Vol.-%



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