

# EC28 Transmitter

The smart transmitter





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### Advanced technology

Wherever hazards are expected, the EC28 transmitter and GfG's proven monitoring systems are the right choice for reliable surveillance. The ATEX-certified design, an integrated, explosion proof buzzer, and bright alarm LEDs provide the highest safety in hazardous areas by including visual and audible alarms. The gas alarm not only alerts the person in the control room of hazards, but also the person on-site.

### Easy handling

Smart sensor technology allows a user 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 using touch keys or with the remote control (one-person calibration).

### RC2 Remote Control (optional)

Ammonia and hydrogen are lighter than air. With the transmitter installed close to the ceiling, GfG can provide permanently connected cables with plugs for the remote control, which allow the user to do all adjustments without having to climb a ladder. In addition, one remote control can be used for several transmitters, which helps cut costs and increase efficiency.

The remote control display is always identical to that of the transmitter, making inspection, service, and calibration considerably simple. The remote control reads the current gas concentration and can be used as an external display.

# « Flexible Solutions For Hazardous Areas. »

## The EC28 series offers several solutions

The EC28 is the "blind" version for Ex zone protection without a display but economical where you have several transmitters and a single RC 2 remote control to view the readings of each one.

The EC28 D model shows the current gas concentration on-site at the display of the transmitter and also at GfG's GMA controller.

The EC28 DA provides additional bright alarm LEDs and a buzzer – avoiding costs for a separate Explosion proof horn and an explosion proof light. You also save money on wiring to connect the controller and alarm devices.

The EC28 B is similar to the EC28 in that it is a "blind" version without display but this model has Modbus communication.

The EC28 DB model has display and communication is carried out using RS-485 industry standard with Modbus protocol.

The EC28 DAB includes display, alarm and Modbus and is also suitable for use in Ex zone areas.

In combination with GfG's flexible control units, the EC28 provides various possibilities for reliable and cost-effective gas monitoring.

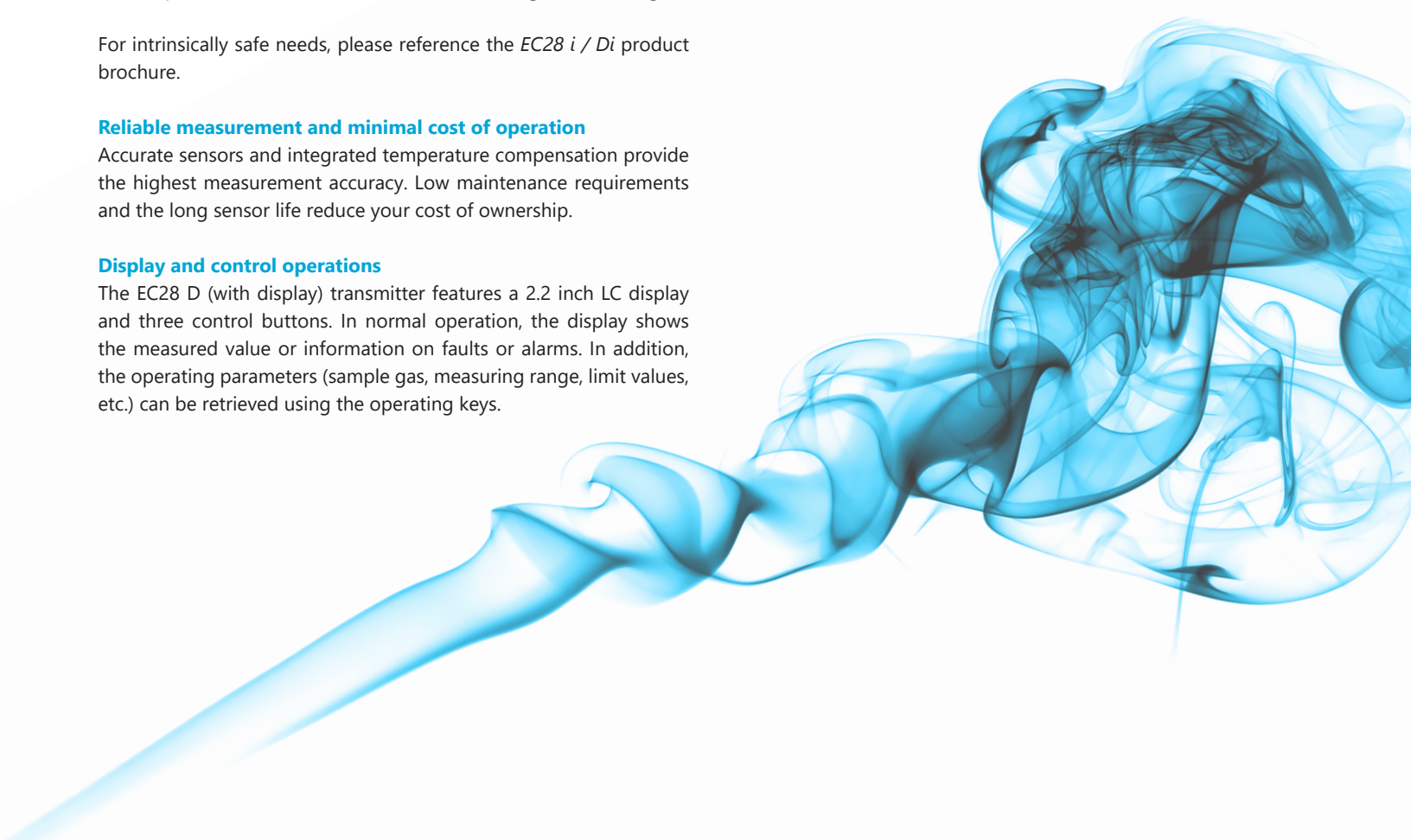
For intrinsically safe needs, please reference the EC28 i / Di product brochure.

## Reliable measurement and minimal cost of operation

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

## Display and control operations

The EC28 D (with display) transmitter features a 2.2 inch LC display and three control buttons. 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 retrieved using the operating keys.





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## Feature summary

- » Concentration display at transmitter or at remote control
- » Ex-proof visual and audible alarms
- » No need for expensive Ex-proof buzzer or wiring
- » Easy sensor replacement by means of plug-in smart sensors
- » Long sensor life
- » Permanent status and function display at transmitter
- » Adjustments without opening the casing using touch keys or remote control; easy handling even for hard-to-reach transmitters positions (e.g. at the ceiling)

## Technical Data: EC28

<b>Type designation:</b>	EC28 / EC28 D / EC28 DA / EC28 DAR / EC28 B / EC28 DB / EC28 DAB
<b>Measuring principle:</b>	Toxic gases and oxygen, Electrochemical (EC)
<b>Gas supply:</b>	Diffusion
<b>Response time:</b>	Sensor dependent
<b>Expected sensor life:</b>	Sensor dependent
<b>Power supply:</b> Operating voltage: Maximum supply current:	18-30 V DC 40 mA for EC28 and EC28 B 55 mA for EC28 D and EC28 DB 70 mA for EC28 DA and EC28 DAB 100 mA for EC28 DAR
Maximum fault voltage: Output signal:	250 V AC bzw. 45 V DC (see type plate) 4-20mA (max. load 200 Ohm) or two wire Modbus (only with EC28 B, EC28 DB, EC28 DAB)
<b>Alarms:</b>	Only with EC28 DA, EC28 DAR, EC28 DAB optical and acoustic (90 dB @ 1 ft / 10 cm)
<b>Relay output:</b>	1 changeover, potential-free (only with EC28 DAR) U <sub>max</sub> =30 V AC/DC, maximum short-circuit current of supply source 1A
<b>Environmental conditions:</b> Short-term storage temperature: Temperature for storage: Temperature for operation: Humidity: Pressure:	-13 to +140 °F / -25 to +60 °C +32 to +86 °F / 0 to +30 °C -4 to +122 °F / -20 to +50 °C 5 to 90% r.h. 8 to 120 kPa
<b>Housing :</b> Stability: Material: Dimensions: Weight: Protection class: Cable connection: Cable type and length:	Protect the casing against very hard impacts (> 4 J) Anti-static plastic 7.63 x 3.94 x 17 in / 115 x 203 x 55 mm (W x H x D) (H with sensor: 7.59 in / 193 mm) 28.22 oz / 800 g (with display) IP64 Cable gland(s) M16x1.5 max. core cross-section 3(4) x 1.5 mm <sup>2</sup> LIYCY 3(4) x 0.75 mm <sup>2</sup> up to 500 m (up to 200 m with EC28 DA...) or LIYCY 3(4) x 1.5 mm <sup>2</sup> up to 1000 m
<b>Approvals / Certifications:</b> Markings and ignition protection types: EU Type Examination Certificate: Electromagnetic compability:	 II 2G Ex emb [ib] IIC T4 Gb -20°C ≤ Ta ≤ +50°C  0158 BVS 04 ATEX E 132 X DIN EN 50270 Interference emission: Type class I Interference immunity: Type class II



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All specifications on this brochure are subject to technical changes due to further development.

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