

GfGsafety.com

EC28 DAB Transmitter

With Display, Alarm and Bus for Use in Ex Zones





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Whenever toxic gases, oxygen or hydrogen need to be monitored, current measured values are to be displayed locally and transmitted digitally, and an alarm needs to be issued on site, the EC28 DAB transmitter combined with GfG's proven control units is the solution of choice. The ATEXcertified design means it can be used even in potentially explosive atmospheres.

The hardware of the EC28 DAB complies with the European Functional Safety Standard DIN EN 61508-2: 2011 for many gases. The SI levels (up to SIL3) in singlechannel (1001) or redundant (1002) use are listed in the overview of gases.

Communication and Service

Communication is carried out via RS-485 industry standard with Modbus protocol. The Smart Sensor technology enables the quick and easy replacement of the sensor. Adjustments can be made using the RC2 remote control (one-man calibration).



Display, Control Buttons and Alarms

The EC28 DAB 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 called up via the operating keys. The EC28 DAB has highly visible, red alarm LEDs and a loud, integrated horn (90 dB). Costs for additional, ex-protected alarm devices can therefore be eliminated.



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
5630 D	
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
F C 2 2 1	-
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: ⓑ II 2G Ex eb mb [ib] IIC T4 Gb €€0158 -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	(As
» Bromin gas	(Br ₂
» Chlorine dioxide	(Cl
» Hydrogen cyanide	(HC
» Diborane	(B ₂)

» Ethvlene oxide » Carbon monoxide » Ozone » Phosgene

 (C_2H_4O) (CO) (O_3) $(COCI_2)$ (PH_2)

» Sulphur dioxide (SO_2) » Hydrogen sulphide (H_2S) (NO₂) » Nitrogen dioxide » Nitrogen monoxide (NO) » Hydrogen (H_2)

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smart GasDetection **Technologies**

H3)) (N) H_6)

Other gases on request

» Phosphine