Fixed gas detection systems

smart GasDetection Technologies

EC28 DB Transmitter

Ex Zone Monitoring with Display and Modbus

MADE IN GERMANY

GfGsafety.com

EC28 DB Transmitter

Ex Zone Monitoring with Display and Modbus

Whenever toxic gases, hydrogen or oxygen are to be monitored and current measured values are to be displayed locally as well as transmitted digitally, the EC28 DB transmitter combined with GfG's proven control units is the perfect solution. The ATEX-certified design means it can be used even in potentially explosive atmospheres. The hardware of the EC28 DB complies with the European Functional Safety Standard DIN EN 61508-2: 2011 for many gases. The SI levels (up to SIL3) in single-channel (1oo1) or redundant (1oo2) 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.

Display and Control Buttons

The EC28 DB 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.

Remote Control RC2 (optional)

If the EC28 DB has to be mounted in a difficult-to-access location, the RC2 remote control facilitates servicing and adjustments (one-man adjustment). It displays the same information that is shown on the transmitter's display.

Reliable Measurement & Minimal Operating Costs

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
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
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.

Overview of Gases and SI Levels:

		1oo1	1oo2
» Ammonia	(NH_3)	2	3
» Arsine	(AsH_3)	-	-
» Bromine gas	(Br_2)	-	-
» Chlorine	(Cl_2)	1	2
» Chlorine dioxide	(ClO_2)	2	3
» Hydrogen chloride	(HCl)	1	2
» Hydrogen cyanide	(HCN)	1	2

		1oo1	1oo2
» Diborane	(B_2H_6)	1	2
» Ethylene oxide	(C_2H_4O)	-	-
» Hydrogen fluoride	(HF)	1	2
» Carbon monoxide	(CO)	2	3
» Ozon	(O_3)	2	3
» Phosgene	($COCl_2$)	-	-
» Phosphine	(PH_3)	1	2

		1oo1	1oo2
» Oxygen	(O_2)	2	3
» Sulphur dioxide	(SO_2)	-	-
» Hydrogen sulphide	(H_2S)	1	2
» Silane	(SiH_4)	1	2
» Nitrogen dioxide	(NO_2)	1	2
» Nitrogen monoxide	(NO)	1	2
» Hydrogen	(H_2)	-	-

Technical Data EC28 DB:

Measuring principle: Electrochemical (EC)
Gas supply: Diffusion or gassing per calibration adapter
Temperature:
in Ex zones -20 to +50 °C
outside Ex zones -25 to +50 °C
Humidity: 5 to 90 % r. h.[1]
Air pressure: 80 to 120 kPa[1]

Output signal: RS-485
Power supply: 18 to 30 V DC
Housing: Plastic
Protection class: IP64
Dimensions: 115 x 203 x 55 mm (W x H x D)
Weight: 800 g

Approvals / Certifications:
Markings & Type of Protection: Ⓔx II 2G Ex eb mb [ib] IIC T4 Gb
-20 °C ≤ Ta ≤ +50 °C
Functional Safety (SIL): DIN EN 61508-2: 2011

[1] see sensor specifications

GfG Asia Pacific Pte. Ltd.
33 Ubi Avenue 3, #06-21B | Vertex Building, Tower B | Singapore 408868
Phone: +65 6 227-4346 | **E-mail:** sales@gfg-asiapac.sg

GfGsafety.com

smart GasDetection Technologies