

Transmitter EC24

for toxic gases, oxygen and hydrogen



- Long life sensors - reduced cost of ownership
- High selectivity
- 0.2 .. 1mA or 4 .. 20mA signal output
- Service lid for:
 - measuring the output signal
 - simple one-man at site calibration
- Robust aluminium casing, IP54 (IP68 optional)
- Plug-in sensor in stainless steel casing, interchangeable without opening the detector

Worldwide Supplier Of Gas Detection Solutions



Transmitter EC24 - The intelligent transmitter

The EC24 is a robust gas transmitter for the detection of toxic gases, oxygen and hydrogen in ambient air. The electrochemical sensor measures very selectively and prevents expensive fault alarms. The amplifying electronics of the transmitter provide a very exact transfer of the measuring signal to the controller. Potentiometers and connectors behind the service lid allow a calibration at site. The casing protection is available up to IP68. That watertight design provides the EC24 with a protection against dirt, and splash water.

The EC24 is an „intelligent transmitter“

Its comprehensive electronics take on a lot of tasks, that make operation much easier and highly ensures reliability and accuracy of measurements. This transmitter is featured by:

- Simple at site calibration
- Service lid for the setting of zero-point and span
- Compensation of temperature effects

Depending on the version, an internal or an external sensor and a signal output 4 .. 20 mA or 0,2 .. 1 mA are available

Mounting position of the EC24

For determination of the mounting position it is important to know and to consider the ambient conditions. To achieve true measurement results the

- ventilation conditions
- density of the gases

need to be considered.

The EC24 must be installed so that the gas reaches the sensor even in poorly ventilated areas. If necessary a check with smoke tubes can be effected.

Other influences like

- rain water, dripping water, condensate
- dust in the atmosphere

need to be considered, as well.

The transmitter EC24 can be protected against water and dust ingress (IP66). Under very harsh measuring conditions special accessories can protect the EC24.

Gases and Detection Ranges:

Ammonia (NH ₃)	0 .. 200 ppm
Chlorine (Cl ₂)	0 .. 5/20 ppm
Hydrogen chloride (HCl)	0 .. 10/20/50 ppm
Hydro cyanide (HCN)	0 .. 20/50 ppm
Ethylene oxide (C ₂ H ₄ O)	0 .. 20 ppm
Hydrogen fluoride (HF)	0 .. 10 ppm
Carbon monoxide (CO)	0 .. 100/200/300/ 600/1000/ 2000 ppm
Ozone (O ₃)	0 .. 3 ppm
Oxygen (O ₂)	0 .. 25 Vol.-%
Sulphur dioxide (SO ₂)	0 .. 10/50 ppm 0 .. 100 ppm
Hydrogen sulphide (H ₂ S)	0 .. 30/50/200 1000 ppm
Nitrogen dioxide (NO ₂)	0 .. 20 ppm
Nitrogen monoxide (NO)	0 .. 100/500/ 1000 ppm
Hydrogen (H ₂)	0 .. 200/2000 ppm 0 .. 2 Vol.-%

Transmitter EC24 Technical Data

Gases:
Oxygen (O₂):
0 .. 25 Vol.-%

Toxic gases:
CO, H₂S, SO₂, NO, NO₂, H₂, HCl, HCN, NH₃, O₃ in ppm

Detection principle:
electrochemical sensor, plug-in

Gas supply:
Diffusion

Response time t₉₀:
depending on gas

Temperature range, humidity and pressure:
depending on gas

Power supply:
18...24 V DC

Casing:
Aluminium

Weight:
980 g

Dimensions:
80 x 185 x 60 mm (WxHxD)
with sensor holder

80 x 125 x 60 mm (WxHxD)
without sensor holder

Protection class:
IP54 or IP68 depending on version

ATEX-labelling:
Ⓢ II 3G EEx nR [L] IIC T6 X
-20°C ≤ Ta ≤ +50°C



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