



EC22 O Transmitter with display

Accurate O₂ measurements even in helium-containing environments





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Oxygen monitoring is part of the basic safety concept in many manufacturing processes.

Many industries, such as semiconductor manufacturing or laboratory and research facilities, also use helium, because it is both a good electrical insulator and chemically extremely inert.

However, timely detection of oxygen deficiency is made more difficult when a very light gas such as helium escapes, since its gas density is only 0.14 (air = 1). The EC22 O with partial pressure sensor and display was developed specifically for monitoring oxygen in environments with gases of low molecular weight.

Protection level, display and operation

The compact housing for wall mounting is protected against splash water and dust (IP54). The front of the EC22 O features a 2.2-inch color backlit display, three push buttons for service and operation, and two status LEDs.



Analog version of the EC22 O with one cable entry and display

Communication

Signal transmission, e.g. to GfG gas measuring computers or higher-level process control systems, is either using 4-20 mA industry standard (alternatively also with 0.2-1 mA) or using the digital RS-485 interface (Modbus RTU).

Reliable and Cost-effective

Additionally, a smart electronic system controls temperature compensation and facilitates operation and maintenance. The high quality and durable sensor (expected 5-years life) ensures many years of use.

The best measurement method

The EC22 O with partial pressure sensor is the only way to reliably monitor the concentration of oxygen even environments that contain or may contain

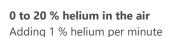
The 22 series transmitters

In addition to the highly specialized EC22 O, the 22 series offers a wide range of other high-quality transmitters for many gases and measuring ranges:

CC22	For monitoring
	combustible gases
CC22 ex	For monitoring combustible
	gases in Ex zone 2
CS22	For monitoring refrigerants
EC22	For monitoring
	toxic gases, H_2 and O_2
IR22	For monitoring
	combustible gases and CO₂
IR22 F	For monitoring CO₂
	in cold stores
ZD22	For monitoring O₂

The 22 series transmitters are usually available in a version with or without display, push buttons and buzzer.

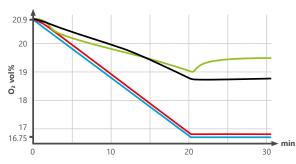
Sensor readings of different sensor technologies





 EC partial pressure sensor Zirconium dioxide sensor

— Standard EC sensor



EC22 O with display Technical Data:

Measuring principle: Measuring range: Gas supply:

Electrochemical (EC) 0 to 35 vol%1 Diffusion or gassing

per flow adapter

Lifetime of the sensor: 5 years **Response time:** t90 ≤ 5 s Temperature: **Humidity:** Air pressure:

0 to 90 % r. h. 70 to 125 kPa

0 to +50 °C

Output signal:

Analog: 0.2-1 mA or 4-20 mA

Digital: RS-485 **Power supply:** 12 to 30 V DC Plastic **Housing: Protection class: IP54**

Dimensions: 96 x 153 x 49 mm

 $(W \times H \times D)$

Weight: 310 to 390 g

¹ Configurable measuring range

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