

Oxygen trace analyser Oxystem S



- Oxygen analyser with largest range possible
- Completely self-monitoring
- Maintenance-free
- Fully automatic operation

Application Monitors inert gas atmospheres for absence of oxygen in order to avoid oxidation. Measurement of residual oxygen concentration in the production of noble gases and nitrogen. Oxygen measurement without cooling (hot measurement); the system can directly process gas with temperatures of up to 350 °C.

Description The analyser is designed as a 19" rack housing 3 U, 84 HP. All components are integrated in a single housing. The electronic system is operated via keypad and display. The ranges % by volume, ppm and e xx % by volume O₂ are fully automatically switched over on the display. The menu item "Error status" provides more detailed information on the self-monitoring functions. All status and alarm messages are indicated at the front plate (display with blinking exclamation marks) and output via a voltage-free contact. The sensor is based on the principle of solid electrolytes (zirconium dioxide). The free oxygen ion movement begins at temperatures of more than 500 °C (solid electrolyte potentiometric method). The sensor is heated. The oxygen concentration is calculated from the cell voltage and the temperature according to Nernst's law.

Technical specifications

Operating temperature range

Medium: +5/+350 °C
Ambient: +5/+45 °C

Permissible reference gas throughput

2/10 l/h

Gas inlet/gas outlet

6 mm Swagelok/4 mm hose connection

Supply voltage

AC 230 V, 50–60 Hz

Power input

40 VA

Analogue output

0–20 mA or 4–20 mA (selectable)

Switching outputs

Relay contacts: 3 voltage-free changeover contacts
Contact rating: 0.5 A

Display

Four-line, alphanumerical LC display (temperature, oxygen concentration % by vol./ppm). Measuring range can be selected as required between 100 % by volume and 0.1 ppm O₂ via the software. Operation via keypad and menus.

Housing

19" rack housing, 3 U
W x H x D: 470 x 134 x 315 mm
Weight: 10 kg
Degree of protection: IP 10 (EN 60529)

DG: E	Part no.	Price €
Oxystem S	69551	
Flow meter with needle valve	69552	
Integrated gas pump	69553	
2 relays for limit values	69454	
Outlet 6 mm Swagelok	69554	