

AUT555

ppm / % Oxygen Transmitter

AUT555 ppm / % Oxygen Transmitter is a microcontroller-based online oxygen analyzer built around a galvanic fuel-cell oxygen sensor. It delivers intelligent operation, high precision, fast response and excellent long-term stability across a wide range of process conditions. A 128 × 64 graphic LCD provides a clear, information-rich readout, while user-configurable parameters keep operation simple. Three installation modes – in-line gaspipe connection, flange mounting and threaded mounting – suit virtually any sampling setup.

Ranges from 0–1000 ppm up to 25.00 % O₂ · 4–20 mA output · optional digital communication



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Shown with tube-fitting process connection

KEY FEATURE

- Galvanic fuel-cell oxygen sensor with advanced digital signal processing for high accuracy and strong anti-cross-interference performance.
- Industry-leading temperature-compensation method keeps readings stable across the full operating range.
- Parameter-lock protection prevents accidental setting changes from affecting normal operation.
- 128 × 64 graphic LCD with intuitive, menu-driven operation and freely configurable parameters.
- Three installation modes – gas-pipe, flange and thread – to suit any sampling setup.

General Specifications*

Sensor Technology	Galvanic Fuel-Cell Oxygen Sensor
Measuring Rang	0–1000 ppm up to 0.1–25.00 % O ₂ (model dependent)
Analog Output	4–20 mA (load resistance ≤ 500 Ω)
Digital Communication	Optional (per configuration)
Display	128 × 64 graphic LCD
Power Supply	24 VDC, 0.42 A
Power Consumption	< 1 VA
Operating Temperature	0 – 45 °C
Operating Humidity	< 90 % RH
Sample Temperature	5 – 45 °C
Sample Flow Rate	800 – 1000 ml/min
Installation Modes	Gas-pipe / Flange / Thread
Measured Gas Compatibility	Specify CO ₂ , H ₂ S, SO ₂ , NO _x , NH ₃ & other background gas

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Measurement Performance*

Model	Measuring Range	Accuracy	Repeatability	Stability	Response Time
AUT555 0–1000 ppm O ₂	0–10 ppm O ₂	±5% FS	±2.5% FS	±2.5% FS / 7d	T90 < 60 s (25°C)
	0–100 ppm O ₂	±3% FS	±1.5% FS	±1.5% FS / 7d	
	0–1000 ppm O ₂	±2% FS	±1% FS	±1% FS / 7d	
AUT555-1 10–10000 ppm O ₂	10–100 ppm O ₂	±3% FS	±1.5% FS	±1.5% FS / 7d	T90 < 60 s (25°C)
	100–1000 ppm O ₂	±2% FS	±1% FS	±1% FS / 7d	
	1000–10000 ppm O ₂	±2% FS	±1% FS	±1% FS / 7d	
AUT555-2 100 ppm–25.00% O ₂	100–1000 ppm O ₂	±2% FS	±1% FS	±1% FS / 7d	T90 < 60 s (25°C)
	1000–10000 ppm O ₂	±2% FS	±1% FS	±1% FS / 7d	
	1.00–25.00% O ₂	±2% FS	±1% FS	±1% FS / 7d	
AUT555-3 0.1–25.00% O ₂	0.1–25.00% O ₂	±2% FS	±1% FS	±1% FS / 7d	T90 < 20 s

APPLICATIONS

- Air separation
- Gas production and testing
- Petrochemical process gas monitoring
- O₂ in inert and hydrocarbon gases
- Food production, packaging & storage
- Semiconductor protective-gas monitoring
- Heat-treatment & annealing atmosphere

Ordering Information

AUT555 – [Test Chamber] – [Function] – [Measuring Range]

Test Chamber (except AUT555-3): G = GE · K = KF40 · Y = Organic glass

Dedicated to AUT555-3: G25 = GE · K25 = KF40 · Y25 = Organic glass

Function Configuration: A = No output · B = One analog output · C = Two analog outputs · D = Communication · E = Communication + one analog output

Measuring Range: (blank) = 0–1000 ppm · 1 = 10–10000 ppm · 2 = 100 ppm–25.00% · 3 = 0.1–25.00%

Note: The measured gas composition – whether it contains CO₂, H₂S, SO₂, NO_x, NH₃ or other background gases – must be specified at time of order to ensure correct sensor selection and reliable measurement.

* Specifications are validated during design and are subject to change without notice.