

# PA-10 Paramagnetic Oxygen Analyzer

For applications such as medical gas testing that require paramagnetic sensors

The PA-10 oxygen analyzer is the instrument of choice for oxygen measurements requiring single channel full range (0-100%), fast response (0.2 sec) and high resolution. This oxygen analyzer is ideal for applications such as medical gas testing that require paramagnetic sensors for standards compliance.

Many standards organizations specify paramagnetic oxygen analyzers for critical measurements. The PA-10 covers the complete oxygen concentration range from 0 - 100%, and is barometric pressure and temperature compensated. Unlike fuel cell and heated zirconia oxygen sensors, the PA-10 sensor does not have an intrinsically limited life and never requires replacement or rebuilding.

In keeping with our "field aware" design philosophy, the PA-10 is remarkably compact and lightweight, and is powered by noncritical 10-18 VDC power. It requires less than ten minutes warm-up, compared to up to 24 hours for other analyzers. Also, the PA-10 consumes less than 5 watts of power, dramatically less than the 200 watts required for competitive models.



## FEATURES

Standards compliant paramagnetic sensor technology

Fast response

Scalable analog and serial output

Range 0-100%, resolution .0001%

Barometric pressure and temperature compensation

Ideal for H2S gas mixtures

# PA-10 Paramagnetic Oxygen Analyzer

## SPECIFICATIONS

<b>ACCURACY AND RESOLUTION</b>	Oxygen: Accuracy better than 0.1% of full scale, 0-100% oxygen; resolution 0.0001% O <sub>2</sub> - at constant temperature and flow Barometric Pressure: Accuracy better than 0.05% of full scale; resolution 0.0001 kPa - at constant temperature and flow
<b>ANALOG OUTPUTS</b>	Three BNC: oxygen 0-5 Volts for multiple ranges; barometric pressure 0-5 Volts for multiple ranges; sensor temperature 0-5V
<b>CONNECTIONS</b>	Nickel plated barb fittings for 1/8 in (3mm) ID flexible or semi-rigid tubing
<b>DISPLAY</b>	Digital, 2 x 16 alphanumeric LCD
<b>DIMENSIONS</b>	(W x D x H) 12 x 10 x 4 in. (33.5 x 25.4 x 10.2 cm)
<b>DRIFT</b>	< 0.02% over 24 hours (measured at atmospheric oxygen concentrations) - at constant temperature, flow rate and O <sub>2</sub> concentration, 2 second filtration
<b>FLOW RATE</b>	25 – 200ml/min (do not exceed maximum flow rate)
<b>NOISE</b>	< 0.002% RMS over 20 minutes - at constant temperature, flow rate and O <sub>2</sub> concentration, 2 second filtration
<b>POWER REQUIREMENTS</b>	12-24 VDC; universal adapter supplied
<b>RANGE</b>	0-100% O <sub>2</sub> , 0-105+ kPa O <sub>2</sub>
<b>READOUT</b>	Simultaneous display of oxygen (0.0001 % or 0.0001 kPa resolution) and barometric pressure (0.001 kPa resolution)
<b>RESPONSE TIME</b>	<0.5 second for 10% to 90% of a step change (200 ml/min, no averaging)
<b>SERIAL OUTPUT</b>	RS232-8N1; both polled and broadcast modes available
<b>TECHNOLOGY</b>	Paramagnetic sensor (never needs replacement)
<b>WEIGHT</b>	5 lbs (2.3kg)
<b>TECHNOLOGY</b>	Dual wavelength infrared with gold-plated optical path
<b>TEMPERATURE RANGE</b>	Operating, 18 to 45 C, non-condensing relative humidity
<b>WEIGHT</b>	6lbs/2.8kg (11lbs/5kg with packaging)

## ABOUT US

Sable Systems International designs and manufactures leading-edge gas, metabolic and behavioral measurement systems for calorimetry, respirometry, metabolic/behavioral phenotyping, and gas analysis. Our products enable the highest precision and resolution, optimum workflow and reliable performance – giving you utmost confidence in your results. Scientists the world over rely on Sable technology for their research needs in physiological, biomedical, environmental, and gas analysis applications.



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