

## MEDOX Safeguards Medical Oxygen

**Industrial Gas** 

lectronic Gas

Natural Gas

Medical & Aviation

Aerospace & Military

Glove Box

Specialty Gases

Oxygen quality truly can be a matter of life and death. Utilizing MEECO's proven and trusted electrolytic technology (specified in 1999 by the European Pharmacopoeia for medical gases), the MedOx<sup>TM</sup> conforms to the highest standards for medical gas, based on independent evaluation of our analyzer. Designed specifically to monitor evidence of moisture contamination in medical oxygen, the MedOx provides continuous, highly linear, online analysis.

Much as the MedOx is a proven and reliable way to analyze moisture in oxygen for hospitals, emergency services, home healthcare, and the aviation industry, it is equally applicable for industrial gas as dry as 0.5 ppmV. To that end, the MedOx features built-in compensation with safe atmospheric moisture to maintain the analyzer's alacrity while in purge mode. That way, as a trusted first responder, your MedOx is always ready!

Exceptional features include:

- □ <u>Wide Dynamic Range</u>: From 0.5 ppmV to 1000 ppmV moisture detection compliant with the Pharmacopoeia Europa
- □ **Quick Response**: Remote controllable moisture addition technology for very dry process and purge gas ensures fast speed of response
- □ <u>European Pharmacopoeia Designated</u>: Standards upheld in Europe, South Africa, and Latin America
- □ <u>Freedom from Calibration</u>: MEECO's electrolytic technology is based on Faraday's Law, providing absolute accuracy traceable to national metrology standards
- □ Low Cost of Ownership: Two-year instrument warranty, with a two-year calibration of the cell as well, with fixed price, low-cost factory refurbished cells available
- □ Compact Footprint: Two MedOx analyzers fit neatly into one 19" rack

Service with a Big Smile : The MedOx comes with a full two-year Certificate of Calibration. The cell can easily be replaced in the field, with no need to disconnect the unit from the sample stream! Also, spare cells have a two-year storage life if unopened in their shipment bags.



## MedOx



## **MedOx Applications:**

Working shoulder-to-shoulder with medical oxygen manufacturers and users since the early 1950s, MEECO has a long history of service and reliability in support of your critical needs, such as:

- □ ASU/Cylinder Filling Plants: The MedOx comes complete with a built-in and automated moisture addition system. This keeps the cell in excellent condition and prevents dry out when on purge gas.
- Mechanical Ventilators: With the need for breath assistance underscored by the lung impairment resulting from Covid-19, guaranteed oxygen purity is mandatory. For patients in critical condition, medical oxygen may comprise from 21% to 50% of the mixture. Moisture analysis assures purity and avoids gas line freeze-up.
- Anesthesia: Medical oxygen is used as a vital precursor and component of general anesthesiology mixtures. Whether the carrier gas is air or oxygen, it should be measured for moisture.
- Aviation: The oxygen required must have a purity of 99.9% or greater and a moisture level of no more than 3 ppmV to avoid pilot hypoxia.

Specifications:	
Detection Limit (LDL):	0.5 ppmV
Operating Range (for inert gases):	0-1000 ppm V
Accuracy:	±5% of reading or 0.4 ppmV, whichever is greater In Oxygen: ±10% of reading or 3 ppmV, whichever is greater
Cell type (P2O5):	APO*
Gas Matrices Library:	Nitrogen, Oxygen, Argon, CDA, Helium, Carbon Dioxide, Nitrous Oxide and others including gas mixtures. For other gases, please consult factory.  *for Oxygen (mixtures) APO cell is required.
Moisture addition:	Automated, custom activation level between 0.5 - 10 ppmV
Inlet Pressure:	30 -150 psig (2.1 – 10.3 barg).
Operating (Ambient) Conditions:	0°C to +60°C (32°F to +140°F), maximum 80% RH non-condensing
Flow Rate:	Cell: 100 sccm  Bypass 1000 sccm (total gas consumption ~ 1.1 slpm)
Displayunit options:	ppmV, ppbV, °C or °F dewpoint
Gas Connections:	Inlet: 1/4" VCR, Outlet: 1/8" compression. Bypass outlet: 1/8" compression
Signal Output:	(Field Configurable Isolated 0-5 VDC or Isolated Current Output 4-20mA, 0-20mA, or 0-24 mA) RS - 232 Communications – Standard
Alarms:	Two (2) user-adjustable moisture levels
Electrical:	100 – 240 VAC, 50/60 Hz, 50 watts.
User Interface:	5-key Membrane Keypad. 2-line x 20-character Vacuum Fluores cent Display (VFD).
Weight:	22 lbs.(10.0kg)
Dimensions (H x W x D):	7" x 8" x 14" (17.8 cm x 20.3 cm x 35.6 cm)
Mounting:	Stand alone (Optional: 19" Rack Mount (Size: 7" x 19" x 17" (17.8 cm x 48.3 cm x 43.2 cm))

