AMEGAS

Medical Air & Medical O2 Monitor



This modular system can be used as a permanent monitor or as a portable point to point periodic checker ideal for pharmacopoeia compliance. Using the latest sensor technology with the required accuracies, users can monitor the following: Oxygen (O2), Carbon Dioxide (CO2), Volatile Organic Compounds (VOC), Dewpoint (H2O), Carbon Monoxide (CO), Nitrogen Dioxide (NO2) and Nitric Oxide (NO). There is also a sample port to conduct an oil mist test, the unit datalogs and has MODBUS.

Nitric Oxide is used to treat ailments such as acute lung injury, respiratory distress syndrome and for pulmonary hypertension so is a vital and commonly used medical gas. The purity of this medical gas is not only a vital part of pharmacopoeia standards but vital for the safety and treatment of patients.

Key Features:

- Continuous monitoring of O2, CO2, VOC, CO, H2O, SO2, NO, NO2
- Complete traceability of medical gas quality
- Compliance with mandatory legislation & duty of care
- Better safety for patients
- Protect equipment & pipework from water damage & improve product reliability
- Easy to install & low maintenance
- Fixed installation & portable multi-point monitor
- Oil sample inlet
- Case or Rack mounted
- Humidifier: Ensures long life of sensors for 24/7 operations

Whilst pharmacopoeia standards vary around the world, they all require accurate readings which are taken to ensure contaminants are kept to a minimum and the make-up of the medical nitric oxide is as pure as possible. Up until the AMEGAS was available, common practice was to use colorimetric tube systems and/or a selection of gas detection systems. Users can now monitor continually with one system and achieve the accuracies required in the standards.

As the AMEGAS is provided in a robust carry case on wheels, it can be used to either check multiple locations or set up permanently either free standing or in an equipment rack meaning that it suits the requirements of individual hospitals and QC Pharmacists charged with checking the medical gases.





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Below gases are available for your Amegas:

O2: Partial pressure electrochemical cell with atmospheric pressure compensation

Range: 0 to 100%

Accuracy: ± (0.035% O2 + 1% of reading + 0.15% of reading/°C)

CO2: NDIR Partial pressure electrochemical cell with atmospheric pressure compensation

Range: 0 to 1000ppm

Accuracy: ± (25ppm CO2 + 1% of reading +1ppm CO2/°C)

VOC: PID Partial pressure electrochemical cell with atmospheric pressure compensation

Range: 0 to 100ppm

Accuracy: ± (1ppm VOC + 5% of reading + 0.25% of reading/°C)

CO: Range: 0 to 20ppm

Accuracy: ± (1ppm CO + 5% reading + 0.1ppm CO/°C + 0.5% of reading/°C)

H2O: Capacitive sensor

Range: 0 to 100mg/m^3 or -80°C to -30°C Accuracy: $\pm (0.15 \text{mg/m}^3 \text{H2O} + 20\% \text{ of reading})$

SO2: 4 Pin electrochemical cell

Range: 0 to 20ppm

Accuracy: ± (2ppm + 0.1ppm SO2/°C)

NO: 4 Pin electrochemical cell

Range: 0 to 100ppm

Accuracy: ± (4ppm + 0.17ppm NO/°C)

NO2: 4 Pin electrochemical cell

Range: 0 to 10ppm

Accuracy: ± (1ppm + 0.05ppm NO2/°C)

Analyser specifications:

Analyser type: Fixed/Portable

Supply Voltage: 24V DC nominal (12 to 32V DC) Optional universal mains supply available

(95 to 250V AC 50/60Hz)

Operating Temperature:

Storage Temperature: -10 to +60°C

Power consumption: 24W max

Dimensions: Analyser 175 x 110 x 75mm

0 to +45°C

Repeater 72 x 170 x 45mm

Response Time: Gases <120 sec T90 H2O < 15mins T90

Warmup Time: Gases 60 seconds H2O 15mins

Inlet Pressure: 5 to 10 bar gauge

Flow Rate: 5 lpm max

Outputs: 1 x Volt free relay contact / 3 x 24V DC switched output

Dimensions: Fixed Unit 350 x 360 x 170mm

Sounder: 75dbA @ 10cm

Alarm: User configurable alarms for each gas measured

Options: 4 to 20mA, 0 to 1V, 2 x relays

Warranty: 1 year electronics

2 years graded - O2 sensor 2 years - CO2 sensor

1 year - all other sensors

IP Rating: IP 5

Certifications and approvals: CE marked. Not a medical device

Part Number: 72-8050-AME

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