

MATRIX and MATRIX Plus

Medical Gas Verification – Made Simple



PRODUCT FEATURES

- Real-time monitoring for 8 gases
- Faster station analysis
- Easily transportable and durable case
- Battery operated (12 hrs)
- Optional datalogger
- Complete field analysis in one instrument

The MATRIX medical gas verifier is designed for the real-time analysis and verification of hospital gases to ensure compliance with NFPA 99.

The MATRIX offers the operator two key advantages:

- Reduces the time to complete a full analysis on station.
- Avoids the complexity of using single purpose instruments.

The MATRIX uses an (8) channel multi-sensor system to simultaneously monitor the following gases.

Carbon Monoxide	Nitrous Oxide
Carbon Dioxide	Trace Hydrocarbons
Oxygen	Anesthesia Gases
Methane	Dew Point

The MATRIX is a transportable instrument that is fully self-contained and able to operate on-site for 12 hours with no external support requirements. The real-time analysis data is displayed on the front LCD panels, which have integral alarm concentration indicators and loss of flow alarms.

The MATRIX Plus offers a datalogging option which allows the analysis data to be displayed on a PC via a USB connection. This permits the real-time data to be displayed in a graphical plot. The datalog can be archived with a location file name for use in reports. Additionally, the MATRIX Plus can be configured with a sampling pump for those applications which are not pressurized.

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GENERAL SPECIFICATIONS

Power	120 VAC/Lithium ion battery
Battery Capacity	12 hours, under normal conditions
Size	19 x 15 x 8 inches / 48 x 38 x 20 cm
Weight	19 Lb. / 8.6 Kg
Alarm	LED visual indicator per channel with flow alarm
Humidity Range	0-95 (non-condensing)
Operating Temperature	32-77° F
Inlet Pressure for Dew Point	55 psig
Inlet Flow Rate for Sensors	0.5 liters/minute

SPECIFICATIONS FOR GASES MONITORED*

GAS	RANGE	ALARM POINT 1	ALARM POINT 2	ACCURACY AT ALARM POINTS	SENSOR TYPE	DISPLAY INCREMENT
1. Carbon Monoxide (CO)	0-50 ppm	10 ppm	20 ppm	± 1 ppm	EC	1 ppm
2. Carbon Dioxide (CO ₂)	0-5000 ppm	1000 ppm	2000 ppm	± 20 ppm	NDIR	10 ppm
3. Dew Point	-112° to + 68°F	+35°F at 55 PSIG	+50°F at 55 PSIG	± 2°F	TFP	1°F or 1°C
4. Trace Hydrocarbons	0-20 ppm	5 ppm	10 ppm	± 1 ppm	PID	0.1 ppm
5. Anesthesia Gases	0-100 ppm	50 ppm	100 ppm	± 5 ppm	MOS	1 ppm
6. Oxygen (O ₂)	0-100% by Vol.	↓95% by Vol.	↓90% by Vol.	± 0.1% by Vol.	PP/EC	0.1% by Vol.
7. Methane (CH ₄)	0-5000 ppm	500 ppm	1000 ppm	± 10 ppm	NDIR	10 ppm
8. Nitrous Oxide (N ₂ O)	0-100% by Vol.	↓95% by Vol.	↓90% by Vol.	± 3% by Vol.	NDIR	1% by Vol.
9. Carbon Dioxide (CO ₂)	0-100% by Vol.	↓95% by Vol.	↓90% by Vol.	± 3% by Vol.	NDIR	1% by Vol.

* NOTE: Maximum 8 gases per instrument

