

Specifications

Gases Detected	Nitric Oxide (NO) and Nitrogen Dioxide (NO ₂)	
Sensor Type	Electrochemical fuel cells	
Measurement Range	NO	100 parts per million (ppm)
	NO ₂	20 ppm
Resolution	NO	0.05 ppm
	NO ₂	0.05 ppm
Response Time	NO	less than 10 seconds (90% FSD)
	NO ₂	less than 30 seconds (90% FSD)
Alarm Range	NO	Lower and Upper 0 to 99 ppm
	NO ₂	Upper 0 to 19 ppm
External Alarm	NO	100 ppm
	NO ₂	9 ppm
Alarm Conditions	Water trap full Sample line occluded Battery low	
Operating Temperature	0 to 40 degrees Celsius	
Sensor Life	>1 year	
Sidestream Flow Rate	250 ml/minute	
Input Pressure Range	0 to 100 cm H ₂ O	
Data Storage	24 hours	
Printer Type	320 dot/line, low power thermal printer	
Paper Type	110mm thermal paper	
Power Supply	Primary	100-250V 50-60Hz
	Secondary	12V 1.5A DC

Reference

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O J Miller, D S Celermajer, J E Deansfield, D J Macrae Archives of Disease in Childhood 1994;70:F47-F49.

Progress in monitoring and delivery of inspired nitric oxide therapy British Journal of Intensive Care July/August 1997p. 149-154 AVV Powroznyk et al

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Use of inhaled nitric oxide in British intensive therapy units. B H Cuthbertson, S Stott and N R Webster. British Journal of Anaesthesia 1997; 78: 696-700

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Nitric Oxide - The next ICU Wonder Drug? Robert M. Kacmarek. N Engl J Med 1993; 328: 399-405

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The PrinterNO_x™ is part of an extensive range of gas monitoring equipment manufactured by Micro Medical Ltd and is offered as Cat No. PN4000. The Micro Medical Environmental Monitors are available as Cat. No. EM2000 (NO) and EM2020 (NO₂).

Micro Medical Ltd pursues a policy of continuing improvement in design, production and performance of its products. The right is therefore reserved to vary details at any time and without notice.

PrinterNO_xTM

Micro
Medical

...the inspiration behind
Nitric Oxide measurement



...the inspiration behind Nitric Oxide measurement

Inhaled Nitric Oxide (NO) is used to reduce pulmonary arterial pressure and improve gas exchange in paediatric and adult intensive care settings. Therapeutic NO concentrations must be kept as low and stable as possible, typically a few parts per million. Higher concentrations may have an adverse effect and cause lung injury. Nitrogen Dioxide (NO₂), the by-product of NO, is even more toxic than NO itself and also requires monitoring. The Micro Medical PrinterNO_xTM is the most advanced NO monitor available today, it allows concentrations of NO and NO₂ to be continually monitored, recorded and printed. A unique built-in sidestream sampling system and intelligent gas sensing mechanism ensure that simplicity of use is combined with unrivalled accuracy and reliability.

To complement the PrinterNO_xTM and provide extra safety whilst administering NO, Micro Medical manufactures NO and NO₂ Environmental monitors. These monitors give a loud audible warning and visual indication of environmental gas levels. They can be placed anywhere from the operating room wall to the NO gas cylinder itself. Also available are the NO and NO₂ MicroCans for simple calibration of the PrinterNO_xTM.

Micro Medical

NO and NO₂
Calibration Gases
provide simple,
monthly calibration
for the PrinterNO_xTM.



*NO_xSORB – a unique
chemical scavenging
system designed to
reduce exhaust gases
from PrinterNO_xTM
during NO therapy and
instrument calibration.*



◀ *Economically designed
water trap, filter and
sampling line. Moulded
as one and designed
for single patient use.*

NO and NO₂
Environmental Monitors
– designed to detect
the presence of NO or
NO₂ during inhaled
Nitric Oxide therapy.



The PrinterNO_x™ is now a preferred choice by professionals who are responsible for transporting patients on iNO. Whether by road or air, the PrinterNO_x™ is compact and powerful enough to make up part of the life saving transport services.



Portable NO and NO₂
Environmental Monitors
– both monitors will give
a loud audible warning
and visual indication of
environmental gas levels.
Unique in design, and
calibration free, both
monitors will give peace
of mind to the ITU
environment.

High resolution measurements displaying simultaneous
monitoring and upper and lower alarm levels.

PrinterNO_x

- Small lightweight and portable.
- Simultaneous monitoring.
- Rechargeable batteries for transportation.
- Water trap full alarm.
- Sampling line occlusion alarm.
- Easy to use, clean and maintain.
- Automatic sensor drift detection.
- Intelligent calibration routine.
- 0.05ppm (50 ppb) sensitivity.
- Inbuilt printer with memory.
- No warm up time.
- RS232 capabilities

