

Vacuum Chemiluminescence

**OEM Product** 

Affordable

Sensitive and stable

0.5 PPB LDL



Affordable to purchase, operate and maintain

Peltier cooled, tried and tested, PMT detector The vacuum chemiluminescence method, where NO is mixed with  $O_3$  to produce light, has long been recognized as the best practical analytical solution for  $NO_x$  detection in a wide variety of applications

## 5000 NO<sub>x</sub> Detector

Sensitive, compact and robust



The model 5000  $NO_x$  Detector is designed as a drop in module for systems builders and OEM manufacturers. It offers the performance of top line  $NO_x$  analyzers, but at a fraction of the cost.

We've done this by stripping out all of the "bells and whistles" of little value to systems and OEM manufacturers, but providing a really straightforward signal and power interface that's easy to engineer in.

And we've sacrificed nothing in the "engine" of a hi-spec chemiluminescent detector:

- Vacuum chemiluminescence
- Heated vacuum reaction chamber for superb sensitivity and condensation prevention
- All Swagelok<sup>®</sup> fittings
- Stainless steel, Teflon® and Viton® wetted parts
- Robust corona discharge ozone generator with good moisture tolerance
- Hamamatsu Photo multiplier tube (PMT)
- Peltier Cooled PMT
- TC temperature outputs for PMT and reaction chamber
- Vacuum interlocked ozone generator
- Remote mounting vacuum pump

## Options available:

- NO<sub>2</sub> to NO reduction furnace
- Ozone decomposer

Measurement Ranges	0-200ppm
Range adjustment	Infinite (thru 0-5V command signal)
Output	0-20ma, 4-20ma, 0-5V, 0-10V
Noise	<0.2 ppb
Lower Detection Limit	<0.4 ppb
Linearity	±1% of full scale
Precision	0.4 ppb or 1 % of reading (the greater)
Zero Drift	24 hours: < 0.5 ppb 7 days: < 1ppb
Span Drift:	24 hours < 0.5% of scale 7 days: < 1.0%
Response time	10 seconds to 95% Scale
Power	Instrument Power: 12 VDC, 4.0Amps Heated reaction chamber: 110- 250VAC 50-60 Hz 60VA
Dimensions	Height: 135mm Width: 255mm Length: 315mm
Weight	8.2Kg
Sample Connections	1/8" OD compression fittings
Sample Flow Rate	to around 300 ml/min
Ambient operating range	8° to 36°c

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