

## The Model N500 CAPS True $NO_2 - NO_x - NO$ Analyzer



The Model N500 CAPS NO<sub>x</sub> analyzer uses superior Cavity Attenuated Phase Shift (CAPS) Spectroscopy to measure True NO<sub>2</sub>, NO<sub>x</sub>, and NO gases. The instrument combines direct NO<sub>2</sub> measurements with highly efficient gas phase titration (GPT) to convert and measure the NO gas component. An automatic baseline reference cycle accounts and compensates for any potential baseline drift due to varying environmental conditions.

CAPS technology is inherently accurate and sensitive, uses very little power, and requires far less maintenance than Chemiluminescence. The Model N500 raises the bar for  $NO_{2'} NO_{x'}$  and NO measurement accuracy, while simultaneously reducing instrument operation and maintenance costs.

- Large, vivid, and durable color touchscreen display
- Low power consumption
- Lifetime technical support by phone and email
- Low cost of ownership
- Long-life particulate sample filter
- Standard two-year warranty





## N500 Specifications

<ul> <li>Ranges</li> </ul>	Min: 0 - 5 ppb full scale Max: 0 - 1,000 ppb full scale
<ul> <li>Measurement Units</li> </ul>	ppb, ppm, μg/m <sup>3</sup> , mg/m <sup>3</sup> (user-selectable)
• Zero Noise	< 0.05 ppb (RMS)
• Span Noise	< 0.2% of reading + 50 ppt (RMS)
<ul> <li>Lower Detectable Limit</li> </ul>	< 0.1 ppb
• Zero Drift	< 0.2 ppb / 24 hours
<ul> <li>Span Drift</li> </ul>	< 0.5% of reading / 24 hours
<ul> <li>Response Time</li> </ul>	< 60 seconds to 95%
<ul> <li>Linearity</li> </ul>	1% of full scale
<ul> <li>Precision</li> </ul>	0.5% of reading above 5 ppb
<ul> <li>Sample Flow Rate</li> </ul>	1000 cc/min ±10%
<ul> <li>Power Requirements</li> </ul>	100-240VAC (50-60Hz), Typical power 110W
<ul> <li>Included I/O</li> </ul>	1 x Ethernet (TCP/IP) 1 x RS232 or RS485 (user-selectable) 2 x front panel USB device ports
<ul> <li>Optional I/O</li> </ul>	Universal Analog Output Board includes (all user-definable): 4 x Isolated Voltage Outputs (5V, 10V; user-selectable) 3 x Individually Isolated Current Outputs (4-20mA) Digital I/O Expansion Board includes: 3 x Isolated Digital Input Controls 5 x Isolated Digital Output Controls (user-definable) 3 x Form C Relay Alarm Outputs (user-definable)
<ul> <li>Operating Temperature Range</li> </ul>	0 - 40°C (with US EPA approval)
<ul> <li>Dimensions (HxWxD)</li> </ul>	7" x 17" x 23.5" (178 x 432 x 597 mm)
• Weight	33 lbs (15kg)
Certifications	USA EPA Federal Equivalent Method EQNA-0320-256

Specifications subject to change without notice. All specifications are based on constant conditions.



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