



The Model 500 CAPS True NO₂–NO_x–NO Analyzer



The Model 500 CAPS NO_x analyzer uses superior Cavity Attenuated Phase Shift (CAPS) Spectroscopy to measure True NO₂, NO_x, and NO gases. The instrument combines direct NO₂ 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 500 raises the bar for NO₂, 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

500 Specifications

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| ■ Ranges | Min: 0 - 5 ppb full scale Max: 0 - 1,000 ppb full scale |
| ■ Measurement Units | ppb, ppm, $\mu\text{g}/\text{m}^3$, mg/m^3 (user-selectable) |
| ■ Zero Noise | < 0.05 ppb (RMS) |
| ■ Span Noise | < 0.2% of reading + 50 ppt (RMS) |
| ■ Lower Detectable Limit | < 0.1 ppb |
| ■ Zero Drift | < 0.2 ppb / 24 hours |
| ■ Span Drift | < 0.5% of reading / 24 hours |
| ■ Response Time | < 60 seconds to 95% |
| ■ Linearity | 1% of full scale |
| ■ Precision | 0.5% of reading above 5 ppb |
| ■ Sample Flow Rate | 1000 cc/min \pm 10% |
| ■ Power Requirements | 110W; 100-250VAC (50-60Hz) |
| ■ Included I/O | 1 x Ethernet (TCP/IP) 1 x RS232 or RS485 (user-selectable) 2 x front panel USB device ports |
| ■ Optional I/O | 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 (all user-definable): 3 x Isolated Digital Input Controls 5 x Isolated Digital Output Controls 3 x Form C Relay Alarm Outputs |
| ■ Operating Temperature Range | 0 - 40°C |
| ■ Dimensions (HxWxD) | 7" x 17" x 23.5" (178 x 432 x 597 mm) |
| ■ Weight | 33 lbs (15kg) |

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



TELEDYNE API
Everywhereyoulook™

9970 Carroll Canyon Road ■ San Diego, CA 92131
Ph. 858-657-9800 Fax 858-657-9816
Email api-sales@teledyne.com

For more information about the Teledyne API family of monitoring instrumentation products, call us or visit our website at:

www.teledyne-api.com

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