



TELEDYNE INSTRUMENTS
Advanced Pollution Instrumentation
A Teledyne Technologies Company

MODEL **200EU NOy**

Chemiluminescence NO-NOy Analyzer



- ▶▶ **Standard two year warranty**
- ▶▶ **Ranges, 0-50 ppb to 0-2 ppm, user selectable**
- ▶▶ **Independent ranges for NO, NOy**
- ▶▶ **Microprocessor controlled for versatility**
- ▶▶ **Multi-tasking software allows viewing test variables while operating**
- ▶▶ **Remote catalytic NOy converter**
- ▶▶ **Automatic purge of calibration lines**
- ▶▶ **Dual bi-directional RS-232 ports for remote operation (optional RS-485 or Ethernet)**
- ▶▶ **Digital status outputs provide instrument operating condition**
- ▶▶ **Adaptive signal filtering optimizes response time**
- ▶▶ **Temperature & Pressure compensation**
- ▶▶ **Converter efficiency correction software**
- ▶▶ **Continuous automatic zero correction**
- ▶▶ **Catalytic ozone scrubber**
- ▶▶ **Internal Zero & Span check (optional)**
- ▶▶ **Internal data logging with 1 min to 365 day multiple averages**

Teledyne – API remains in the forefront of ozone precursor research with the Model 200EU NOy Analyzer. This analyzer utilizes the chemiluminescence effect to measure Total Reactive Oxides of Nitrogen as part of a comprehensive ozone precursor monitoring program.

A remote catalytic converter, mounted at the sampling point, converts reactive oxide of nitrogen and other organic nitrogen compounds into nitrogen oxide (NO) before they can chemically react with the sampling system. The converter is housed in a stainless steel NEMA 4X (IP65) housing with a flexible metal umbilical, connecting the converter to the Flow Module, up to 50 feet (15 meters) away. The Flow Module provides bypass flow for consistent sampling as well as a unique purge for the calibration gas tubing (included).

The analyzer module uses the proven Model 200EU platform for the ultimate in sensitivity, with a lower detectable limit of 0.05 ppb or better. The sensitivity of the Model 200EU analyzer, coupled with our state-of-the art sampling system, provides the best available combination for critical monitoring applications. When used in combination with a separate Model 200EU Ultra-Sensitive NOx Analyzer, the Model 700E Multigas Calibrator and the Model 701H Ultra-High Purity Zero Air System, the Model 200EU NOy forms the backbone of an accurate, stable, and reliable ozone precursor monitoring system.

FREE Customer Support by telephone and email for the life of the instrument



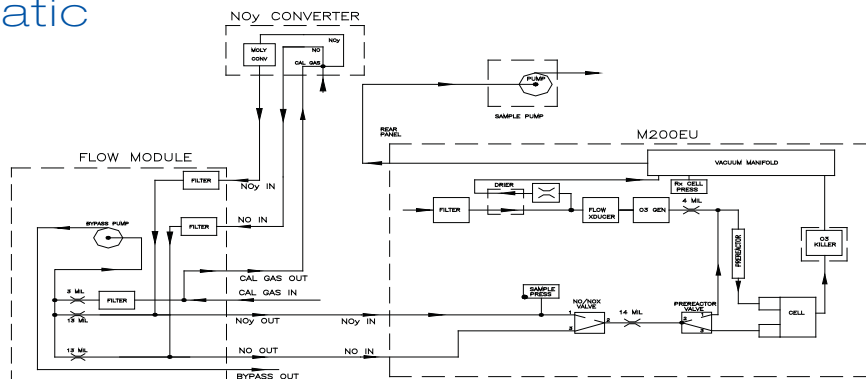
MODEL 200EU NOy Chemiluminescence NO-NOy Analyzer

Specifications

<p>Ranges: 0-50 ppb to 0-2,000 ppb full scale, user selectable. Independent NO, NOy ranges and autoranging supported</p> <p>Units: ppb, ppm, $\mu\text{g}/\text{m}^3$, mg/m^3</p> <p>Zero Noise: < 0.025 ppb</p> <p>Span Noise: < 0.5% of reading (RMS) above 5 ppb</p> <p>Lower Detectable Limit (LDL): 0.05 ppb</p> <p>Zero Drift: < 0.1 ppb/24 hours</p> <p>Span Drift: < 0.5% of reading/24 hours</p> <p>Rise and Fall Time: < 50 seconds to 95%</p> <p>Linearity: 1% of full scale</p> <p>Precision: 0.5% of reading</p> <p>Sample Flow Rate: 1800 cm^3/min ± 200 cm^3/min (NO & NOy) + 800 cc (bypass)</p> <p>Operating Temperature Range: 5 - 40°C</p> <p>Dimensions (HxWxD): 7" (178 mm) x 17" (432 mm) x 23.5" (597 mm) [Analyzer] 8.75" (222 mm) x 17" (432 mm) x 23.5" (597 mm) [Flow Module] 13.5" (343 mm) x 10.5" (267 mm) x 6.5" (165 mm) [Converter]</p>	<p>Weight: Analyzer 40 lbs (18 kg) Flow Module 28 lbs (12.7 kg) Converter 15 lbs (6.8 kg) External Pump 15 lbs (7 kg)</p> <p>Power: 100V - 120V, 220V - 240V, 50/60 Hz, 250W</p> <p>Analog Outputs: 10V, 5V, 1V, 0.1V, selectable</p> <p>Recorder Offset: $\pm 10\%$</p> <p>Serial Outputs: Serial Port 1: RS-232 (DB-9M) Serial Port 2: standard RS-232 or optional RS-485 (DB-9F), Ethernet</p> <p>Status (Digital): 8 outputs, 6 inputs (opto-isolated), 4 alarm outputs (optional)</p> <p>Current Output: Optional 4-20mA, select up to three channels</p>
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NOTE: The values expressed above are in accordance with EPA definitions. All error specifications are based on constant conditions. Specifications exceed US EPA and Eignungsgeprüft requirements.

Schematic



How to Order

Model 200EU Chemiluminescence NO, NOy Analyzer includes:

- Standard two year warranty
- External pump
- Remote converter
- Flow module
- Independent NO, NOy ranges
- Auto ranging
- 47mm diameter particulate filters
- 8 digital status outputs, 6 inputs
- Dual bi-directional RS-232
- APIcom remote control software

Specify input AC voltage & frequency:

- 100V - 115V 50Hz
 220V - 240V 60Hz

Specify output DC voltage:

- 10V 5V 1V 0.1V

Calibration Option:

- Dual calibration valves for selection of customer-specified zero and span gas

Optional Equipment:

- Rack mount brackets (19") with chassis slides
- Rack mount brackets only
- 4-20mA outputs (specify up to three channels)
- Multi-drop RS-232 connection
- Ethernet port includes 7 ft. CAT-5 cable (disables one serial port)

Accessories:

- RS-232 Cable
- Expendables Kit

Specifications subject to change without notice. Printed documents are uncontrolled. SAL000009 A (DCN 5058) M200EU NOy/08/08/08.



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

www.teledyne-api.com

