

MODEL 200AH

Chemiluminescent High Range NO/NO₂/NO_x Analyzer



0-5 ppm to 0-5000 ppm ranges, user selectable in 1 ppm increments

Independent ranges for NO, NO₂, NO_x

Auto ranging and remote range selection

Microprocessor controlled for versatility

NO, NO_x only or single channel switching

Multi-tasking software allows viewing test variables while operating

Continuous self checking with alarms

Bidirectional RS-232 for remote operation

Digital status outputs provide instrument condition

Adaptive signal filtering optimizes response time

Temperature and pressure compensation

Permeation ozone air drier

Minimum CO₂ and H₂O interference

Charcoal and desiccant expendables not required

The Model 200AH High Range NO/NO₂/NO_x Analyzer uses the field-proven chemiluminescent technique for monitoring high levels of oxides of nitrogen. User-selectable ranges of 5 ppm to 5000 ppm make it ideal for a wide variety of applications including CEM, stack testing, and process control.

A choice of NO₂-to-NO converters handles tough CEM and stack testing applications. Selectable measurement modes (NO only, NO_x only, NO/NO_x switching), auto ranging and remote range control let you set up the Model 200AH to your exact needs. The modular design offers top-mounted access to all subassemblies and has hinged front and rear panels to simplify module replacement.

The modular, sealed ozone generator provides improved voltage coefficient, safety, and reliability. A standard permeation dryer on the ozone generator means there is no desiccant to replace. In addition, the excess ozone is removed by catalytic reaction, eliminating the need for charcoal (expendable) replacement.

All instruments in the API "A Series" include built in data acquisition capability using the analyzer's own internal memory. This allows the logging of multiple parameters including averaged or instantaneous concentration values, calibration data, and operating parameters such as pressures and flow rates. Stored data is easily retrieved through the RS-232 port or from the front panel, allowing the operator to perform predictive diagnostics by tracking parameter trends.

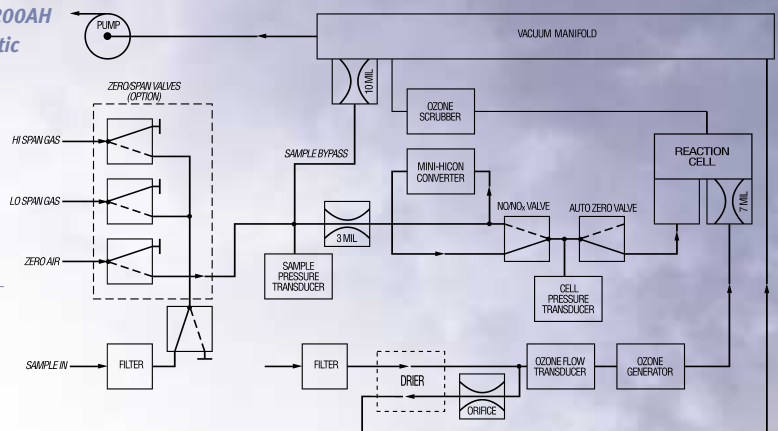
The Model 200AH combines rugged construction, ease of use, powerful diagnostics and outstanding performance for high range applications.

MODEL 200AH



Chemiluminescent High Range NO/NO₂/NO_x Analyzer

Model 200AH schematic



SPECIFICATIONS

Ranges:	0-5 ppm to 0-5000 ppm full scale, user selectable; independent NO, NO ₂ , NO _x ranges and auto-ranging supported
Units:	ppm, mg/m ³
Zero Noise:	< 20 ppb (RMS)
Span Noise:	< 0.2% of reading above 20 ppm (RMS)
Lower Detectable Limit (LDL):	< 40 ppb (RMS)
Zero Drift:	< 20 ppb/24 hours
Span Drift:	< 1% reading/24 hours, < 1% reading/7 days
Lag Time:	20 seconds switching mode; < 6 seconds NO or NO _x only mode
Rise and Fall Time:	< 60 seconds to 95% (switching); 5 seconds NO only; 10 seconds NO _x only
Linearity:	1% full scale
Precision:	0.5% of reading
Sample Flow Rate:	290 cc/min (standard); 540 cc/min (optional)
Operating Temperature Range:	5 - 40°C
Dimensions (HxWxD):	7" (178 mm) x 17" (432 mm) x 23.5" (597 mm)

Weight:	Analyzer 44 lbs (20 kg), External Pump 15 lbs (7 kg)
Power:	100V 50/60 Hz, 115V 60Hz, 220V 50/60Hz, 230V 50Hz, 240V 50Hz 250 Watts (analyzer), 250 Watts (pump)
Analog Outputs:	10V, 5V, 1V, 100 mV, selectable
Recorder Offset:	±10%
RS-232:	Standard, DB-9 connector
Status (Digital):	12 outputs from optoisolator, included with standard configuration
Current Output:	0-20 mA or 4-20 mA isolated outputs (optional)
Approvals:	CE

NOTE: The values expressed above are in accordance with EPA definitions. All specifications are based on constant conditions.

HOW TO ORDER

Model 200AH Chemiluminescent NO/NO₂/NO_x Analyzer includes:

- External pump
- Permeation ozone air dryer
- Independent NO, NO₂, NO_x ranges
- Auto ranging
- 47mm particulate filter
- 12 isolated digital status outputs
- Bi-directional RS-232

Specify voltage/frequency:

- | | |
|---|------------------------------------|
| <input type="checkbox"/> 100V/50hz | <input type="checkbox"/> 100V/60hz |
| <input type="checkbox"/> 220V/50hz | <input type="checkbox"/> 115V/60hz |
| <input type="checkbox"/> 230V/50hz (CE) | <input type="checkbox"/> 220V/60hz |
| <input type="checkbox"/> 240V/50hz | |

Specify output voltage:

- 10V 5V 1V 100mV

Particulate Filter:

- 47mm (standard) 37mm (optional)

Additional Options:

- Rack Mount (19") with chassis slides
- Rack Mount only
- Isolated 0-20mA or 4-20 mA Output (specify channels)
- Non-Isolated 0-20mA or 4-20 mA Output (all channels)
- Multi-drop serial interface

Calibration Valves:

- Stainless steel valves for selection of customer-supplied zero and span gas (one span point)
- Stainless steel valves for selection of customer-supplied zero and span gases (two span points)

NO₂-NO Converter:

- Mini-HICON Internal Converter (standard)
- MOLYCON Converter (consult factory)
- MODEL 501 External Converter

Accessories:

- RS-232 Cable
- Expendables Kit
- Spare Parts Kit

For more information on API's family of monitoring instrumentation products, call us or visit our website at www.advpol.com