



## Model T200H High Range Chemiluminescence NO/NO<sub>2</sub>/NO<sub>x</sub> Analyzer

The Model T200H combines the proven chemiluminescence principle with a number of innovative features to provide reliable and repeatable NO, NO<sub>2</sub>, and NO<sub>x</sub> measurements for extractive type CEM systems. A high-efficiency stainless steel thermal NO<sub>2</sub> converter provides durable and consistent operation under the harshest conditions (other converter options also available).

The T200H may be fitted with an optional, internal paramagnetic O<sub>2</sub> sensor or an infrared absorption CO<sub>2</sub> sensor, reducing integration and operating costs significantly.

All T Series instruments offer an advanced color display, capacitive touch screen, intuitive user interface, flexible I/O, and built-in data acquisition capability. All instrument set up, control and access to stored data and diagnostic information is available through the front panel, or via RS232, Ethernet, or USB com ports either locally or by remote connection using the included APIcom™ software.

- » **Ranges: 0-5 ppm to 0-5,000 ppm, user selectable**
- » **Independent ranges and auto ranging**
- » **Optional internal O<sub>2</sub> or CO<sub>2</sub> sensor**
- » **Large, vivid, and durable color graphics display with touch screen interface**
- » **Ethernet, RS-232, and (optional) USB com ports**
- » **Front panel USB connections for peripheral devices and firmware upgrades**
- » **8 analog inputs (optional)**
- » **Adaptive signal filtering optimizes response time**
- » **Temperature & pressure compensation**
- » **Comprehensive internal data logging with programmable averaging periods**
- » **Ability to log virtually any operating parameter**
- » **Two-year warranty**

## Specifications

### General

Ranges:	Min: 0-5 ppm Full scale Max: 0-5,000 ppm Full scale (selectable, independent NO, NO <sub>2</sub> , NO <sub>x</sub> ranges and auto ranging supported)
Measurement Units:	ppm, mg/m <sup>3</sup> (selectable)
Zero Noise:	< 20 ppb (RMS)
Span Noise:	< 0.2% of reading (RMS) above 20 ppm
Lower Detectable Limit:	40 ppb
Zero Drift:	< 20 ppb/24 hours
Span Drift:	< 0.5% of reading/24 hours
Lag Time:	20 seconds
Rise and Fall Time:	< 60 seconds to 95% (in switching mode)
Linearity:	1% of full scale
Precision:	0.5% of reading above 5 ppm
Sample Flow Rate:	290 cm <sup>3</sup> /min ±10%

### Electrical Specifications

Power Requirements:	100V-120V, 220V-240V, 50/60 Hz
Analog Output Ranges:	10V, 5V, 1V, 0.1V, (selectable)
Recorder Offset:	±10%

### Communication Specifications

Included I/O:	1 x Ethernet: 10/100Base-T 2 x RS232 (300-115,200 baud) 2 x USB device ports 8 x opto-isolated digital outputs 6 x opto-isolated digital inputs 4 x analog outputs
Optional I/O:	1 x USB com port 1 x RS485 8 x analog inputs (0-10V, 12-bit) 4 x digital alarm outputs Multidrop RS232 3 x 4-20mA current outputs

### Physical Specifications

Operating Temperature Range:	5 - 40°C
Dimensions (HxWxD):	7" x 17" x 23.5" (178 x 432 x 597 mm)
Weight:	Analyzer: 40 lbs (18 kg) External pump: 15 lbs (7 kg)

## How to Order

### Model T200H includes:

- ☐ Two year warranty
- ☐ External pump or internal pump (optional)
- ☐ Independent ranges and auto ranging
- ☐ 47mm diameter particulate filter
- ☐ 8 isolated digital outputs
- ☐ 6 isolated digital inputs
- ☐ RS-232 ports
- ☐ Ethernet port
- ☐ USB ports for peripheral devices
- ☐ APIcom™ remote control software
- ☐ Select AC input voltage
  - ☐ 100V - 120V    ☐ 50Hz
  - ☐ 220V - 240V    ☐ 60Hz
- ☐ Select DC output voltage
  - ☐ 10V                ☐ 5V
  - ☐ 1V                 ☐ 0.1V

### Calibration Options:

- ☐ Ambient zero and ambient span
- ☐ Ambient zero and pressurized span
- ☐ Zero scrubber and 2 pressurized spans
- ☐ Zero air scrubber for Z/S valves

### Mounting Options:

- ☐ Rack mount brackets with chassis slides
- ☐ Rack mount brackets only
- ☐ Handle

### I/O Options:

- ☐ 4-20mA outputs (up to three channels)
- ☐ USB com port
- ☐ 8 Analog Inputs
- ☐ Multi-drop RS232
- ☐ RS485

### Other Options:

- ☐ Paramagnetic O<sub>2</sub> Sensor
- ☐ CO<sub>2</sub> Sensor
- ☐ Internal moly converter with O<sub>3</sub> killer, instead of mini-hicon
- ☐ Model 501 external converter (ss only)
- ☐ Model 501 external converter with stainless steel and moly converter
- ☐ Concentration alarm relays
- ☐ Expendables kit

The values expressed above are in accordance with EPA definitions.  
All error specifications are based on constant conditions.  
Specifications subject to change without notice.  
Printed documents are uncontrolled. SAL000047A (DCN 5815) T200H/10.25.10



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