TELEDYNE
MONITOR LABS
A Teledyne Technologies Company

sensor⊖®

NOX ANALYZER - MODEL T200

Model T200 Chemiluminescence NO/NO$_2$/NO$_X$ Analyzer

The Model T200 NO/NO$_2$/NO$_X$ analyzer uses the proven chemiluminescence detection principle, coupled with state-of-the-art electronics, to allow accurate and dependable low-level measurements for use as an ambient analyzer or dilution CEMS monitor.

A unique AutoZero feature provides superb stability by continuously correcting for zero drift, while advanced Adaptive Filtering allows the analyzer to optimize performance under changing conditions. The Model T200 includes a permeation inlet dryer for ozone generation to provide excellent reliability with no periodic replacement required. A catalytic exhaust ozone scrubber is standard for maximum safety and pump life.

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: 0-50 ppb to 0-20 ppm, user selectable**
- **Independent ranges and auto ranging**
- **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**
- **Internal zero & span check (optional)**
- **Comprehensive internal data logging with programmable averaging periods**
- **Ability to log virtually any operating parameter**
- **Two-year warranty**

Specifications

General

Ranges:	Min: 0-50 ppb full scale
	Max: 0-20,000 ppb full scale (user selectable), independent NO, NO$_2$, NO$_X$ ranges and auto ranging supported
Measurement Units:	ppb, ppm, µg/m^3, mg/m^3 (selectable)
Zero Noise:	< 0.2 ppb (RMS)
Span Noise:	< 0.5% of reading (RMS) above 50 ppb
Lower Detectable Limit:	0.4 ppb
Zero Drift:	< 0.5 ppb/24 hours
Span Drift:	< 0.5% of full scale/24 hours
Lag Time:	20 seconds
Rise and Fall Time:	< 60 seconds to 95%
Linearity:	1% of full scale
Precision:	0.5% of reading above 50 ppb
Sample Flow Rate:	500 cm^3/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)
	Multidrop RS232
	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
	3 x 4-20mA current outputs

Physical Specifications

Operating Temperature Range:	5 - 40ºC (with EPA Equivalency)
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)

Certifications

US EPA:	RFNA-1194-099
MCERTS:	Sira MC 050068/05

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.
Specifications subject to change without notice.
Printed documents are uncontrolled.

How to Order

Model T200 includes:

- Two year warranty
- External pump
- Charcoal Scrubber Assembly
- Independent ranges and auto ranging
- 47mm diameter particulate filter
- 8 isolated digital outputs
- 6 isolated digital inputs
- RS-232 ports
- Multi-drop RS232
- 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

Mounting Options:

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

I/O Options:

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

Other Options:

- ☐ Ammonia removal sample conditioner. Required for EN14212 approved configuration.)
- ☐ Concentration alarm relays
- ☐ Consumables kit
- ☐ O$_2$ 0-25% Paramagnetic sensor

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

www.teledyne-ml.com

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