



Model T201 Chemiluminescence NH₃ Analyzer

The Model T201 combines a specially configured chemiluminescence analyzer with an external thermal converter* to give stable and repeatable NH₃ measurements at stack levels. In addition, the T201 provides simultaneous values for NO_x concentrations. The T201 is ideal for stack ammonia monitoring applications.

The Model T201 achieves its remarkable stability by means of an AutoZero valve which measures and corrects for zero noise. Multiple self-checks are performed continuously to ensure maximum up-time while an innovative sample path, plumbed with specially conditioned materials, preserves the NH₃ sample and reduces interferences to a minimum.

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.

* External converter is part of TML Ammonia Probe.

- ▶ Ranges: 0-1 ppm to 0-20 ppm, user selectable
- ▶ Independent ranges for NH₃ and NO_x
- ▶ 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

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Specifications

General

Ranges:	Min: 0-1 ppm full scale Max: 0-20 ppm full scale (user selectable), independent NH ₃ and NO _x ranges and auto ranging supported
Measurement Units:	ppm, mg/m ³ (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:	250 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 - 40°C
Dimensions (HxWxD):	Analyzer: 7" x 17" x 23.5" (178 x 432 x 597 mm) Converter: 7" x 17" x 6.5" (178 x 432 x 165 mm)
Weight:	Analyzer: 43 lbs (19.5 kg) External Pump: 15 lbs (7 kg)

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.



**TELEDYNE
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How to Order

Model T201 includes:

- Two year warranty
- External pump
- Independent ranges
- 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:

- Concentration alarm relays
- Consumables kit
- Internal Pump and Fittings
- O₂ 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

Teledyne Monitor Labs, Inc. reserves the right to make changes in construction, design, specifications and/or prices without prior notice.