



Sabio

Environmental *ambient pollution analyzers and calibration systems*

Model 6042 NH3 Analyzer

The Model 6042 NT/NH3/NOX Analyzer provides accurate measurement of NT (Total Oxides of Nitrogen), NH3 (Ammonia) and NOX (Oxides of Nitrogen) gas in air or low source levels from industrial processes. The Model 6042 NH3 analyzer uses the same optical bench and electronics as the Model 6040 NO/NO2/NOX Analyzer and will be referred to as the NOX analyzer. The Model 6042 uses the chemiluminescence method for measurement.



An efficient external high temperature NH3/NOX oxidizer/converter thermally converts all oxides of nitrogen and NH3 to NO (Nitric Oxide) gas. NO gas that may be present in the sample gas passes through the NH3/ NOX converter unaffected. The NH3/NOX oxidizer/converter is plumbed to the rear of the NOX analyzer. NH3 and NOX gas combined in the sample gas is NT (Total Oxides of Nitrogen) gas. A second low temperature NOX oxidizer/converter, housed in the NOX analyzer, only converts nitrogen dioxide (NO2) gas to NO gas. Again, NO gas that is present in the sample gas passes through the low temperature NOX converter unaffected.

A three-way sample valve in the NOX analyzer is used to sequentially allow sample gas to be pulled through the analyzer detector assembly through each of the two converters. The microprocessor in the NOX analyzer controls the sample process and tracks each sample run. Once each sample run is complete, a calculation is performed to determine the concentration of NT, NH3, and NOX gases, essentially: $NT - NOX = NH3$ gas.

Specifications

Specifications subject to change without notice

| | |
|-------------------------------|--|
| Ranges | 0-50 ppb to 10,000 ppb user set |
| Noise | <0.0005 ppm |
| Lower Detectable Limit | < 1 ppb |
| Zero Drift | <±0.003 ppm per 24 hours |
| Span Drift | <±1 % URL per 24 hours |
| Cycle Time | 1 sample/second |
| Precision | <1 % of URL |
| Linearity | <1 % of URL |
| Sample Flow Rate | 0.4 to 0.8 LPM |
| Operating Temperature | 5° to 40° C |
| Power Requirements | 200 Watts (depends on analyzer) |
| Voltage Output Ranges | 0.1V, 1V, 2V, 5V, 10V, user-selectable |
| Input/Output Ports | Rear Panel: Ethernet, USB Device, USB Host (2), RS-232/485 (2) |
| Physical Dimensions | 5.25 in (H). x 17 in. (W) x 22.5 in.(L) |
| Weight | 45 lbs. (20.41 kg) |
| Certification | US EPA: RFNA-0418-250 (NOx Bench) |
| Display | 7" Wide View Color LCD Touchscreen |
| Interface | Touchscreen, Front Panel Keypad, External Keyboard, Mouse |
| Communications | Ethernet, USB and RS-232/485 Ports |
| Features | Automatic temperature and pressure compensation, Comprehensive internal data logging, Modbus protocol |



Sabio Environmental, LLC
21 Cypress Blvd Suite 1130
Round Rock, TX 78665

PH: 512.869.0544
sales@sabio.com
www.sabio.com