CLD NOx/O2 Analyzer

700 LX Series CLD NOx/O_2 Analyzer

PROCESS & EMISSIONS MONITORING SYSTEMS

SPECIFIC FEATURES:

- Measures from 3 ppm up to 3,000 ppm Full Scale
- Three Measurement Modes — NO, NOx and NO/NO2/NOx
- 0-25% Paramagnetic Oxygen Channel
- Auto Calibration and Ranging
- Fast Response Time
- Robust and Rugged Linux Based Operating System
- Electronic Sample and Ozone Flow Control
- Does Not Require Vacuum Pump
- Comprehensive Diagnostics

MAIN APPLICATIONS:

› Combustion Efficiency
› Fuel Cell Analysis
› Turbine/Generator Feedback Control
› Ammonia Slip
› Process Chemical Gas Analysis
› Pharmaceutical Processes
› Vehicle Emissions
› Site Safety

MAIN OPTIONS:

- Internal Sample Pump
- Internal Calibration Solenoid Valves
- Internal Ozone Pump
- Low Flow
- Low Pressure
- 19 Inch Rack Mount Slides

CE

U.S. EPA COMPLIANCE
40 CFR PART 1065

Conforms to UL STD 61010-1, Certified to CAN/CSA C22.2 STD No. 610610.1

ECE 49-06 Compliant

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The California Analytical 700 LX Series CLD/O2 Analyzer utilizes the principle of chemiluminescence for analyzing the NO or NOx concentration within a gaseous sample. In the NO mode, the method is based upon the chemiluminescent reaction between ozone and nitric oxide (NO) yielding nitrogen dioxide (NO2) and oxygen. This reaction produces light which has intensity proportional to the mass flow rate of NO2 into the reaction chamber.

The light is measured by means of a photodiode and associated amplification electronics. In the NOx mode, NO plus NO2 is determined as above, however, the sample is first routed through the Internal NO2 to NO converter which converts the NO2 in the sample to NO. The resultant reaction is directly proportional to the total concentration of NOx. 0-25% oxygen is measured by the paramagnetic method.

MEASURING RANGES

NO/NOx	4 user-definable 0-3 to 0-3,000 ppm	Higher ranges available upon request

TECHNICAL SPECIFICATIONS

Detector	Photodiode
Response Time	Typically < 3 Seconds to 90% Full Scale
Repeatability	Better than 0.5% of Full Scale
Linearity	Better than 1% of Full Scale
Accuracy	Better than 1% Full Scale
Precision	Better than 0.5% Full Scale
Zero & Span Drift	Less than 1% of Full Scale per 24 Hours
CO2 Effect	Less than 2% with 10% CO2
H2O Effect	Less than 1% with 1% H2O Interference Data: CO, HCN, SO2, NH3, N2O not Detectable at 100 ppm
Interference Data	Less than 1% with 1% H2O Interference Data: CO, HCN, SO2, NH3, N2O not Detectable at 100 ppm
Flow Control	Electronic Proportional Pressure Controller
Sample Flow Rate	Typically 1.5 to 2.5 LPM (0.6 LPM with Low Flow Option)
Converter	Carbon Material @ 205 C; 95 to 100% Efficiency
Ozonator	Ultraviolet Lamp
Air or O2 Requirements	Dry Air less than 0.01 ppm NOX at 350 cc/Min. @ 25 psig (Dew Point < -10°C)
NO/NOx Control	Manual/Remote/Auto Cycle
Standard Outputs	Voltage, Current, RS-232 AK Protocol, TCP/IP MODBUS and AK Protocol, Alarms & Status
Digital Diagnostics	Temperature, Pressure, EPC Volt %, and Flow
Display	3” x 5” LED
Sample Temperature	50°C Max. (Non-condensing)
Ambient Temperature	5 to 40°C
Ambient Humidity	Less than 90% RH (Non-condensing)
Warm Up Time	1 Hour
Fittings	1/4 Inch Tube
Power Requirements	115/230 VAC; 50/60 Hz; 560 Watts
Dimensions (HxWxD)	5.25 x 19 x 23 (In.)
Weight	45 Lbs.

700LX 7/31/2025 - The ENVEA Group has a policy of continuous improvement of its products and we reserve the right to update or modify specifications without notice.

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