Model N360M
Mid-Range Gas Filter Correlation CO$_2$ Analyzer

► Single or dual range capability

► Customizable alerts and continuous self-checking

► Wide operating temperature range

► Internal DC-powered vacuum pump

► 5-year warranty on Gas Filter Correlation (GFC) wheel

► Integrated Oxygen (O$_2$) sensor (optional)

N Series Platform Features

Color Touch-Screen Graphics Display

Two Front Panel USB Ports

Modular Internal Hardware Design

All DC-powered Internal Components

Large Internal Data Storage

Serial and TCP/IP Ethernet Included

Digital and Analog Expansion Options

Indicator Illuminated Soft Power Switch

Split Fold-Down Rear Panel

The Model N360M measures carbon dioxide (CO$_2$) by comparing infrared energy absorbed by a sample to that absorbed by a reference according to the Beer-Lambert law.

The N360M uses Gas Filter Correlation (GFC) to overcome the interfering effects of various other gases (such as water vapor) that also absorb IR. The analyzer passes the IR beam through a spinning wheel made up of two separate chambers: one containing a high concentration of CO$_2$ known as the reference, and the other containing a neutral gas known as the measure. The concentration of CO$_2$ in the sample chamber is computed by taking the ratio of the instantaneous measure and reference values and then compensating the ratio for sample temperature and pressure. A nitrogen purge system is provided for the GFC wheel assembly to eliminate the effects of ambient CO$_2$, if necessary.

Instrument functions and controls are managed through a series of integrated microprocessor-controlled modules utilizing a simple and reliable CAN Bus communications architecture. Each module is independently assembled and calibrated allowing easy and fast field replacement to maximize instrument uptime.

Intuitive operation and calibration of all N Series products is achieved through the NumaView™ Software interface. The graphical user interface (GUI) is customizable, giving the user fast and efficient access to instrument status, as well as measurement data and diagnostic parameters in either numeric or graphical form. NumaView™ Remote Software (included at no charge) provides the same virtual interface and complete instrument control, as well as access to the instrument's large internal data storage buffer from a remote PC or tablet.

● Measurement Units	ppb, ppm, µg/m³, mg/m³ (selectable)
● Response Time	< 70 seconds to 95%
● Ranges	Min: 0 - 4 ppm full scale
	Max: 0 - 4,000 ppm full scale (selectable, dual-range supported)
● Sample Flow Rate	800 cc/min ±10%
● Zero Noise	< 0.2 ppm (RMS)
● Span Noise	< 1% of reading (RMS)
● Lower Detectable Limit	< 0.4 ppm
● Precision	0.5% of reading
● Linearity	1% of full scale
● Zero Drift	< 0.5 ppm/24 hours
● Span Drift	< 0.5% of reading/24 hours
● Included I/O	1 x Ethernet (TCP/IP)
	1 x RS232
	2 x front panel USB device ports
● Optional I/O	Universal Analog Output Board includes (all user-definable):
	4 x Isolated Voltage Outputs (5V, 10V; user-selectable)
	3 x Individually Isolated Current Outputs (4-20mA)
	Digital I/O Expansion Board includes:
	3 x Isolated Digital Input Controls
	5 x Isolated Digital Output Controls (user-definable)
	3 x Form C Relay Alarm Outputs (user-definable)
● Weight	40 lbs (18.1 kg)
● Dimensions (HxWxD)	7" x 17" x 24.3" (178 x 432 x 617 mm)
● Operating Temperature	0 - 40°C
● Power	100V-240V, 50/60 Hz, Typical consumption <150W

Specifications subject to change without notice.
All specifications are based on constant conditions.

**All N Series instruments include a 2-year manufacturer's warranty as well as
email and phone support for the lifetime of the instrument.**