

# **Model N901** THC-CH<sub>4</sub>-NMHC Analyzer



#### ► Fast Response

- ► Low Detection Limit
- Intuitive User Interface
- Sample Particulate Filter
- Automatic Baseline
- Dedicated Graphical Calibration Screen
- Internal AutoCal Valve Option

#### N Series Platform Features



Color Touch-Screen Graphics Display

Two Front Panel USB Ports



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Modular Internal Hardware Design



All DC-powered Internal Components





Serial and TCP/IP Ethernet Included



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Digital and Analog Expansion Options

Indicator Illuminated Soft Power Switch The Model N901 is a near-continuous hydrocarbon gas analyzer that measures the concentration of Methane (CH<sub>4</sub>) and Total Hydrocarbons (THC) in air. The concentration of the non-Methane (NMHC) component is calculated by the subtraction of CH<sub>4</sub> from THC, with high sensitivity and accuracy. The hydrocarbons are measured using a Flame lonization Detector (FID), in combination with gas chromatography (GC). The instruments range and performance are tuned specifically for use in ambient air quality monitoring assessments.

The Model N901 is designed for simple operation and maintenance with a modular hardware and electronics architecture. A long-life stainless-steel fritted filter is used at the sample intake to effectively remove particulate matter without introducing any gas-phase measurement artifacts. Instrument operation, calibration functions, chromatogram views, and data handling are all automated and controlled using the internal NumaView<sup>™</sup> Software (NVS) interface, without the need for an external PC.

For remote connection to the N901 instrument, Teledyne API's NumaView<sup>™</sup> Remote PC-based Software provides a virtual interface, instrument controls, and data downloading capability to all TAPI analyzers operating NumaView<sup>™</sup> Software.

## N901 Specifications

Detector	Flame Ionization Detector (FID)
Method	Gas Chromatography with CH <sub>4</sub> separation column
<ul> <li>Ranges (Methane)</li> </ul>	Min: 0-5 ppm
	Max: 0-1,000 ppm
Lower Detectable Limit	<25 ppb (Methane); <25 ppb (Propane)
Cycle Time	60 sec (minimum), user-definable
Precision	<1% of reading or 0.05 ppm (whichever is greater)
Linearity	<1% of full scale
Zero Drift	Zero baseline performed once per cycle
Span Drift (24hr)	<1% of full scale
Sample Flow Rate	60 cc/min ± 10%
Carrier Gas	50 to 70 psi, N2 UHP Grade, Consumption 20 cc/min
Fuel Gas	50 psi ± 5%, H2 UHP Grade, Consumption 35 cc/min
FID Air	50 psi $\pm$ 5%, HC Free clean air, Consumption 350 cc/min
Auxiliary Air	70 psi ± 5%, Clean Dry Air, Consumption 1 cc/actuation
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	35 lbs (16 kg)
Dimensions (HxWxD)	7" x 17" x 23.5" (178 x 432 x 597 mm)
Operating Temperature	5-40°C
Power	100-240V, 50/60Hz, Typical Power 130W

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



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