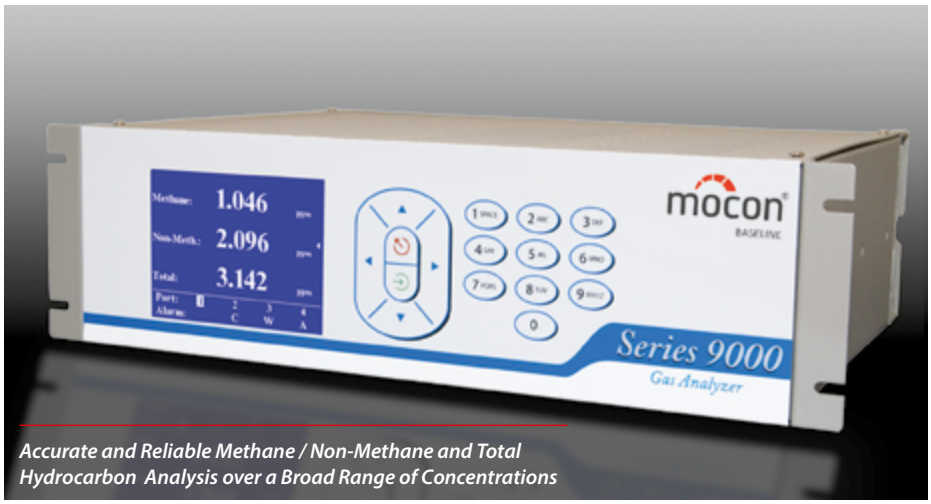
SERIES 9000 NMHC
NON-METHANE HYDROCARBON ANALYZER

DATA SHEET



Accurate and Reliable Methane / Non-Methane and Total Hydrocarbon Analysis over a Broad Range of Concentrations

Continuous methane, non-methane and total hydrocarbons analysis based on a methane / non-methane calibration in non-condensing gases

The AMETEK MOCON - Baseline Series 9000 NMHC is a microprocessor, flame ionization detector (FID)-based instrument designed to continuously measure total hydrocarbons, methane and non-methane hydrocarbon content in non-condensing gas samples in environmental or industrial settings. The analyzer can be purchased in a variety of configurations with internal components for single or multipoint sampling (with or without a sample pump) for pre-filtered (< 0.1 microns) non-condensing samples.

Detection limit down to < 60 ppb. User-programmable ranges from 1–1000 ppm (as methane, CH_4) are factory-configured per the customer's application to facilitate installation and setup.

AMETEK MOCON - Baseline's FlowGuard electronic control regulates the delivery of fuel, air, and a small part of the sample gas, to the FID. A catalytic oxidizer is switched into and out of a portion of the sample stream. The catalyst oxidizes all hydrocarbons except methane, for a methane measurement. The methane value is then automatically subtracted from the total hydrocarbon concentration to determine the non-methane hydrocarbon reading. The non-methane signal, being the difference of the two measured quantities, is more stable, reducing systemic zero drift of the non-methane value.

mocon® BASELINE | AMETEK® PROCESS & ANALYTICAL INSTRUMENTS

Applications

- Ambient Air Monitoring Networks (AQM)
- VOC Continuous Emissions Monitoring Systems (CEMS)
- Clean Rooms
- Air & Oxygen Purity in Air Separation Plants
- Source Emissions Monitoring - Abatement System Efficiency
- Inlet/Outlet VOC Abatement Process Equipment

Please contact us to discuss other applications

Features & Benefits

- Hydrocarbon detection from sub-ppm to 1000 ppm (methane)
- Flame ionization detector (FID)
- Automatic FID ignition
- Graphical LCD display with easy to use menu system
- Sleek rack mountable profile
- Automatic calibration at user-defined intervals
- Internal multi-point sampling option
- FlowGuard electronic control of fuel, air and sample
- Electronic back-pressure regulator with sample bypass system
- Discrete, multilevel concentration & fault alarms
- Programmable analog output ranges
- Programmable relays for diagnostics, concentration, alarms, and events
- Automatic shut-off of sample, fuel and combustion air
- Remote operation via RS-232 and Ethernet

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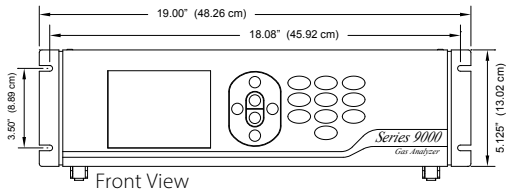
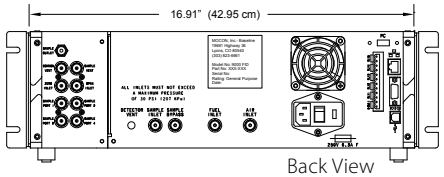
All instrument parameters are reported clearly and continually refreshed on a large, graphical LCD display. Using analog, digital, and logic output communication capabilities, analytical information from the analyzer can be acquired using an external PC and a simple communications program such as Windows® HyperTerminal or the analyzer can output binary or ASCII formats directly to a data acquisition system or PLC. Every Series 9000 analyzer includes AMETEK MOCON - Baseline's free PC utility *9000 Keeper* used for storing and uploading multiple methods, as well as sending configuration settings, directly to the analyzer.

Specifications

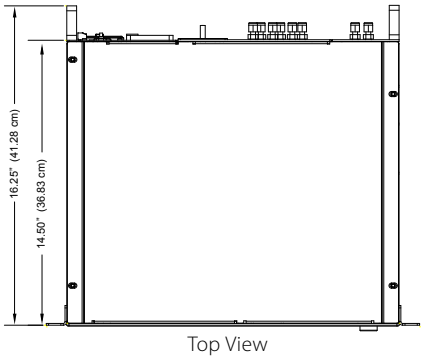
Detector	Flame Ionization (FID)		
Oxidizer	Oxidizes non-methane hydrocarbons		
Ranges	User definable based upon calibration within: • 0.06 ppm to 200 ppm (Air balance) Accuracy ± 1%, full-scale • 0.10 ppm to 1,000 ppm (Air balance) Accuracy ± 1%, full-scale • 0.30 ppm to 200 ppm (O_2 balance) Accuracy ± 1%, full-scale • Analyzer range configured at the factory.		
Repeatability	± 1% full-scale response		
Drift, Zero	± 0.01% of full-scale over 24 hours		
Drift, Span	± 1% of full-scale over 24 hours		
Response Time	T90 < 30 seconds		
Sampling	Internal single or multipoint modules for pre-filtered (1 micron) non-condensing samples, with or without sample pump		
Alarms	Multilevel concentration and fault alarms that result in an audible and visually displayed alarm. Alarms may also be mapped to relays to control external equipment		
Calibration	Programmable automatic or manual calibration		
Support Gases	Hydrogen (H_2) — 35 cc/min (H_2/He blend — 100 cc/min). Hydrocarbon content must be < 1 ppm. Air — 175 cc/min (typical) Fuel blend options available, consult MOCON - Baseline		
Display	Graphical LCD display, 3.4" x 4.5" (8.64 x 11.43 cm)		
Outputs	**Digital** Standard: RS-232 LAN	**Analog** Standard: 1 programmable 0–20 mA or 4–20 mA isolated output Optional: 3 programmable analog outputs	**Relay** Standard: 5 programmable Form A relays rated to 3 A @ 230 V AC Optional: 9 programmable relays
Operating Temperature	32 to 104 °F (0 to 40 °C)	**Connections**	1/4" (6.35 mm) tube fitting connectors
Operating Humidity	0 to 95% (non-condensing)	**Power**	100–240 V AC, 50/60 Hz, 2 A
Configuration	Bench-top or 19" (48.3 cm) rack-mount, 3U	**Weight**	< 20 lb (9.07 kg)



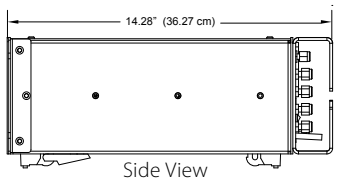
Front View



Back View



Top View



Side View

mocon® BASELINE | AMETEK® PROCESS & ANALYTICAL INSTRUMENTS

AMETEK MOCON - Baseline
19661 Highway 36
PO Box 649
Lyons, CO 80540 USA
T: +1 303.823.6661
www.baseline-mocon.com

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