

Total Carbon Analyzer

Series 9000TCA Analyzer

Accurate and Reliable Analysis of Total Hydrocarbons and Total Carbons

Fully Automated Analysis over a Broad Range of Concentrations

Applications

- Hydrocarbon and CO / CO₂ impurities in ultra pure inert gases with no oxygen content
 - Argon
 - Helium
 - Hydrogen
 - Nitrogen

Features & Benefits

- Flame Ionization Detector
- Graphical Display with Easy to use Menu System
- Sleek Rack Mountable Profile
- Automatic Calibration at User-Defined Intervals
- 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 Concentration, Alarms, Events and Diagnostics
- Automatic FID (Flame Ionization Detector) Ignition
- Automatic Shut-off of Sample, Fuel and Combustion Air
- Remote Operation via RS-232 and Ethernet
- Optional: 9000 Keeper Software allows for Remote Monitoring and Control



Continuous and Fully Automated Gas Analysis

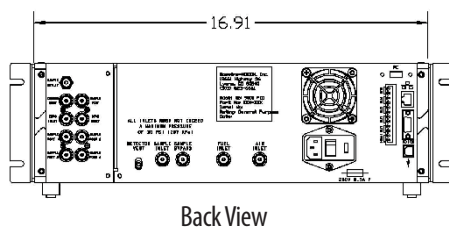
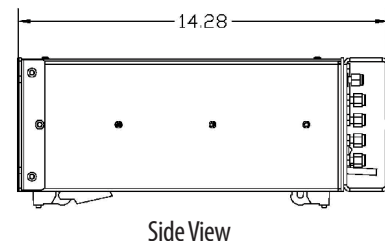
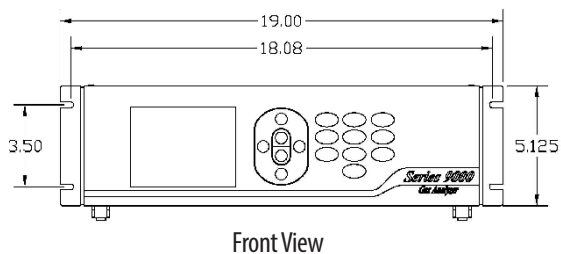
As part of the Baseline® Series 9000 Hydrocarbon Analyzer family, the 9000TCA has a dynamic range from 0.1 ppm to 100 ppm and is designed to measure total hydrocarbon content and provide a combined carbon monoxide (CO) and carbon dioxide (CO₂) reading. The analyzer has a generous complement of analog, digital and logic output capabilities.

The detector used is a FID (Flame Ionization Detector) along with a reduction catalyst that is switched in and out of the sample stream. Total hydrocarbons are first measured and the catalyst converts the CO & CO₂ to methane and leaves the hydrocarbons unchanged for a total carbon measurement.

The total hydrocarbon value is then automatically subtracted from the total carbon concentration to determine the combined CO /CO₂ reading.

The Series 9000TCA can be configured for single or multi point analysis. The automatic calibration feature enhances the long-term analytical stability of the instrument. These features place the instrument well ahead of the competition in performance, automation and configurability.

Detector	(FID) Flame Ionization Detector
Methanizer	Converts low levels of CO and CO ₂ to methane
Ranges	User definable based upon calibration within 0-100 ppm
MDQ	0.1 ppm
Repeatability	+/- 1% Full-scale response
Drift	+/- 1% of full-scale over 24 hours
Response Time	T90 < 30 seconds
Alarms	Multilevel concentration and fault alarms that result in audible and visual alarms. Alarms may also be mapped to relays to control external equipment
Sampling	Internal single or multi-point modules for pre-filtered (<0.1 microns), non-condensing samples, with or without sample pump
Calibration	Programmable automatic or manual calibration
Support Gas	Hydrogen 40cc/min, Air 200 cc/min (typical). Hydrocarbon content must be less than 1 ppm. Fuel blend options available, consult Baseline
Power	90 – 230 VAC, 50/60Hz, 3A
Relay Outputs	5 programmable form A relays rated to 3A @ 230V AC (optional additional 9 relay output board)
Analog Outputs	1 programmable 0-20mA or 4-20mA isolated output (optional additional 3 analog output board)
Digital Outputs	RS-232, Ethernet



Dimensions are displayed in inches

Physical Characteristics

Dimensions	3u, 19.00" (48.3cm) W x 14.25" (36.2cm) D x 5.25" (13.3cm) H	Weight	< 20 lb (9.07kg)
Configuration	Bench-top or rack-mount 19" (48.3cm) panel	Operating Temperature	32 - 104 °F (0 - 40 °C)
Connections	1/4" (6.35mm) tube fitting connectors	Operating Humidity	0 - 95% (non-condensing)



P.O. Box 649, 19661 Highway 36 • Lyons, CO 80540

P: 1.800.321.4665 • 1.303.823.6661

F: 303.823.5151

E: info@baselineindustries.com

www.baselineinc.com