The Series 9000 Hydrocarbon Analyzer is a microprocessor-based instrument designed for continuous ambient or process hydrocarbon gas measurement in environmental or industrial settings. The analyzer can be purchased in a variety of configurations with internal components for single or multi-point sampling (with or without a sample pump) for pre-filtered (< 0.1 microns) non-condensing samples.

Detection limits down to < 10 ppb. User-programmable ranges from 1 ppm up to 100% as methane (CH₄) are factory-configured per the customer’s application to facilitate installation and setup.

Using a Flame Ionization Detector (FID), AMETEK MOCON - Baseline’s FlowGuard electronic control regulates the delivery of fuel, air, and a small part of the sample gas, to the FID. During the combustion process, organic or hydrocarbon-based gases in the sample are ionized, detected by the instrument, and then reported as a concentration. The automatic calibration feature enhances the long-term analytical stability of the instrument.

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.
Series 9000
Total Hydrocarbon Analyzer

Specifications

**Detector**
Flame Ionization (FID)

**Ranges**
User definable based upon calibration within:
- 0.01 ppm to 200 ppm (methane, CH₄), full-scale Accuracy ± 1%, full-scale
- 0.10 ppm to 2000 ppm (methane, CH₄), full-scale Accuracy ± 1%, full-scale
- 0.30 ppm to 20,000 ppm (methane, CH₄), full-scale Accuracy ± 1%, full-scale
- 0.003% to 100% (methane, CH₄), full-scale Accuracy ± 1%, full-scale
Analyzer range is configured at the factory.

**Repeatability**
± 1% full-scale response

**Drift, Zero**
± 0.025% of full-scale over 24 hours

**Drift, Span**
± 1% of full-scale over 24 hours

**Response Time**
T₉₀ < 5 seconds

**Sampling**
Internal single or multipoint modules, with or without sample pump, for pre-filtered (1 micron) non-condensing samples

**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 (H₂) — 35 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**

<table>
<thead>
<tr>
<th>Digital</th>
<th>Analog</th>
<th>Relay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard: RS-232 LAN</td>
<td>Standard: 1 programmable 0–20 mA or 4–20 mA isolated output</td>
<td>Standard: 5 programmable Form A relays rated to 3 A @ 230 V AC</td>
</tr>
<tr>
<td>Optional: 3 programmable analog outputs</td>
<td>Optional: 9 programmable relays</td>
<td></td>
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</tbody>
</table>

**Operating Temperature**
32 to 104 °F (0 to 40 °C)

**Operating Humidity**
0 to 95% (non-condensing)

**Configuration**
Bench-top or 19” (48.3 cm) rack-mount, 3U

**Connections**
1/4” (6.35 mm) tube fitting connectors

**Power**
100–240 V AC, 50/60 Hz, 1 A

**Weight**
< 20 lb (9.07 kg)