**Workplace monitors for dust and gases**

**Ametek Mocon 9100 On-line Gas Chromatograph**

***Description***

The AMETEK MOCON - Baseline Series 9100 on-line gas chromatograph blends state-of-the-art technology with the reliability and flexibility of gas chromatography. Building on decades of experience, this instrument has been designed with key features to meet your application requirements. The GC is specifically designed for sub-part-per-billion (sub-ppb) to percent levels to analyse a multitude of organic and inorganic compounds. Detector options include Photoionization (PID), High-sensitivity Photoionization (HS-PID), Flame Ionization (FID), Thermal Conductivity (TCD), or Pulsed Discharge Ionization (PDD). Analytical arrangements typically involve a single valve, two column configuration, but will vary depending upon the application. The Series 9100 is a microprocessor-based instrument controlled by its internal system software. The software receives your instructions directly, using the touch screen on the front panel. The GC's automatic calibration is ideal for unattended operation. There are a variety of industry standard outputs, such as network (LAN), RS232, multiple 4–20 mA or 0–20 mA, and multiple relays for concentration alarms, diagnostics or user specified timed events. Data collection features include chromatograms and user-definable text formats for exporting data to reports. Data storage options are either continuous or based on events, such as alarms. The compact size and design makes this unit transportable and allows for either rack mount configuration or bench top use.

Applications:

 *Well logging-fast C1-C5*

* Area monitoring of toxic gases for industrial hygiene and safety - Ethylene Oxide,
 Acrylonitrile, Butadiene, Styrene, Epichlorohydrin and many others*

* Fenceline (perimeter) monitoring around industrial and remediation sites - BTEX and
 other VOC's*

* Scrubber efficiency - hydrocarbons and VOC's*

* Carbon bed breakthrough detection -solvents and organic compounds*

* Quality Assurance Monitoring, contaminant analysis or blending of industrial gases*

* Methane/Non-methane analysis*

* A list of over 200 detectable gases is available upon request*

***Specifications:***

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| **Sampling** | Standard: Single point analyser for pre-filtered (1 micron)Optional: Internal: 4- or 8-point sampling; External: 16 or more  |
| **Valves** | Standard: 10-port valve sample injection/column switching. Contact MOCON - Baseline for additional valve options  |
| **Calibration** | Automatic or manual using a dedicated standard  |
| **Output** | Standard: Digital: RS-232, LAN  |
| **Relays** | Optional: I/O Board - (5) programmable (latched/not, NE/NNE) relays as contact closure (3 A at 250 V DC); (1) analog output, (6) digital inputsAdditional expansion boards - Relays: available in multiples of 8 up to 16; Analog: available in 4 or 8 an  |
| **Physical Dimensions** | 19" (48.26 cm) W x 16.25" (41.28 cm) D x 5.74" (14.58 cm) H (w/feet) / 5.12" (13.00 cm) H (w/o feet)  |
| **Nominal Weight** | < 30 lb (13.64 kg)  |
| **Configuration** | Bench-top or rack-mount 19" (48.3 cm), 3U panel  |
| **Display** | 7" Colour LCD graphical display with touch screen  |
| **Power** | 110/230 V AC, 50/60 Hz, 2 Amp  |
| **Operating Conditions** | Temperature: 32 °F to 104 °F (0 °C to 40 °C)  |
| **Gas Connections** | 1/4” or 1/8” O.D. tube compression fittings or 1/8" Legris  |
| **Enclosures** | General purpose, wall mount, X-purged or Z-purged  |
| **Column** | Packed, micro-packed, or capillary columns; Specific to application  |

### Options & Accessories

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| **Detectors** | Photoionization (PID)Flame Ionization (FID)Pulse Discharge Ionization (PDD)High-sensitivity (HS-PID)Thermal Conductivity (TCD)  |
| **Inputs** | Optional Digital input board for six contact closure inputs. Supports start sequence (8 each), start sequence loop (8 each), open method (8 each), and diagnostic functions.  |
| **Software** | Internal  |
| **Gas Generators** | Zero Air, H2 or N2  |
| **Calibration Methods** | Gas Cylinder, Model 8990 Permeation Calibrator, or response factors  |