Environics 2000
Multi-Component Gas Mixer

The series 2000 from Environics produces gas concentrations from percent levels to ppb for the purpose of single or multi-point calibration.

Legislative Compliance

Able to employ mass flow controllers calibrated to a NIST standard, the Environics 2000 automatically blends and dilutes gases to generate precise gas calibration standards for analytical research or production purposes.

Rapid Calibration & Calculation

Automatic calculation of dilution and span gas flows based on the concentration commanded by the user eliminates the need for manual computation and allows a smooth and quick transitition from point to point and scale to scale.

Various Modules to Suit your Application

LED Module, LCD Module, Printer Module, CPU Module, Analogue input Module, Adapter Module, Relay Module, Anlogue output Module and Communication module

"Simultaneous 8 component dynamic mixing with automatic computation of component and balance gas mass flow"

FEATURES

- Multi-component capability permits the user to generate a wide range of complex standards with a minimum inventory of expensive, long lead-time, multicomponent gas cylinders
- Automatic calculation of dilution and span gas flows based on the concentration commanded by the user eliminates the need for manual computation and allows rapid transitition from point to point and scale to scale
- Internally-stored mass flow controller calibration data improves accuracy.
- High capacity memory permits storage and recall of up to 200 multi-component "recipes", saving time and reducing errors.
- Twenty-five line by eighty character display permits viewing of data in worksheet form.
- Modular design allows user to add additional gas circuits later, reducing initial investment and protecting against obsolescence.
- Optional RS-232 Serial Data Interface permits remote operation and complete integration with a data station

TECHNOCAL SPECIFICATION

PERFORMANCE

Accuracy From 10 to 100% of Full Scale Flow

- Concentration: ± 1.0% setpoint
- Flow: ± 1.0% setpoint
- Repeatability: ± 0.05% setpoint

*Mass flow controllers are calibrated using a NIST traceable Primary Flow Standard, using a Reference Temperature of 0o C (32oF) and a Reference Pressure of 760mm Hg (29.92 in. Hg)

Warm up time:

- 30 minutes

MECHANICAL

Inlets

- Balance: One external ¼" Swagelok™*
- Purge: One external ¼" Swagelok™*
- Analyte: One external ¼" Swagelok™*

Outlet

- External ¼" Swagelok™ (or compatible fitting)

Operating Pressures at inlets

- Recommended: 25 psig (1.68 Bar)
- Minimum: 10 psig (0.67 Bar)
- Maximum: 75 psig (5.04 Bar)

Weight

- Minimum: 35 lbs. (16 Kg)
- Maximum: 70 lbs. (32 Kg)

Wetted Surfaces

- Tubing: Electropolished 316 Stainless Steel
- MFC's: Stainless Steel
- Seals: Viton®

(Optional: Kalrez®, Buna-N, Neoprene, Metal)

Operating temperatures

- 0°C- 40°C

Performance temperatures

- 15°C - 35°C

Dimensions (w x h x d)

- Portable: 43.18cm x 17.78 cm x 38.1 cm
- Rack: 48.26 cm x 17.78 cm x 38.1 cm

Electrical

- Standard: 115 VAC (100 to 130 VAC), 50/60 Hz
- Optional: 220 VAC (200 to 260 VAC), 50/60 Hz
- Current: 3 Amps (maximum)

Electronics

- Inmos T 400 series, 32 Bit processor
- 12 Bit A/D and D/A Conversion

Operating Modes

- Front panel membrane keypad
- Internal timer control
- Optional RS-232 serial data interface
- Optional Status board interface

Data Output

- Parallel printer port (Centronics™ compatible)
- Optional RS-232 serial data interface

PC Requirements

- IBM PC or compatible (486-33 or higher)
- Windows 95/98/Me/NT/2000/XP or Windows 7/8/10
- 8 MB RAM
- 10 MB Hard Disk Space
- CD_ROM or access to internet
- USB (standard) or RS-232 Communication port

OPTIONS

- RS-232 Serial Data Interface
- Status Board
- Solenoid Valve on Output
- Ozone Generator (0-1.0ppm)
- Permeation Oven
- Pressurisation Package
- Humidification Package

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