**Gas dilution / blending**

**Environics Series 4020 gas dilution system**

***Description:***

The Environics® Series 4020 can mix up to seven (7) component gases simultaneously to generate precise gas calibration standards and gaseous atmospheres in a broad dynamic range. The dilution capabilities of the Series 4020 allows dilution ratios from 1:1 to 10,000:1 (with larger ranges possible, depending on the configuration of the system). It provides a low cost, computerized gas mixing/dilution system which utilizes an advanced Windows-user interface.

***Specification:***

**Performance**
Accuracy
Concentration: ± 1.0% setpoint
Flow: ± 1.0% setpoint
Repeatability: ± 0.05% setpoint

\*Performance specifications are valid when all Mass Flow Controllers are operating between 10% and 100% of full scale flow. Mass flow controllers are calibrated using a NIST traceable Primary Flow Standard, using a Reference Temperature of 0° C (32°F) and a Reference Pressure of 760 mm Hg (29.92 in. Hg)

Warm up time: 30 minutes

**Mechanical**
Inlets
External 1/4" Swagelok (or compatible fitting)

Outlet
External 1/4" 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)

Wetted Surfaces
Tubing: Electropolished 316 Stainless Steel
MFC's: Stainless Steel
Seals: Viton
(Optional: Kalrez, Buna-N, Neoprene, Metal)

Operating temperatures
32°- 104° F (0° - 40° C)

Performance temperatures
59° - 95° F (15° - 35° C)

Weight
18 lbs. (2 Mass Flow Controllers)
23 lbs. (4 Mass Flow Controllers)
35 lbs. (8 Mass Flow Controllers)

Dimensions (w x h x d)
Portable: 17" x 7" x 15"
(43.18cm x 17.78 cm x 38.1 cm)

Rack: 19" x 7" x 15"
(48.26cm x 17.78 cm x 38.1 cm)
Portable: 17" x 7" x 15"
(43.18cm x 17.78 cm x 38.1 cm)

**Electrical**
110 to 240 VAC, 50/60 Hz

**Electronics**
12 Bit A/D and D/A Conversion
USB (standard) or RS232 Serial interface

**Software**
Environics Instrument Control Software

PC Requirements
Windows 95/98/Me/NT/2000/XP or  Windows 7/8/10
8 MB RAM
10 MB Hard Disk Space
CD drive or internet access
USB or RS-232 Communication port

## **OPTIONS**

Additional MFCs (up to 8)

Additional input ports (up to 8)