

# Gas Mixer/Blender

## Gas Mixer/Blender Systems

The gas mixer provides a mixture of two gases by alternately filling a tank until each gas has contributed proportionally to the tank's final pressure. The volume ratio of each gas is determined by the selected mix percentage.



### Features:

- Full microprocessor control with nonvolatile memory
- Dual 30 gallon ASME coded tanks rated for 600 psig
- Gas mixture selectability
- Single step calibration
- Optional on-line concentration monitoring
- 40 character alphanumeric (AN) display
- Fault control system with (AN) display of fault
- High reliability encapsulated linear power supply
- Photo isolated opto relays with zero voltage turn on
- Keyboard control of mix percentage and operating pressure
- High flow air actuated ball valves
- Unique diffuser mechanism assures a proper and consistent gas mixture
- On-Line display provides information on tank pressure, valve status, and system prompts
- Moisture-proof, water resistant stainless steel cased high resolution pressure transducers

## Vacuum Instruments Corporation, LLC

2101 Ninth Avenue • Ronkonkoma NY 11779 • Tel 631 737 0900 • Fax 631 737 1541

[vicleakdetection.com](http://vicleakdetection.com) • email [sales@vicleakdetection.com](mailto:sales@vicleakdetection.com)



## GAS MIXER/BLENDER SYSTEMS

A microprocessor-based system designed to blend two gas components, typically helium and air. These systems provide a cost effective alternative to 100% tracer gas.

### How It Works

#### Sequence of Operation – as easy as 1...2...3.

1. Fill Tank 1 with Gas A to a specified pressure.
2. Introduce Gas B to Tank 1 to complete mix operation.
3. Repeat above steps for Tank 2.

### Model Selection

Base unit performs blending of two gas components based on pressure ratio. Options available include on-line gas mixture analysis, air driven pressure booster systems (up to 600 psi) for one or both gases.

Base Unit P/N 925-102

Base Unit with Gas Analyzer P/N 925-110

Gas Boost Options available on request.

### Performance

#### Pressure Measurement

Two solid state all welded transducers rated for 0-1000 psig used for mixture control.

Two 2 1/2" liquid filled gauges mounted on each pressure vessel.

Pressure relief valves incorporated into each vessel for safety.

#### Valving

Rack and pinion pneumatically actuated high conductance ball valves.

#### Manifolding

Seamless tubing, helium leak tested to  $1.0 \times 10^{-6}$  atm cc/sec at 600 psig.

#### Pressure Vessels

Two 30 gallon ASME coded tanks designed for 600 psig service.

### Electronics

Microprocessor-based housed in NEMA 12 enclosure.

### Operator Interface

Menu-based operation with 2 x 40 character alphanumeric display. Includes data entry capability for gas mixture, remix and output pressure. Displays tank pressures and current gas mixture in operating mode.

### Power

105–125 VAC 50/60 Hz

### Power Consumption

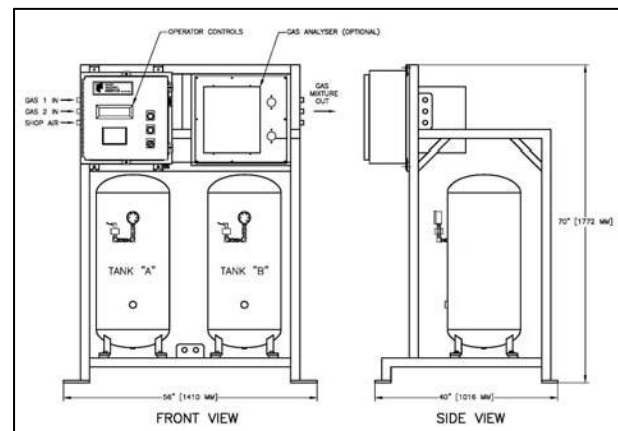
240 Watts (375 Watts with optional gas analyzer).

### Dimensions

48" (1220mm) W x 70" (1778mm) H x 37" (940mm) D.

### Weight

980 lbs. (445kg)



### Vacuum Instruments Corporation, LLC

2101 Ninth Avenue • Ronkonkoma NY 11779 • Tel 631 737 0900 • Fax 631 737 1541

[vicleakdetection.com](http://vicleakdetection.com) • email [sales@vicleakdetection.com](mailto:sales@vicleakdetection.com)

\* Performance determined in accordance with American Vacuum Society Standards; Specifications subject to change without notice.

©2016 Vacuum Instruments Corporation, LLC; ©VIC Leak Detection is a registered trademark and the VIC symbol is a trademark of Vacuum Instruments Corporation, LLC.

REV061618