

# Gas Delivery Systems Blender Systems

## DATA SHEET



### Features & Benefits:

- Inert, toxic, hazardous gases; semi-auto or fully automatic PLC-based control with touchscreen interface
- Up to 250-slpm constant flow rate and 300-slpm peak flow rate for versatility
- Concentration analyzer for accuracy
- Adjustable MFC-based mixture ratio, with mixing accuracy  $\pm 0.3\%$
- UHP-purity construction for submicron processes
- Optional communication protocols for monitoring
- Backup supply control for uninterrupted gas flow
- Life safety relay logic to override PLC for fire, leak, toxic and facility shutdowns with relay feedback
- Modular construction to facilitate service and maintenance
- SEMI-S2 compliant

### Blender

The Collabratech Blender is a closed-loop, control-based gas blending system combined with a built-in analyzer. It provides an accurate blend ratio at variable flow rates up to 250 slpm. These features, combined with intuitive PLC control software and a user-friendly touch-screen HMI, provide a safe, reliable and versatile gas mixing system.

The Collabratech Blender System expands on standard gas mixing technology by combining an MFC mixing system, surge tank, concentration analyzer and Collabratech' innovative Power Purge V controller. The automated system maintains operation within the user-defined system parameters. The system is capable of providing consistent results with varying flow rates and adjustable blend ratios.

Collabratech's extensive experience in gas systems provides system designs that ensure the best uptime in the industry with the most stable supply record. The system software is designed to improve efficiency and extend the lifetime of the tool. Contact Collabratech for more information about a system that matches your needs.



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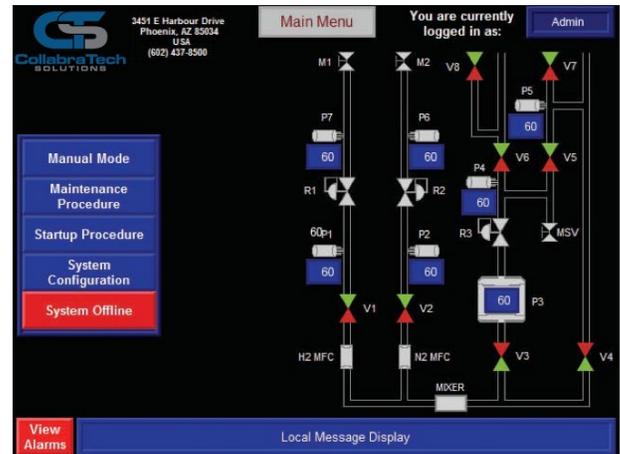


## Blender Operation

The Blending System is designed to mix two gases to an adjustable ratio, and supply a variable flow up to 250 slpm continuously, with up to 300 slpm peak flows for brief durations. A concentration analyzer monitors the mixture and adjusts the blend ratio to maintain the concentration set point. The system is designed for accuracy within 0.3% of the set point value at 72°F (22.2°C) with the minor blend component set point below 10% of the mix ratio. Adjustable set points and alarms allow the operator to safely operate and monitor the system.

## Blender Enclosure Features

- Measures 26" W x 21" D x 64" H with dual 6" exhaust
- Superior construction – 11-gauge cold-rolled steel, all-welded construction, polyester powder coating for superior corrosion resistance
- Large windows – Self-closing, self-latching with ¼" safety glass
- Doors – Self-closing, self-latching with enclosure gasket with full-length hinge for years of trouble-free service
- Cabinet louvers – Air intake on door bottom and rear of the enclosure bottom eliminates dead or trapped-gas areas
- Exhaust sensor – Alarm can initiate chemical shutdown, audible alarm or remote alarm as needed
- Sprinkler head – U.L. approved
- SEMI-F14 compliant



## Blender Options

- Door/window sensors – Provide programmable alarm if door or window is opened
- Toxic monitor – Monitors enclosure continuously for any sign of toxic leak
- Fire sensors – Standard rate of rise or optional UV/IR or dual IR sensors
- High-accuracy analyzer for systems requiring blend accuracy below  $\pm 0.3\%$
- Real-time facility ratio monitoring with additional analyzer
- Optional stainless steel cabinet

## Facilities

- 220 VAC @ 5 amps
- N2 @ 80 psi
- CDA @ 80 psi