

# Process Gas Sampling System

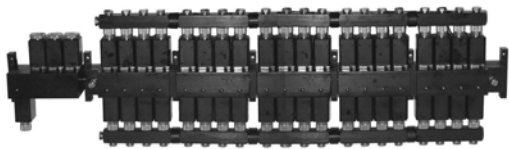
## Product Description

The Process Gas Sampling System connects a gas analyzer to multiple gas-sampling lines via a valve/manifold system. The valve bank is modular to accommodate various gas sampling system needs. Each module consists of four stainless steel valves. Sample scheduling is set to continuously cycle through the sampling ports, one after another. The system includes a multi-port-purge system that uses an auxiliary pump to simultaneously pre-purge one or more sample lines while simultaneously analyzing gas in a specified line. This shortens the time between port-gas measurements by keeping the sample lines filled with fresh sample gas. Sample time at each port is typically 10 to 15 seconds. A PC-based control system running MS Windows 2000 is required to operate the sampling system. ARI supplies the sampling system software and system setup to user specifications.

The system also includes ARI's nitrogen back flush system. Should any of the sampling lines become restricted or plugged, pressurized nitrogen can be forced backwards down the line to clean it. The sampling system optionally includes high-pressure calibration gas cylinders mounted within an enclosure. Each calibration gas has its own on/off valve and pressure regulator. A system may optionally include continuous monitoring of gas pressure and temperature from multiple locations.

## System Features

- Modular design for flexible configuration
- Pre purge reduces sampling time
- Nitrogen back flush for line cleaning
- Scheduled auto calibration of analyzer
- Manual and auto sampling
- Pre filters protect analyzer
- Integrates with any gas analyzer



A manifold configuration of 20 sample valves plus 3 additional valves for calibration gases.



Modular block of four valves

**“Flexible modular sampling system for all gas process applications”**



## Specifications

### GENERAL

Dimensions	40" x 36" x 12" (typical)
Enclosure	NEMA 4 cabinet
Sample flow rate	200-800 ml/min
Valve body	Aluminum
Valve stem	Stainless steel
Sample time	1-15 sec.
Tubing	1/8" stainless

### FILTERS

Media filters	Aluminum base Twist on case Polypropylene with Teflon core (Other types optional)
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### CONTROL

PLC I/O controller	Interface to PC running SW on Windows 2000
Power	24v valves, controller, pump

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