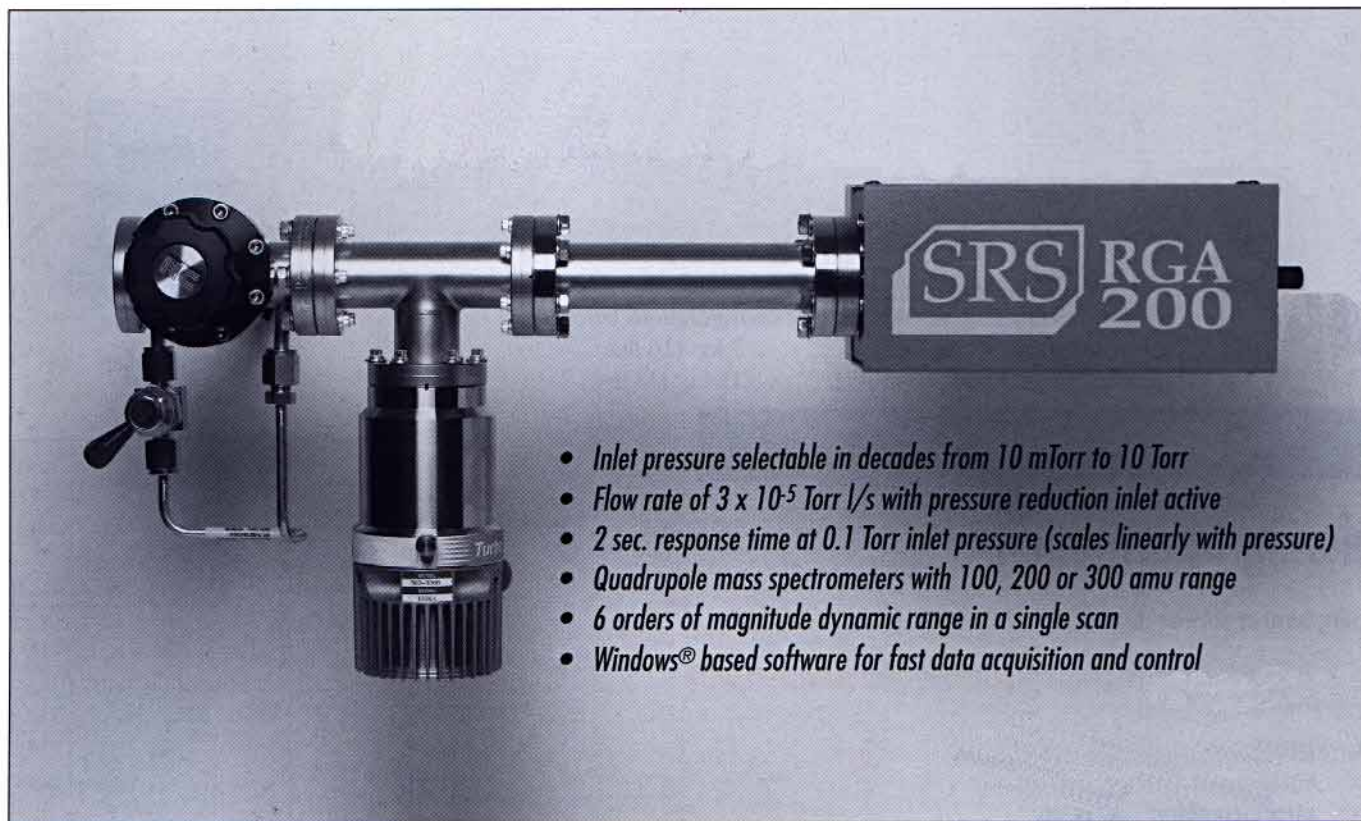




PPR100/200/300 Vacuum Process Monitoring Systems



The PPR Vacuum Process Monitoring System is designed for inline process monitoring and diagnosis. Two paths are provided to the RGA: a high conductivity path for monitoring base vacuum and a pressure reducing path for monitoring the process at operating pressure. The pressure reducing path contains a micro-hole orifice, which is designed to operate at one of the following pressures: 0.01, 0.1, 1, or 10 Torr. It reduces the sample pressure to the operating pressure of the RGA (about 10^{-6} Torr). This pressure drop is maintained by the pumping system, which consists of a hybrid turbomolecular pump and a diaphragm pump. Both pumps are oil free and will not contaminate your process. The inlet assembly that attaches to your process chamber is pictured above. The full system also includes a controller, diaphragm pump and a Windows® based software program for data acquisition and control.

The software is used to operate the instrument in various modes, including analog scan, histogram mode and pressure vs. time mode. An electron multiplier option provides greater sensitivity and higher scan speeds. The PPR system is shipped completely assembled and calibrated, and is ready to attach to your vacuum process chamber.

If you are looking for a solution to your process diagnosis, contamination and leak detection problems, call SRS to find out how these process monitoring systems fit into your application. To place an order or for further details, please call SRS at (408)744-9040.

Specifications

Performance

Gas flow	~ 3 x 10 ⁻⁵ mbar l/s with pressure reduction inlet active
Response time	2 s at 0.1 mbar inlet pressure (scales linearly with pressure)
Startup time	8 minutes nominal

Connections

Inlet	2 3/4 inch CF flange, rotatable with through holes
Inlet to controller	6 foot cable (provided)
Inlet to backing pump	6 foot, 1/4 inch ID x 7/16 inch OD flexible hose (provided)
Computer interface	RS-232C (28,800 baud, 9 pin D connector)

Pumps

High Vacuum	Hybrid turbomolecular/drag pump, 70 liter/s, ultimate pressure 2 x 10 ⁻⁹ mbar
Backing	Diaphragm pump with ultimate pressure less than 1 mbar. Protection class IP44
Cooling	Requires forced air cooling

General

Power requirements	110 VAC/60 Hz or 220 VAC/50 Hz (not field selectable), less than 300 W
Dimensions	Vary with configuration (see sample configurations below)
Weight	Inlet (mounted on chamber)7 kg. (16 lbs.) Diaphragm pump and controller15 kg. (33 lbs.)



Diaphragm pump



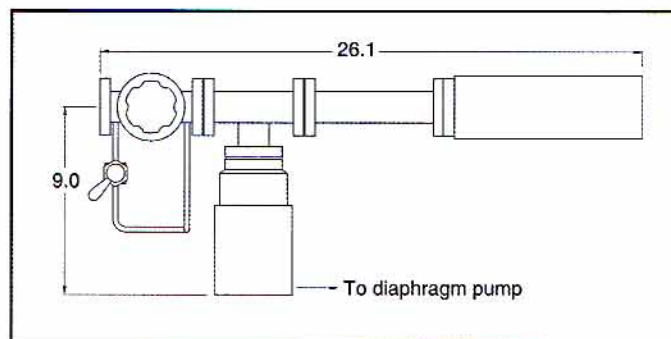
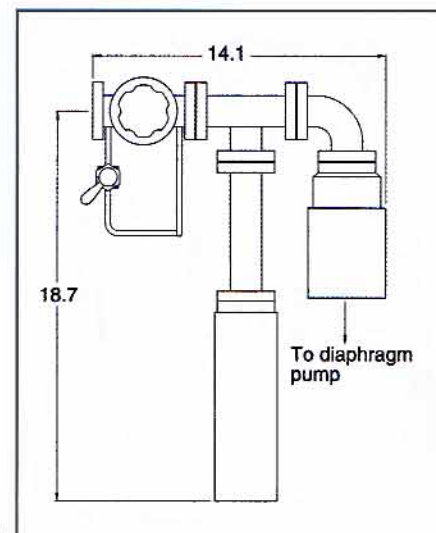
Controller

Ordering Information

The part number format is:

PPR-MOD-PR-G-OP

MOD	RGA Model: 100, 200 or 300 amu
PR	Pressure: .01, 0.1, 1.0 or 10 Torr
G	Inlet Geometry: A, B , etc.
OP	Option: 01 Electron Multiplier



Inlet Geometries

The inlet assembly is offered in various geometries to match your space requirements. Shown are two typical configurations (with dimensions in inches). Call for complete mechanical drawings or additional geometries.



Stanford Research Systems
 1290-D Reamwood Avenue, Sunnyvale, California 94089
 TEL: (408)744-9040 • FAX: (408)744-9049
 email: info@thinkSRS.com • www.thinkSRS.com