An Economical, Accurate Method for Measuring Vacuum

- Bayard-Alpert Design
- Convenient Bench Top Enclosure
- I2R Degas Standard
- 1 x 10^{-9} to 1 x 10^{-1} Torr Range

Model 330 Ion Gauge Controller

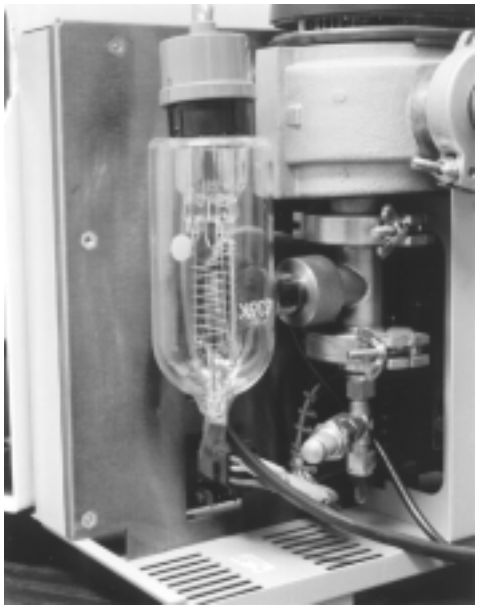
The Granville-Phillips Model 330 Ionization Gauge Controller is reliable, easy to operate, easy to service and moderately priced. The 330 with switchable, variable emission currents provides the advantage of long filament life, excellent immunity to electrical noise and easily read pressure display.

Bayard-Alpert style gauges have become the standard for accurate measurement of vacuum in mass spectrometers. In some instances, a mass spectrometer may be shipped without a vacuum gauge since it is an optional accessory (such as in the Agilent Technologies 5971 Mass Spectrometer). The mass spec user can easily add the controller at a cost significantly less than purchasing directly from the mass spectrometer manufacturer.

Often the user may want to add additional gauges to better visualize the operation of the mass spectrometer. On magnetic sector instruments or other mass spectrometers where the source and analyzer are differentially pumped, two ion gauge controllers would be advantageous to separately monitor the vacuum in both the source and at the analyzer (multiplier section). This will enable the quick diagnosis of pumping and vacuum problems for optimum instrument performance and maximum electron multiplier life.

An Ion Gauge Controller can easily be added to the Agilent Technologies 5971 mass spec as shown on the right, by inserting the Ion Gauge Adapter between the NW25 flange on the mass spec and solenoid valve/calibration vial. The Ion Gauge Adapter contains NW25 flanges on both ends to clamp into the Agilent 5971 as shown, and a 3/4" Cajon 'O' Ring fitting to attach the ion gauge tube. Also included with the Ion Gauge Adapter is one centering ring, and one clamp. A complete set up for the Agilent 5971 as shown would include one of each of (1) Model 330 Ion Gauge Controller, (2) Ion Gauge Adapter, (3) G75K Ion Gauge Tube and (4) 330-10' cable.

Additional flanges or ion gauge adapters are described elsewhere in this catalog, or Scientific Instrument Services can custom machine an adapter to your requirements. If you have special requirements, please call or write with the specifications you require.



Ion Gauge Tube and Adapter installed in a Agilent 5971 GC/MSD

Specifications	
Display	Green LED Digital
Pressure Range	1 x 10^{-1} to 1 x 10^{-9} torr
Units	torr
Emission Current	Controlled, Adjustable from 0.01 - 10.0 mA
Degas	I2R: 8V, 10A max.
Weight	10.5 lbs.
Power Input	110V, 100 watts, 60 Hz
Dimensions	9" wide x 3" high x 11" deep.

Part No.	Description	Price ea.
IGC330*	Model 330 I.G.C., with degas	
330C10	330 10' Cable	
G75K	3/4" Kovar Ion Gauge Tube	
G75P	3/4" Pyrex Ion Gauge Tube	
HP71A	Ion Gauge Adapter	

**A complete system requires purchase of IGC330, one cable, and one tube.*