Hot Ion Vacuum Gauges

From atmosphere to ultrahigh vacuum with one gauge
The Hot Ion Family
Wide Range Vacuum Gauge

The INFICON Hot Ion Family of vacuum gauges combines the advantages of up to three different technologies in a single compact economic package to measure process and base pressure from 5 x 10^-10 to 1500 mbar (3.75 x 10^-10 to 1125 Torr). Combining technologies reduces the complexity of installation, setup, and integration, thus reducing cost and valuable tool space. For applications that require stand alone hot ion gauge technology, INFICON offers the single technology Bayard Alpert Hot Ion Gauge BAG402-S. The supported single or dual filament options offer superior accuracy and longevity. A broad range of interface options enable simple system integration.

Typical applications
- Pressure measurement for semiconductor process, transfer, and load lock chambers
- General vacuum measurement and control in the low to ultrahigh vacuum range
- Physical vapor deposition (PVD) in industrial coating
- Sputter application in semiconductor manufacturing, electronic and media industry (HPG400)

Enhanced lifetime through intelligent filament on/off control

The temperature will be conducted through the gas molecules. The temperature loss of the hot filament is a function of the pressure.

Gas type independence

CDG working principle

Quick and easy with replacement sensor

Differential pressure measurement

Interface I/O
- Classic analog signal
- Wide range power supply
- Status LED
- RS-232
- Display
- ACM SWITCH function

CDG sensor technology

Pirani and Hot Ion principle

Stability and accuracy

CDG sensor technology

Pirani sensor technology

CDG sensor technology

Stable

Nonstable

Filaments are kept precisely in position by controlled tension

Stable filament alignment and displacement

S-shaped filament alignment and displacement

Gas type independence

CDG sensor technology

Pirani sensor technology

CDG sensor technology

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INFICON HOT ION FAMILY
ADVANTAGES AT A GLANCE

• Up to 13 decades in one gauge
• Save costs and tool space
• Install and forget
• Long lifetime

Measurement ranges

Combined technologies save costs and tool space

- BAG402
- BPG400
- BPG402
- HPG400
- BCG450

Single BA Gauge

Pirani
Capacitance Diagram Gauge
Hot Ion
Triple Gauge BCG450
EXCELLENT CUSTOMER SUPPORT IS A COMMITMENT

INFICON provides a global network of sales and service centers. These centers are staffed with local service and application experts who can assist you in choosing the best solution for your individual product application and provide fast support if service is needed.

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Due to our continuing program of product improvements, specifications are subject to change without notice.