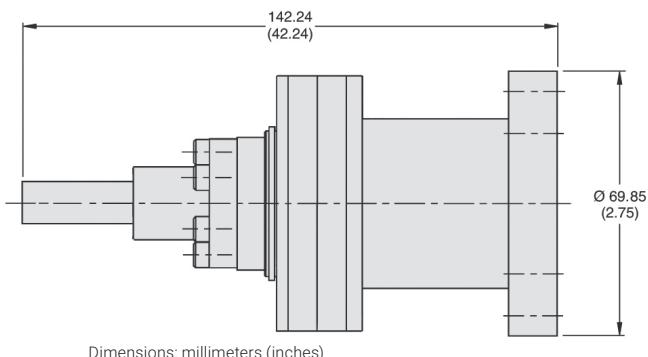


IMG-300 UHV Inverted Magnetron Gauge



The Agilent IMG-300 Inverted Magnetron gauge combines excellent ultra-high vacuum (UHV/XHV) measurement capability where stable UHV/XHV pressure measurement and fast pressure response are equally critical. It spans a range from 1×10^{-3} to 1×10^{-11} Torr (1.3×10^{-3} to 1.3×10^{-11} mbar). This passive gauge has minimal outgassing and is electron and photon emission-free, eliminating disruption to the experimental process.

This cold cathode UHV/XHV gauge is easily interfaced with the Agilent XGS-600 Gauge controller for integration into a variety of vacuum systems. This sensor is fast starting at low pressure and optimized for UHV applications such as particle accelerators, synchrotron light beam lines, and energy research applications.

Technical Specifications

| |
|--|
| Measurement range |
| 1.0 x 10 ⁻³ to 1.0 x 10 ⁻¹¹ Torr; 1.3 x 10 ⁻³ to 1.3 x 10 ⁻¹¹ mbar |
| Measurement precision |
| ±50% |
| Temperature limits |
| Operating: 0 °C to 250 °C; storage: -15 to 80 °C |
| Bake out temperature |
| 250 °C maximum with cable and magnet attached |
| Pressure response time |
| < 10 milliseconds for increasing pressure |
| Ignition response (starting time) |
| < 5 seconds at pressures > 1E-6 Torr, typically 20 min @ 1E-10 Torr |
| Operating voltage (HV range) |
| 3kV DC |
| Materials exposed to vacuum |
| 304L Stainless steel, Nickel, 2% Thoriated Tungsten, and ceramic |
| Sensitivity |
| 2.5A/Torr |
| Radiation Resistance |
| 10 ⁹ Rad |

Ordering Information

| Description | Part Number | Fitting | Shipping Weight kg (lbs) |
|-------------|-------------|-------------------------|--------------------------|
| IMG-300 | R0343301 | DN 40 CFF (2.75 in CFF) | 1.0 (2.0) |

Cable ordering

| Cables | Length | | | | | | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|--|--------|
| | | 10ft | 25ft | 50ft | 75ft | 100ft | Others |
| IMG gauge Non-bakeable cable | R03113010 | R03113025 | R03113050 | R03113075 | R03113100 | R03113135 – 135 ft R03113165 – 165 ft R03113200 – 200 ft | |
| IMG gauge Bakeable cable up to 250°C | R03413010 | R03413025 | R03413050 | | R03413100 | R03413065 – 65 ft R03413115 – 115 ft R03413165 – 165 ft | |

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www.agilent.com/chem/vacuum where
you can chat live with a vacuum expert.



<https://www.agilent.com/en/product/vacuum-technologies/vacuum-measurement/vacuum-transducers/img-300-uhv-inverted-magnetron-gauge>

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