

G7003-80303 Agilent 10-9to10-2Torr DualFilament Ion Gauge Datasheet



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Category: Process Sensors

Price: \$33.99

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Product Description

Agilent G7003-80303 is a high-precision Micro-Ion vacuum gauge featuring a measurement range of 1.0×10^{-9} to 5.0×10^{-2} Torr and dual Yttria-coated Iridium filaments. The assembly utilizes a specialized interface for direct integration into mass spectrometer manifolds, ensuring accurate pressure monitoring within high vacuum environments. The internal architecture consists of a fine-wire collector and a helical grid designed for stable electron emission and ion collection. The dual-filament configuration provides redundancy, extending the operational lifespan of the sensor in demanding analytical conditions.

G7003-80303 Specifications

Model: G7003-80303

Brand: Agilent Technologies

Category: Ionization Vacuum Gauge

Measurement Range: 1.0×10^{-9} to 5.0×10^{-2} Torr

Filament Type: Dual Yttria-coated Iridium

Emission Current: 0.02 mA to 1.0 mA

Sensitivity: 15 Torr⁻¹ (Nitrogen)

Operating Temperature: 0 to 50 °C

Bakeout Temperature: 200 °C

Instrument Compatibility: Agilent 7000, 7010, 7250 ICP-MS and 5975, 5977 MSD series

Interface: Proprietary Agilent manifold mount

Collector Material: Tungsten

Grid Material: Platinum-clad Molybdenum

G7003-80303 Applications

Primary applications include integration into Agilent 7000 series ICP-MS and 5977 series Mass Selective Detectors for real-time high vacuum monitoring. Deployed within Gas Chromatography-Mass Spectrometry (GC-MS) and Inductively Coupled Plasma Mass Spectrometry (ICP-MS) systems to ensure precise pressure regulation during ion source operation and detector protection.

Supplemental Images

