

Convection-Enhanced Pirani Gauge

PG105U — UHV Pirani gauge



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- **1000 Torr to 10^{-4} Torr range**
- **UHV compatible**
- **Bakeable to 250 °C**
- **Fast response time**
- **Compatible with IGC100 controller**

PG105U Specifications

Type	Convection-enhanced Pirani gauge
Measurement range	1.0×10^{-4} to 1000 Torr
Materials exposed to vacuum	Stainless steel, nickel "52" alloy, glass-alumina, ceramic, gold, copper
Sensor	Gold-plated tungsten
Sensor temperature	120 °C (nominal)
Reproducibility	5 % (at constant temp.)
Bakeout temperature (non-operating)	250 °C
Operating temperature	0 °C to 50 °C
Temp. compensation	10 °C to 40 °C range
Installation orientation	Gauge tube axis must be horizontal for pressure measurements above 1 Torr.
Connection	<i>Standard:</i> 0.5 inch dia. side tube terminated in 1/8NPT thread <i>Options:</i> NW16KF, NW25KF, 1.33" CF, 2.75" CF, 1/4" VCR
Gas compatibility	1) Not intended for use in explosive atmospheres 2) Do not use in the presence of fluorine or mercury containing vapors.
Calibration gas	N ₂ /air
Internal volume	28 cm ³
Dimensions	1.3" × 2.7" × 4.2" (WHL)
Weight	0.5 lbs.
Electrical connector	RJ-45

The PG105U is an all-metal, convection-enhanced Pirani gauge, featuring a knife-edge copper gasket seal. The gauge has a bakeout range from 110 °C to 250 °C allowing complete compatibility with UHV environments.

Ordering Information

PG105U	Pirani gauge (250 °C, 1/8" NPT)
Option 01	1.33" CF flange
Option 02	2.75" CF flange
Option 03	NW16KF flange
Option 04	NW25KF flange
Option 05	VCR 1/4" fitting
O105C4	10' cable (dual-gauge cable)
O105C4/1	25' cable (dual-gauge cable)
O105CA1	Adapter for Convector® gauge
O105CA2	Adapter for HPS® series 317