

Specifications and Ordering Information

Measuring Range for N₂ or Air (See Notes 1, 2)

UHV Gauge	
Torr	1x10 ⁻¹⁰ to 2x10 ⁻²
Mbar	1x10 ⁻¹⁰ to 3x10 ⁻²
Pa	1x10 ⁻⁸ to 3
Extended Range Gauge	
Torr	2x10 ⁻¹⁰ to 2x10 ⁻²
Mbar	3x10 ⁻¹⁰ to 3x10 ⁻²
Pa	3x10 ⁻⁸ to 3
Accuracy for N₂ (See Note 4)	±25% of Reading from 1x10 ⁻⁹ to 1x10 ⁻⁴
Repeatability (See Note 5)	±10% of Reading from 1x10 ⁻⁸ to 1x10 ⁻⁴
Emission Currents	0.1 mA and 4.0 mA
X-ray Limit (See Note 3)	
UHV	2x10 ⁻¹¹ Torr; 3x10 ⁻¹¹ mbar; 3x10 ⁻⁹ Pa
Extended Range	2x10 ⁻¹⁰ Torr; 3x10 ⁻¹⁰ mbar; 3x10 ⁻⁸ Pa
Degas	Electron bombardment, 20 W with 2-minute timer
Filament Material	Yttria-coated iridium
Operating Temperature	0°C to 40°C ambient, non-condensing
Non-Operating Temperature	-40°C to 70°C
Gauge Bakeout Temperature	450°C with electronics removed
Power	24 VDC +15%, 75 W maximum, 3.75 A at 20 VDC
Case Material	Aluminum
Approximate Weight	800 gm (1 lb, 12.5 oz)
Materials Exposed to Gas	All vacuum fired, UHV compatible
Internal Volume	73.0 cm ³ , (4.45 inch ³) to the port screen
Analog Output	
Remote Input Signals	1 volt/decade, logarithmic, 0 to 9 VDC
Remote Output Signals	Gauge ON/OFF, degas ON/OFF, set by continuity to ground
I/O Connector Output	
Remote Input Signals	1 volt/decade, logarithmic, 0-9 VDC
Remote Output Signals	Gauge on/off, degas on/off, set by continuity to ground
	Gauge and degas status by open collector transistor

Notes:

- Measurements will change with different gases and mixtures. Correction factors for common gases are provided in the instruction manual.
- Stabil-Ion gauges are not intended for use with flammable or explosive gases.
- The X-ray limit is the absolute lowest indication from the gauge. It is not practical to make repeatable measurements near the X-ray limit.
- Accuracy (the difference between the gauge reading and a calibrated reference standard) is determined statistically and includes the combined performance of the gauge electronics.
- Repeatability refers to the ability of the same module to read the same pressure at different times.

Model Number Matrix

Stabil-Ion Gauge Module with analog output, no relays, Yttria-coated iridium gauge filaments, Torr. To order a Stabil-Ion Gauge Module with analog output, extended range gauge, yttria-coated iridium filaments, and measurement units in Torr, select catalog number 347054-YE-T.

Stabil-Ion Gauge Module:	347054 - Y# - T
Gauge Type:	
Extended Range	E
UHV	U



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