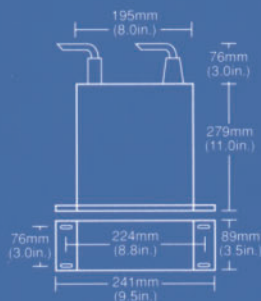


350 CONTROLLER SPECIFICATIONS

Display	<ul style="list-style-type: none"> • type-digital (green LED) • units - torr, mbar, pascal (user-selectable) • update time - 0.5 second typical
Controller Pressure Range	<p>Lower Measurement Limit $\leq 2 \times 10^{-11}$ Torr or x-ray limit of Bayard-Alpert gauge with 10 mA emission and tube sensitivity of 25/Torr</p> <p>Upper Measurement Limit 1×10^2 Torr with 0.1 mA emission and tube sensitivity of 25/Torr</p> <p>Pressure Range 8 decades within limits listed above</p>
Emission Current	Controlled, adjustable from 0.01 to 10.0 mA
Ionization Gauge	Bayard-Alpert and other compatible hot cathode type ionization gauges
Analog Output	Logarithmic: 1 V/decade, 0-10 Vdc
Degas	Electron Bombardment 40 W approximate with soft turn on
Remote I/O	IG status optoisolation transistor with open collector and emitter. Momentary ground controls cathode selection and degas.
Cathode Selection	Front panel switch selects cathode
Sensitivity Adjustment Range	3/Torr to 50/Torr
Available Options:	(Only one)
Process Setpoints	Two channel, SPDT relays settable over entire pressure range with manual override switches
Computer Interface	RS-232C
Cables	3m (10 ft.), 7.5m (25 ft.), 15m (50 ft.), or custom length
Controller Weight	4.8kg (10.5 lb.)
Operating Temperature	15-40 °C
Power Input	100/115/215/230 \pm 10% VAC (user selectable) 100 watts, 50 or 60 Hz
Controller Dimensions	(allow 76mm (3 in.) depth for connectors)



350 UHV IONIZATION GAUGE CONTROLLER



Benefits/General Information

The 350 UHV Ionization Gauge Controller (IGC) helps reduce costs in ultra high vacuum measurement applications by providing dependable, trouble free pressure measurement in a compact package that saves valuable panel space. The result of the 350's efficient design is a smaller system, and a smaller footprint that can save dollars in expensive factory floor space.

The 350 helps increase system productivity by helping to reduce operator errors that can lead to product defects or cycle time delays. Infrequently used controls are housed behind a hinged front panel to prevent tampering or accidental setting changes. A large, bright easy to read, flicker free digital display provides distinct, unmistakable pressure readings directly in torr, mbar or pascal. You are not overloaded with information that can detract from the process itself.

Even unskilled operators should have no problem using the 350 IGC. One switch turns on the ion gauge. A damage preventing interlock allows electron bombardment degas only when displayed pressure is below 5×10^{-5} Torr. A built-in timer saves operator time by turning off the degas function after fifteen minutes. The 350 also helps prevent cathode failure due to accidental or intentional

operation at high pressure. Switching between cathodes on dual cathode style Bayard-Alpert gauges is as simple as turning on the gauge itself. You don't have to waste time changing the gauge connection.

The 350's clean, uncluttered appearance integrates easily into turnkey systems and does not detract from the main functions of the system operation. Automated operation of the gauge and degas is possible through remote input/output. Optional pressure setpoints can be used to configure the 350 to control a variety of system functions such as switching valves, interlocks, alarms, etc. An optional RS-232C interface provides compatibility with computerized systems. Uptime is maximized by conservative design and protection against power surges, RF interference, and gauge malfunctions.

If you need more information, or want to order a 350, give us a call. We'll be glad to talk with you. Ordering information and phone numbers are on the reverse side of this specification sheet.

GRANVILLE-PHILLIPS
HELIX TECHNOLOGY CORPORATION

Advanced Vacuum Measurement Solutions

ORDERING INFORMATION

How to Order

Please give the complete catalog number and description when ordering any item, as listed below.

- 350001** Basic Ion Gauge Controller. Electron bombardment (EB) degas standard. Please specify torr, mbar, or pascal units of measure and 100, 115, 215, or 230 Vac input voltage. 115 Vac and torr readout is standard. Gauge cable not included. (Note: only one option may be ordered with each controller.)
- 350002** Process Setpoints Option
- 350003** RS-232 Computer Interface Option
- 350010** Additional Instruction Manual
- 350013** Extended Limited Warranty

Optional Mounting Configurations (9.5 in. x 3.5 in. half-rack mounting is standard)

- 330006** Bench or table top mounting
- 307010** Mounted with spacer panel to fit in one side of 19 in. rack (specify right or left side controller mounting)
- 307011** Mounted with spacer panels to fit in center of 19 in. rack
- 307021** Adapter to mount 2 units side-by-side in 19 in. rack

Ion Gauge Cables:

- 350004** 10 ft., nude gauge
350005 25 ft., nude gauge
350006 50 ft., nude gauge
350008 up to 100 ft., nude gauge
350004-C 10 ft., nude gauge with molded connector, 150 °C bakeable
350005-C 25 ft., nude gauge with molded connector, 150 °C bakeable
350006-C 50 ft., nude gauge with molded connector, 150 °C bakeable
350008-C up to 100 ft., nude gauge with molded connector, 150 °C bakeable

Ionization Gauges

The 350 is compatible with all GPC Series 274 nude gauges. Other compatible hot cathode type ionization gauges are useable but may require cable modification.



274022/274023
Electron bombardment degas
Nude ionization gauge
(without pin guard connector)



274028
I²R or EB degas
Nude ionization gauge
(without pin guard connector)

Where to Order

Information regarding order placement, technical assistance, or the location of the sales office nearest you is available through our corporate office: Granville-Phillips Co., 5675 Arapahoe Avenue, Boulder, Colorado 80303-1398, USA. Telephone: (303) 443-7660 or (800) 776-6543. Fax: (303) 443-2546.

Terms and Price Policy

F.O.B. Plant, Boulder, Colorado USA. Other terms will be quoted on request. Granville-Phillips reserves the right to change prices and specifications without notice.

Limited Warranty

This equipment is warranted for a period of one year to be free of defects in materials and workmanship subject to certain exceptions and limitations which are expressly stated in our Limited Warranty for this equipment, a copy of which is included in each instruction manual or which will be mailed to you upon request. An extended warranty is available, for an additional charge if purchased on the same date as the equipment. This extends the warranty period to a total of five years.

Call to Order

Call Today for applications assistance or to order vacuum gauges that could significantly increase the productivity of your vacuum-based process.

GRANVILLE-PHILLIPS
HELIX TECHNOLOGY CORPORATION

Advanced Vacuum Measurement Solutions

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