



VGC-301 Convection Vacuum Gauge Controller

- ◆ Wide measuring range lets you monitor your vacuum system from 1000 to 10^{-4} Torr with a single gauge.
- ◆ Includes two setpoints, user-selectable analog output, and RS232/485 interfaces.
- ◆ Analog output is configurable as a non-linear S-curve, log-linear, or user-scalable linear.
- ◆ Space-saving 1/8-DIN panel mount housing.
- ◆ Powered by universal 100-240 VAC or 12-30 VDC.



Description

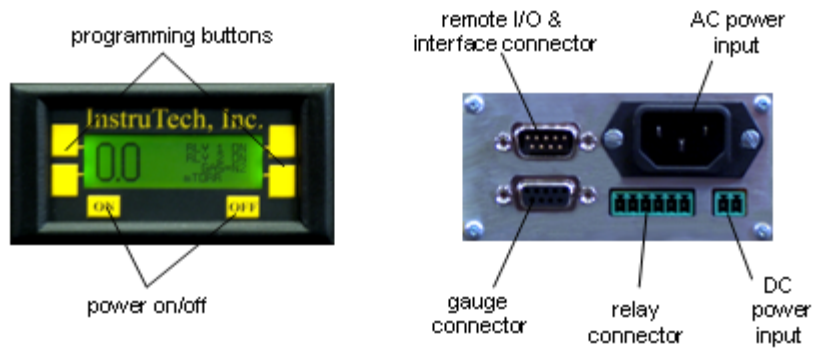
The VGC-301 vacuum gauge controller is a convenient and inexpensive power supply and readout instrument for a CVG "Worker Bee" convection vacuum gauge. The 1/8-DIN housing can be used on the bench top or mounted in a cutout in an instrument panel. The VGC-301 is powered by 12-30 VDC, or by its self-contained universal 100-240VAC supply.

Compatibility: Signals and relay functions are the same as found on similar Convection gauge controllers from other manufacturers. The VGC-301, CVG gauge, and gauge cable can be directly interchanged with Granville-Phillips 375 Controller, 275 Convector[®] gauge, and gauge cable. (Remote interface, relay, and power connectors are different.)

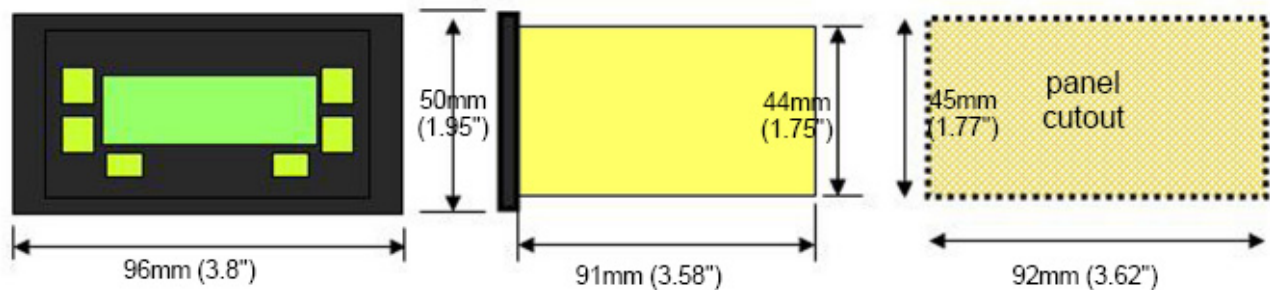
Specifications

measurement range	1×10^{-4} to 1000 Torr 1×10^{-4} to 1333 mbar 1×10^{-2} Pa to 133 kPa
resolution	1×10^{-4} Torr / 1×10^{-4} mbar / 1×10^{-2} Pa
display	Four-digit LCD, displays 4 digits from 1100 Torr to 1000 Torr 3 digits from 999 Torr to 10.0 mTorr 2 digits from 9.9 mTorr to 1.0 mTorr 1 digit from 0.9 mTorr to 0.1 mTorr
display engineering units	Torr, mbar, or Pa - user selectable
display update rate	0.5 sec
weight	250 gm (9 oz)
operating temperature	0 to +40 °C ambient
storage temperature	-40 to +70 °C
humidity	0 to 95% RH non-condensing
analog output (user-selectable)	a) non-linear S-curve 0.375 to 5.659 Vdc, or b) linear 0 to 10 Vdc, user scalable (default is 10Vdc = 1 Torr), or c) log-linear 1 to 8 Vdc, 1V/decade
digital interface	RS232 and RS485
housing	1/8-DIN panel-mount enclosure (see outline drawing for dimensions)
input power	100-240 Vac, 50/60Hz, universal power supply or 12-30 Vdc
setpoint relays	two single-pole double-throw relays (SPDT)
contact rating	1A at 30 Vdc resistive, or ac non-inductive
trippoint range	1×10^{-3} to 1000 Torr
adjustment	a) adjust value by panel pushbutton up/down keys and display b) adjust value, direction, and hysteresis by software/interface
connectors	gauge: 9-pin D female analog output and digital interface: 9-pin D male relay outputs: 6-pin pluggable terminal block power: universal AC and 2-pin pluggable terminal block DC
RF/EMI protection	CE compliant

Controls & Connections



Outline Drawing



Ordering Information

VGC 301 A Convection Vacuum Gauge Controller

VGC 301 A

(Includes mating interface connectors, and North American 115VAC power cord & plug. Contact us for availability of power cords and plugs for other countries.)

InstruTech CVG Gauge:

1/8" NPT - 1/2" tube	CVG 101 G A
NW16KF	CVG 101 G B
NW25KF	CVG 101 G C
NW40KF	CVG 101 G D
1-1/3" Mini-CF / NW16CF Mini-Conflat®	CVG 101 G E
2-3/4" CF / NW35CF Conflat®	CVG 101 G F
1/4" Cajon® 4VCR female	CVG 101 G G
1/2" Cajon® 8VCR female	CVG 101 G H

Gauge Cables:

10 ft (3m)	CB 421-1- 10F
25 ft (8m)	CB 421-1- 25F
50 ft (15m)	CB 421-1- 50F
over 50 ft (15m) custom lengths available up to 100 ft (30 m)	CB 421-1 - xxxF or - yyM

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Cajon® is a registered trade mark of the Swagelok Company.

Conflat® is a registered trade mark of Varian Vacuum Technologies.

