

VGC031

Vacuum Gauge Controller



The INFICON Vacuum Gauge Controller 031 (VGC031) is designed for use in conjunction with the INFICON Pirani Gauge Enhanced 050 (PGE050) and acts as a convenient power supply, control and readout. VGC031 and PGE050 are a flexible combination to monitor your vacuum system in the range from 1.3×10^{-4} up to 1333 mbar (1×10^{-4} up to 1000 Torr). The VGC031 with its space saving panel mount housing supports a variety of technical features as 2 set point relays, 4 user selectable analog outputs and offers additionally RS232/ RS485 digital interfaces. The bright, sharp and clear OLED display with the integrated keypad user interface rounds out this user friendly vacuum gauge controller package. The rugged industrial design makes the VGC031 in combination with the convection enhanced PGE050 gauge sensor a very good choice for many vacuum applications where economical vacuum measurement from low to high vacuum range is required.

ADVANTAGES

- Displays and controls wide measurement range from 1.3×10^{-4} up to 1333 mbar (1×10^{-4} up to 1000 Torr).
- Bright digital OLED display with keypad for simple set up and operation
- 4 user selectable analog output signals
- 2 set point relays
- RS232/ RS485 digital interface
- Space saving design – 1/8-DIN panel mount housing for rack mount installation or as standalone unit
- Powered through user supplied 12 to 28 V (dc) or by INFICON's VGC031 Power Supply
- Compliance & standards: CE, RoHS
- VGC031 controller and PGE050 convection enhanced vacuum gauge sensor and cable can direct drop in replace Granville-Phillips® 375 and 475 controllers and 275 Convector® gauge sensors and gauge cable (Remote interface, relay and power connectors are different)

APPLICATIONS

- Fore vacuum pressure measurement
- General vacuum measurement and control from low to the high vacuum range

ORDERING INFORMATION

Type	VGC031
	399-570

ACCESSORIES

Gauges	PGE050 (see Data Sheet PEG050)
Power supply for VGC031 ¹⁾	399-575
Cable VGC031 to PGE050 in m (ft) ²⁾	
3 (10)	399-580
8 (25)	399-581
15 (50)	399-582
Mating connector kit for PGE050	399-591

¹⁾ The IEC 60320 AC power entry receptacle allows use with any user supplied AC mains cord set available worldwide

²⁾ Other length on request

SPECIFICATIONS

Type	VGC031	
Measurement channels	1	
Display	OLED	
Display update rate	1/s	0.5 s
Connectable gauge with display range PGE050 (see Data Sheet)	mbar Torr Pa ... kPa	1.3 × 10 ⁻⁴ ... 1333 1 × 10 ⁻⁴ ... 1000 1.3 × 10 ⁻² ... 133
Connector	gauge analog output, serial interface relay outputs power	9-pin D-Sub female ¹⁾ 9-pin D-Sub female 6-pin pluggable terminal block ²⁾ 2-pin pluggable terminal block ²⁾
Measurement unit (selectable)	mbar, Torr, Pa	
Setpoint relay	2 (single-pole double-throw relays (SPDT)) 1 A at 30 V (dc) resistive, or V (ac) non-inductive	
Analog output		
Range (selectable)	V (dc) V (dc) V (dc) V (dc)	0 ... 7 or 1 ... 8 (log-linear, 1 V/decade) 0 ... 10 (linear) 0.375 ... 5.659 (non-linear S-curve) 0 ... 9 (non-linear S-curve)
Interface (digital)	RS232, RS485	
Supply voltage	V (dc)	+12 ... +28 ³⁾
Operation temperature (ambiance)	°C	0 ... +40
Storage temperature	°C	-40 ... +70
Housing	1/8-DIN panel-mount enclosure (aluminum extrusion)	
Weight	g (oz)	250 (9)

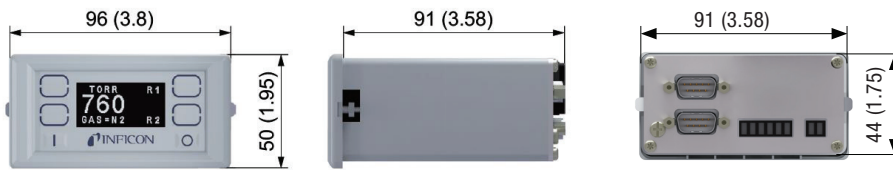
¹⁾ mating connector provided as part of the gauge cable

²⁾ mating connector included

³⁾ 2 W protected against power reversal and transient over-voltages

DIMENSIONS

mm (inch)



ACCESSORIES

Power supply for VGC031 ¹⁾

399-575



Input power:	V (ac)	100 ... 240
Output power:	V (dc)	+24
Cable length:	m (ft)	2 (6)

¹⁾ The IEC 60320 AC power entry receptacle allows use with any user supplied AC mains cord set available worldwide