

VGC031

Vacuum Gauge Controller

The Vacuum Gauge Controller VGC031 is a single channel gauge controller for the INFICON Pirani Gauge Enhanced PGE050. VGC031 acts as a convenient power supply, control and readout, allowing straightforward vacuum pressure monitoring and controlling from atmosphere down to high vacuum (1.3×10^{-4} mbar).

VGC031 supports a variety of technical features as 2 setpoint 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 housing of VGC031 allows panel mounting thus providing a great rack space saving capability. The combination VGC031 - PGE050 is the best choice for many vacuum applications where economical vacuum measurement from atmosphere to high vacuum range is required.



ADVANTAGES

- Displays and controls wide measurement range from 1.3×10^{-4} up to 1333 mbar
- 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
- Replacement capability for MKS / Granville-Phillips® 375 and 475 controllers and 275 Convectron® gauge sensors and gauge cable (remote interface, relay and power connectors are different)

APPLICATIONS

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

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ORDERING INFORMATION

Type	VGC031
Vacuum Gauge Controller VGC031	399-570

Accessories	PGE050	
	50 °C	150 °C
Cables for VGC031 to		
3 m (9.9 ft)	399-580	399-520
8 m (25 ft)	399-581	399-521
15 m (50 ft)	399-582	399-522

Other lengths on request

Accessories		
Power supply for VGC031 ¹⁾		399-575
Input	100 ... 240 V(ac) 50 ... 60 Hz	
Output	+24 V(dc)	
Cable length	2 m 6 ft.	
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



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SPECIFICATIONS

Type	VGC031
Measurement channels	1
Display	OLED, 4 digits
Display rate	2 s ⁻¹
Connectable gauge with display range PGE050	1.3 × 10 ⁻⁴ ... 1333 mbar 1 × 10 ⁻⁴ ... 1000 Torr 1.3 × 10 ⁻² ... 133000 Pa
Measurement unit (selectable)	mbar, Torr, Pa
Controller connections	
Gauge	9-pin D-Sub female ¹⁾
Analog output, serial interface	9-pin D-Sub male
Relay outputs	6-pin pluggable terminal block ²⁾
Power	2-pin pluggable terminal block ²⁾
Setpoint relay	2 (single-pole double-throw relays SPDT) 1 A at 30 V resistive (dc), non-inductive (ac)
Analog output	
Range (selectable)	
log-linear	0 ... 7 V (dc) or 1 ... 8 V (dc) 1 V/decade
linear	0 ... 10 V (dc)
non-linear S-curve	0.375 ... 5.659 V (dc)
non-linear S-curve	0 ... 9 V (dc)
Interface (digital)	RS232, RS485
Supply voltage (external)	+12 ... +28 V (dc) ³⁾
Temperature	
Operation (ambient)	0 ... 40 °C
Storage	-40 ... +70 °C
Relative humidity	≤95%
Housing	1/8 DIN panel-mount enclosure (aluminum extrusion)
Weight	250 g

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

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DIMENSIONS

[mm]

