

# VGC401, VGC402, VGC403

## Vacuum Gauge Controllers

### Your complete solution for process measurement and control.

Compatible to all INFICON active gauges, the VGC400 series of controllers can monitor the entire pressure range from  $10^{-10}$  to 1500 mbar ( $10^{-10}$  to 1125 Torr) and the setpoint status.

### ADVANTAGES

- Automatic identification of the connected INFICON gauges
- User selectable measurement unit (mbar, Torr, Pascal, micron)
- High resolution – 16 bit A/D converter
- Up to six adjustable setpoints with adjustable hysteresis may be assigned to any channel
- Programmable 0 to 10 V chart recorder output with logarithmic / linear characteristics for each gauge or gauge combination (VGC402/403 only)
- Firmware upgrades available on-line are easily downloaded via the RS232 interface
- Versatile, compact bench-top model design can easily be mounted in a panel or 19" rack
- Widerange power supply 90 to 250V, 50 to 60Hz

VGC401



VGC402



VGC403



### ORDERING INFORMATION

Type	VGC401	VGC402	VGC403
Vacuum Gauge Controller	<b>398-010</b>	<b>398-020</b>	<b>398-021</b>
Adapter for rackmount 2HE / 3HE	<b>398-499</b>	–	–

### ACCESSORIES

Gauges	PCG, PEG, PSG, MPG	BAG, BCG, BPG, HPG CDG	CDG (unheated)
Signal read out / communication	analog	digital analog possible	analog
Connector	FCC / FCC	D-Sub / D-Sub	FCC / D-Sub

#### Cable to VGC401/402/403 in m (ft)

	VGC401	VGC402	VGC403
3 (9.9)	<b>398-500</b>	<b>398-520</b>	<b>398-540</b>
5 (16.5)	<b>398-501</b>	<b>398-521</b>	<b>398-541</b>
10 (33.0)	<b>398-502</b>	<b>398-522</b>	<b>398-542</b>
15 (49.5)	<b>398-503</b>	<b>398-523</b>	<b>398-543</b>
20 (66.0)	<b>398-504</b>	<b>398-524</b>	<b>398-544</b>
30 (99.0)	<b>398-505</b>	<b>398-525</b>	<b>398-545</b>

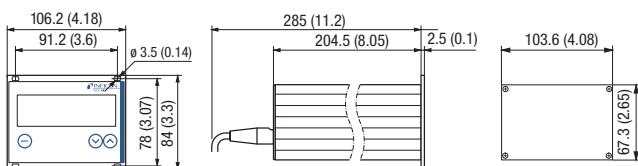
other lengths on request

## SPECIFICATIONS

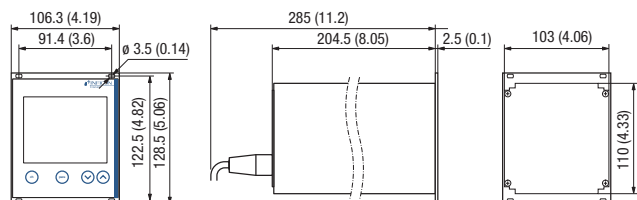
Type		VGC401	VGC402	VGC403
Measurement channels		1	2	3
Display		LED	LCD	LCD
Range	mbar (Torr)	2 x 10 <sup>-10</sup> ... 1500 (1.5 x 10 <sup>-10</sup> ... 1125)	5 x 10 <sup>-10</sup> ... 1500 (3.75 x 10 <sup>-10</sup> ... 1125)	5 x 10 <sup>-10</sup> ... 1500 (3.75 x 10 <sup>-10</sup> ... 1125)
Rate	1/s	10	10	10
A/D converter	bit	16	16	16
Connectable gauges with display range			1 x 10 <sup>-3</sup> x FS ... 1 x FS	
CDG (A/D)	Torr			
PCG400	mbar (Torr)		5 x 10 <sup>-4</sup> ... 1500 (3.75 x 10 <sup>-4</sup> ... 1125)	
PSG	mbar (Torr)		5 x 10 <sup>-4</sup> ... 1000 (3.75 x 10 <sup>-4</sup> ... 750)	
MPG	mbar (Torr)		5 x 10 <sup>-9</sup> ... 1000 (3.75 x 10 <sup>-9</sup> ... 750)	
PEG	mbar (Torr)		1 x 10 <sup>-9</sup> ... 1 x 10 <sup>-2</sup> (7.5 x 10 <sup>-10</sup> ... 7.5 x 10 <sup>-3</sup> )	
BCG	mbar (Torr)		5 x 10 <sup>-10</sup> ... 1500 (3.75 x 10 <sup>-10</sup> ... 1125)	
BPG	mbar (Torr)		5 x 10 <sup>-10</sup> ... 1000 (3.75 x 10 <sup>-10</sup> ... 750)	
HPG	mbar (Torr)		2 x 10 <sup>-6</sup> ... 1000 (1.5 x 10 <sup>-6</sup> ... 750)	
BAG	mbar (Torr)	2 x 10 <sup>-10</sup> ... 1 x 10 <sup>-1</sup> (1.5 x 10 <sup>-10</sup> ... 7.5 x 10 <sup>-2</sup> )	–	–
Measurement unit (selectable)		mbar, Torr, Pascal, micron		
Setpoints				
Setpoint relays		1	4	6
Channel assignment		1	1 or 2	1/2 or 3
Adjustment range		Sensor dependent		
Hysteresis		adjustable		
Relay contact		potential free change over contact		
Contact rating	V AC / A V DC / A	30 / 1 60 / 0.5	30 / 1 60 / 0.5	30 / 1 60 / 0.5
Connector		D-Sub, 9pin, male	D-Sub, 25pin, female	D-Sub, 25pin, female
Analog output		0 ... 10.3 Volt, sensor analog output signal		
Range		0 ... 10.3 Volt, sensor analog output signal		
Programmable analog output		–	1	1
Connector		D-Sub, 9pin, male	D-Sub, 9pin, male	D-Sub, 9pin, male
Interface (digital)		RS 232 C	RS 232 C	RS 232 C
Connector		D-Sub, 9pin, female	D-Sub, 9pin, female	D-Sub, 9pin, female
Power				
Supply	V	90 ... 250	90 ... 250	90 ... 250
Frequency	Hz	50 ... 60	50 ... 60	50 ... 60
Consumption	W	≤ 30	≤ 45	≤ 65
Temperature				
Operation (ambient)	°C	5 ... 50	5 ... 50	5 ... 50

## DIMENSIONS

VGC401



VGC402 / VGC403



mm (inch)



### GLOBAL HEADQUARTERS:

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UNITED STATES FRANCE GERMANY LIECHTENSTEIN SWITZERLAND UNITED KINGDOM CHINA JAPAN KOREA SINGAPORE TAIWAN

Visit our website for contact information and other sales offices worldwide. [www.inficon.com](http://www.inficon.com)  
Due to our continuing program of product improvements, specifications are subject to change without notice.  
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