

# VGC501, VGC502, VGC503

## Vacuum Gauge Controllers

### Sustainable solution for process measurement, control and data log

Compatible to the wide range of INFICON active gauges, the VGC50x series of active gauge controllers are able to monitor and data log the entire pressure range from  $10^{-10}$  to 1500 mbar ( $10^{-10}$  to 1125 Torr) and the set point status.



### ADVANTAGES

- Simple operation with dot matrix menu guided display for parameter, sensor or general settings
- Very bright and clear Display for long distance instrument read-out
- Bar graph display with setpoints or pressure vs. time display
- Data log and parameter log function with USB port (rear side) and USB flash drive (front side)
- Ethernet interface
- Firmware upgrade available online or with USB flash drive
- Two free definable setpoints per channel with adjustable hysteresis
- High Resolution - 16 bit A/D converter
- Automatic identification of the INFICON active gauges
- Programmable 0 to 10 V Chart Recorder Output with logarithmic/ linear characteristics for single gauge or gauge combination (only VGC502 and VGC503)

## VGC501, VGC502, VGC503

### ORDERING INFORMATION

Type	VGC501	VGC502	VGC503
Vacuum Gauge Controller	<b>398-481</b>	<b>398-482</b>	<b>398-483</b>
Adapter rack mount 2HE / 3HE	<b>398-499</b>	-	-
Adapter USB to RS232	<b>398-487</b>	<b>398-487</b>	<b>398-487</b>

Accessories	PCG, PEG, PSG, MAG, MPG, Porter	BCG, BPG, HPG, CDG-D	CDG (unheated)
Signal read out and communication	analog only	digital RS232 / analog	analog only
Cable connectors	FCC / FCC	D-Sub <sup>1)</sup> / D-Sub <sup>1)</sup>	FCC / D-Sub <sup>1)</sup>
Cable to Gauges in m (ft)			
3 (9.0)	<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>

<sup>1)</sup> D-Sub 15-pin

Other lengths on request

# VGC501, VGC502, VGC503

## SPECIFICATIONS

Type	VGC501	VGC502	VGC503
Measurement channels	1	2	3
Display	LCD, LED backlight		
Rate	10 / s		
Connectable gauges with display range			
CDG (A/D)	1 × 10 <sup>-3</sup> × FS ... 1 × FS Torr		
PCG	3.75 × 10 <sup>-4</sup> ... 1125 Torr		
PSG	3.75 × 10 <sup>-4</sup> ... 750 Torr		
MPG	3.75 × 10 <sup>-9</sup> ... 750 Torr		
PEG	7.5 × 10 <sup>-10</sup> ... 7.5 × 10 <sup>-3</sup> Torr		
MAG	7.5 × 10 <sup>-10</sup> ... 7.5 × 10 <sup>-3</sup> Torr		
BCG	3.75 × 10 <sup>-10</sup> ... 1125 Torr		
BPG	3.75 × 10 <sup>-10</sup> ... 750 Torr		
HPG	1.5 × 10 <sup>-6</sup> ... 750 Torr		
Connectable gauges with display range			
PCG	5 × 10 <sup>-4</sup> ... 1500 mbar		
PSG	5 × 10 <sup>-4</sup> ... 1000 mbar		
MPG	1 × 10 <sup>-9</sup> ... 1000 mbar		
PEG	1 × 10 <sup>-9</sup> ... 1 × 10 <sup>-2</sup> mbar		
MAG	1 × 10 <sup>-9</sup> ... 1 × 10 <sup>-2</sup> mbar		
BCG	5 × 10 <sup>-10</sup> ... 1500 mbar		
BPG	5 × 10 <sup>-10</sup> ... 1000 mbar		
HPG	2 × 10 <sup>-6</sup> ... 1000 mbar		
Measurement unit (selectable)	mbar, Torr, Pa, hPa, Micron, V		
Setpoints			
Setpoint relays	2	4	6
Channel assignment	1	1 or 2	1, 2 or 3
Adjustment range	sensor dependent	sensor dependent	sensor dependent
Hysteresis	adjustable	adjustable	adjustable
Relay contact	floating changeover	floating changeover	floating changeover
Connector	D-Sub, 15-pin, male	D-Sub, 25 pin female	D-Sub, 25 pin female
Contact rating	30 V (ac) / 1 A 60 V (dc) / 0.5 A	30 V (ac) / 1 A 60 V (dc) / 0.5 A	30 V (ac) / 1 A 60 V (dc) / 0.5 A
Analog output			
Range	0 ... 10.3 V, sensor analog output signal	0 ... 10.3 V, sensor analog output signal	0 ... 10.3 V, sensor analog output signal
Analog output	1	2	3
programmable analog output	-	1	1
Connector	D-Sub, 15-pin, male	D-Sub, 9 pin, male	D-Sub, 9-pin, male
Interface			
Connector	USB slave, master and Ethernet, USB Type A (stick), USB Type B, FCC68/RJ45		

# VGC501, VGC502, VGC503

Type	VGC501	VGC502	VGC503
Power			
Supply		100 ... 240 V (ac)	
Frequency		50 ... 60 Hz	
Consumption	≤45 W	≤65 W	≤90 W
Operating temperature (ambiance)		+5 ... +50 °C	

## DIMENSIONS

mm (in.)

