VGC50x Vacuum Gauge Controller

Sustainable solution for process measurement, control and data log

Compatible to the wide range of INFICON active gauges, the new 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.

BENEFITS

- 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's or pressure vs. time display
- Data log and parameter log function with USB port (rear side) and USB stick (front side)
- Ethernet interface
- Firmware upgrade available online or with USB stick
- 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)

ORDER INFORMATION

Type	VGC501	VGC502	VGC503
Vacuum Gauge Controller	**398-481**	**398-482**	**398-483**
Adapter rack mount 2HE / 3HE	**398-499**	–	–

ACCESSORIES

Gauges	**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 [1] / D-Sub [1]	FCC / D-Sub [1]
Cable to VGC50x in m (ft)			
3 (9.0)	**398-500**	**398-520**	**398-540**
5 (16.5)	**398-501**	**398-521**	**398-541**
10 (33.0)	**398-502**	**398-522**	**398-542**
15 (49.5)	**398-503**	**398-523**	**398-543**
20 (66.0)	**398-504**	**398-524**	**398-544**
30 (99.0)	**398-505**	**398-525**	**398-545**

Other lengths on request

[1] D-Sub 15-pin

SPECIFICATIONS

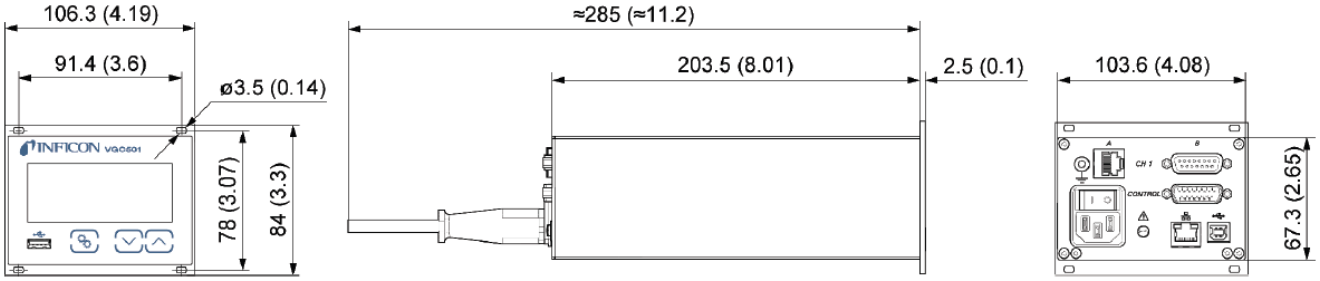
Type		VGC501	VGC502	VGC503
Measurement channels		1	2	3
Display		LCD, LED backlight	LCD, LED backlight	LCD, LED backlight
Rate	1/s	10	10	10
Connectable gauges with display range				
CDG (A/D)	Torr	1×10^{-3}×F.S. …1×F.S.	1×10^{-3}×F.S. …1×F.S.	1×10^{-3}×F.S. …1×F.S.
PCG	Torr	3.75×10^{-4}…1125	3.75×10^{-4}…1125	3.75×10^{-4}…1125
PSG	Torr	3.75×10^{-4}…750	3.75×10^{-4}…750	3.75×10^{-4}…750
MPG	Torr	3.75×10^{-9}…750	3.75×10^{-9}…750	3.75×10^{-9}…750
PEG	Torr	7.5×10^{-10}…7.5×10^{-3}	7.5×10^{-10}…7.5×10^{-3}	7.5×10^{-10}…7.5×10^{-3}
MAG	Torr	7.5×10^{-10}…7.5×10^{-3}	7.5×10^{-10}…7.5×10^{-3}	7.5×10^{-10}…7.5×10^{-3}
BCG	Torr	3.75×10^{-10}…1125	3.75×10^{-10}…1125	3.75×10^{-10}…1125
BPG	Torr	3.75×10^{-10}…750	3.75×10^{-10}…750	3.75×10^{-10}…750
HPG	Torr	1.5×10^{-6}…750	1.5×10^{-6}…750	1.5×10^{-6}…750
Connectable gauges with display range				
PCG	mbar	5×10^{-4}…1500	5×10^{-4}…1500	5×10^{-4}…1500
PSG	mbar	5×10^{-4}…1000	5×10^{-4}…1000	5×10^{-4}…1000
MPG	mbar	1×10^{-9}…1000	1×10^{-9}…1000	1×10^{-9}…1000
PEG	mbar	1×10^{-9}…1×10^{-2}	1×10^{-9}…1×10^{-2}	1×10^{-9}…1×10^{-2}
MAG	mbar	1×10^{-9}…1×10^{-2}	1×10^{-9}…1×10^{-2}	1×10^{-9}…1×10^{-2}
BCG	mbar	5×10^{-10}…1500	5×10^{-10}…1500	5×10^{-10}…1500
BPG	mbar	5×10^{-10}…1000	5×10^{-10}…1000	5×10^{-10}…1000
HPG	mbar	2×10^{-6}…1000	2×10^{-6}…1000	2×10^{-6}…1000
Measurement unit (selectable)		mbar, Torr, Pa, hPa, Micron, V	mbar, Torr, Pa, hPa, Micron, V	mbar, Torr, Pa, hPa, Micron, V
Setpoints				
Setpoint relays		2	4	6
Channel assignment		1	1 or 2	1, 2 or 3

SPECIFICATIONS

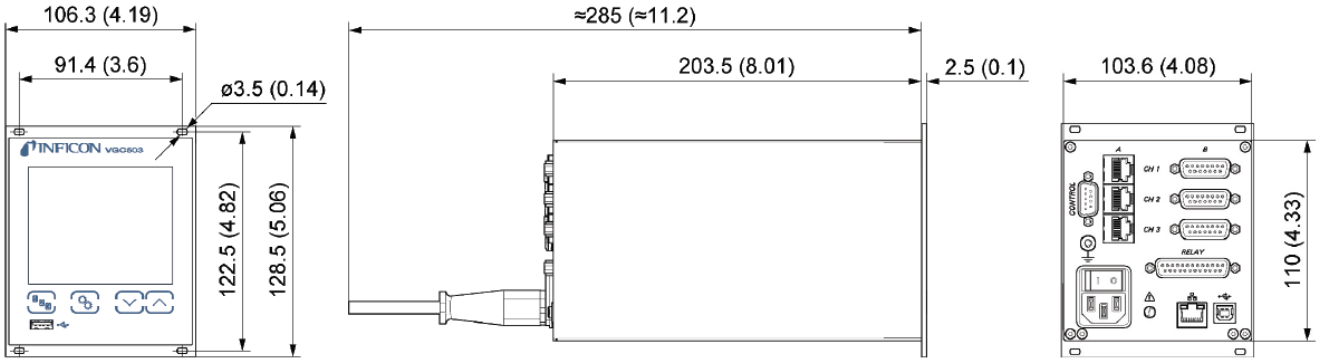
Type		VGC501	VGC502	VGC503
Adjustment range		sensor dependent	sensor dependent	sensor dependent
Hysteresis		adjustable	adjustable	adjustable
Relay contact		floating changeover contact	floating changeover contact	floating changeover contact
Connector		D-sub, 15-pin, male	D-sub, 25-pin, female	D-sub, 25-pin, female
Setpoints				
Contact rating	V (ac) • A	30 / 1	30 / 1	30 / 1
Setpoints				
Contact rating	V (dc) • A	60 / 0.5	60 / 0.5	60 / 0.5
Analog output				
Range	V	0 ... 10.3, sensor analog output signal	0 ... 10.3, sensor analog output signal	0 ... 10.3, sensor analog output signal
Analog output				
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 (digital)				
Connector		USB slave, master and Ethernet, USB Typ A (stick), USB Type B, FCC68/RJ45	USB slave, master and Ethernet, USB Typ A (stick), USB Type B, FCC68/RJ45	USB slave, master and Ethernet, USB Typ A (stick), USB Type B, FCC68/RJ45
Power				
Supply	V (ac)	100 ... 240	100 ... 240	100 ... 240
Power				
Frequency	Hz	50 ... 60	50 ... 60	50 ... 60
Power				
Consumption	W	≤45	≤65	≤90
Operation temperature (ambiance)	°C	+5 ... +50	+5 ... +50	+5 ... +50

DIMENSIONS

VGC501 mm (inch)



VGC502, VGC503 mm (inch)



www.inficon.com reachus@inficon.com

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