

# PRG 500 pirani vacuum gauge

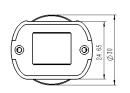
# **Advantages**

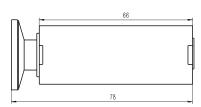
- Vacuum range covers 1E-2Pa to 1.0E+5Pa
- · LED real-time display of vacuum, easy to read
- · Intelligent calibration for ATM and HV
- · Automatic temperature compensation for better stability and accuracy
- · Supports switching between multiple units such as Pa, Torr, and mbar
- dual communication mode, supports RS485 and AO (0-10V and 4-20mA are optional)
- · Setpoint is optional
- highly compatible with international common pirani vacuum gauges, capable of seamless replacement
- adapted to IVMS system, capable of real-time collection and recording of vacuum degree data



## **Typical applications**

- Vacuum measurement and control within the medium and low vacuum range, such as vacuum drying, food freezing, vacuum impregnation, vacuum coating, vacuum heat treatment, and many other fields
- Safety circuits in high vacuum systems and monitoring of the front vacuum pump





#### FCC-68/RJ45 Connector

Pin1:+24VDC Pin2:GND (power) Pin3:AO Pin4:Setpoint Pin5:GND(AO & SP) Pin6:NC

Pin7: RS485, Data-Pin8: RS485, Data+



### P=10<sup>((U-C)/1.286)</sup> < U=C+1.286 × lgp

- P: Pressure
- U: Voltage(V)
- C: Constant

(Pressure Unit Dependent)

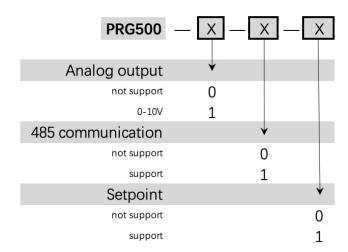
U	Р	С
(V)	Pa	3.572
(V)	mBar	6.143
(V)	Torr	6.304

# **Specifications**

Materials exposed to vacuum	SS316L stainless steel, tungsten, kovar, glass
Measurement range	1.0×10 <sup>-2</sup> ~1.0×10 <sup>+5</sup> Pa (Air, N2)
Accuracy(N2)	2.0×10 <sup>-2</sup> ~1.0×10 <sup>-1</sup> Pa: ±30% of reading
	1.0×10-1~1.0×10+4Pa: ±15% of reading 1.0×10+4~1.0×10+5Pa: ±50% of reading
Repeatability	1.0×10-2~1.0×10-1Pa : 5%
	1.0×10 <sup>-1</sup> ~1.0×10 <sup>+3</sup> Pa: 2% 1.0×10 <sup>+3</sup> ~1.0×10 <sup>+5</sup> Pa: 5%
Display	LED screen, real-time vacuum display
Data Collection	Resolution of 1%, response time<100ms
Admissible temperature	Operation 0 °C~+45°C, storage -40 °C~+75°C
Bake temperature for probe	180°C Max(Remove the electronic control unit)
Power consumption	1W Max
Power supply	16VDC~32VDC/100mA, recommand +24VDC(±20%)/0.1A
Electric connection	FCC68/RJ45 connector
Vacuum connections	DN 16 ISO-KF
Max Withstand Pressure	5bar

# **Purchasing Guide**

The functional configuration of the product is specified through the order number described below:



#### For example:

PRG500-0-1-0, means PRG500 without 0-10V analog output but support 485 data remote communication, not support setpoint. Explanation:

When customers purchase, please accurately provide the order number of the required product. Unless otherwise stated, all products sold by our company are standard, and the corresponding order number is PRG500-0-1-0.

### For more product information, please contact us

Tel: 021-54130910

website: www.infitech-cn.com