

PRV101N Pirani Vacuum Gauge

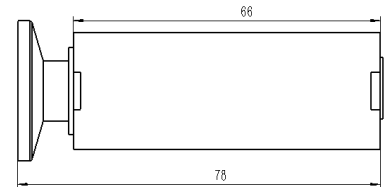
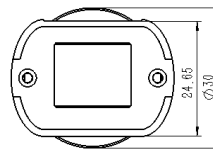
Advantages

- Vacuum range covers 1E-2Pa to 1.0E+5Pa
- Indicates different vacuum levels with color strips
- Real-time indication of operation status and health status
- Easy push button ATM and HV adjustment
- dual communication mode, supports RS485 and AO (0-10V and 4-20mA are 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
- compact design, special structure enhances physical security
- support firmware upgrade



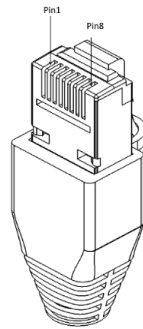
Typical applications

- 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
- Pin3: Analog Output+
- Pin4: Identification 27K
- Pin5: Analog Output-
- Pin6: NC
- Pin7: RS485, Data-
- Pin8: RS485, Data+



$$P=10^{((U-C)/1.286)} \longleftrightarrow U=C+1.286 \times \lg P$$

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

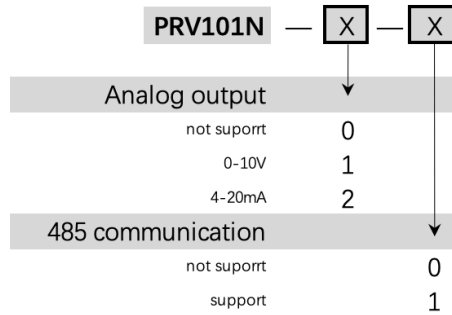
U	P	C
(V)	Pa	3.572
(V)	mBar	6.143
(V)	Torr	6.304

Specification

Materials exposed to vacuum	SS316L stainless steel, tungsten, kovar, glass
Measurement range	1.0×10 ⁻² ~1.0×10 ⁺⁵ Pa (Air, N ₂)
Accuracy(N₂)	1.0×10 ⁻² ~1.0×10 ⁻¹ Pa : ±30% of reading 1.0×10 ⁻¹ ~1.0×10 ⁺⁴ Pa : ±15% of reading 1.0×10 ⁺⁴ ~1.0×10 ⁺⁵ Pa : ±50% of reading
Repeatability	1.0×10 ⁻² ~1.0×10 ⁻¹ Pa : 5% 1.0×10 ⁻¹ ~1.0×10 ⁺³ Pa : 2% 1.0×10 ⁺³ ~1.0×10 ⁺⁵ Pa : 5%
UI	Color strips indicate different vacuum range, and a combination of multiple colors and display modes display the status of the vacuum gauge
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, recommend +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:

PRV101N-1-1, means PRV101N with 0-10V analog output and 485 data remote communication

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 PRV101N-0-1

For more product information, please contact us

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