

CDG 500

电容薄膜规

Capacitance Diaphragm Gauge

INFITECH CDG500 电容薄膜真空计系列产品是针对在严苛环境下进行真空度测试而开发的一款真空计，自带温度补偿功能，具有精度高，耐腐蚀，测量气体种类不敏感等优势。CDG500 采用先进的数字电子技术不仅提升了真空计的整体性能，还带来了便捷的操作功能，另外，CDG500 采用高清 LED 数显集成功能，实时显示真空度，可以脱离上位机或控制器作为独立检测设备使用，大大拓宽了产品的使用场景。

INFITECH CDG500 Series Capacitance Diaphragm Gauges are engineered for precise vacuum measurement in demanding environments. Featuring integrated temperature compensation, the CDG500 delivers outstanding accuracy, superior corrosion resistance, and minimal sensitivity to different gas types. Equipped with advanced digital electronics, the CDG500 offers enhanced performance along with user-friendly features such as zero calibration and factory reset. Its built-in high-definition LED display provides real-time vacuum readings, enabling standalone operation without the need for a host system or controller, and significantly broadening its application versatility.



优势/ADVANTAGES

- 气体普适性
Universal gas compatibility
- 高精度
High precision
- 耐腐蚀陶瓷传感器
Corrosion-resistant ceramic sensor
- 带温度补偿功能
Integrated temperature compensation
- 本地高清液晶数显
Local high-definition LCD display
- 一键归零功能
One-touch zeroing function
- 485 数据通讯
RS485 digital communication
- 0-10V 或 4-20mA 可选
Optional 0–10 V or 4–20 mA output
- 全金属外壳，坚固的机械结构
Robust all-metal housing with durable mechanical construction

典型应用场景/TYPICAL APPLICATIONS

- 半导体制造
Precise vacuum control in semiconductor processes (photolithography, etching, PVD, CVD).
- 平板显示生产
Vacuum measurement in OLED and LCD manufacturing (deposition, sputtering, etching).
- 太阳能制造
Accurate vacuum control in crystalline and thin-film solar cell production.
- 真空镀膜
Used in optical, tool, and decorative coating processes.
- 科研与实验室
High-precision vacuum measurement in research and laboratory equipment.
- 航天与航空工程
Vacuum control in satellite testing and spacecraft simulation.
- 工业真空炉
Used in heat treatment, sintering, and annealing processes.
- 泄漏检测
Reference gauge for leak detection systems, including helium mass spectrometry.
- 制药与生物工艺
Accurate vacuum control for freeze-drying in pharmaceutical and biotech processes.

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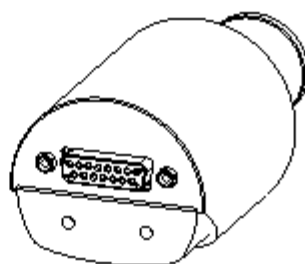
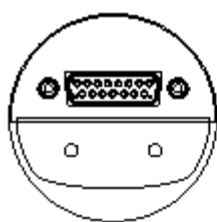
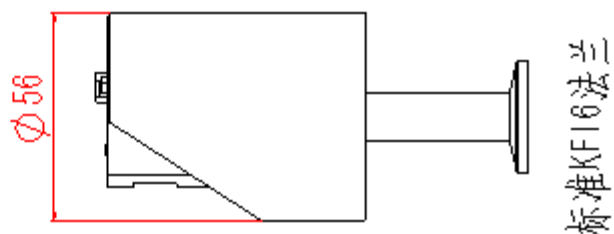
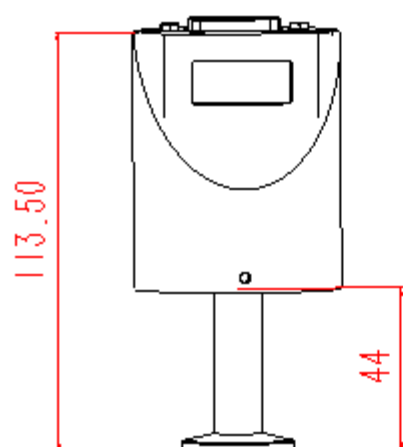
订货号/ORDERING INFORMATION

	CDG500	X	X	X	X
量程 Measurement range		↓			
1000毫巴 1000mbar		1000			
100毫巴 100mbar		100			
10毫巴 10mbar		10			
模拟量输出 Analog Output			↓		
无模拟量输出 NO Analog output			0		
0-10V电压模拟量输出 0-10V Voltage Output			1		
4-20mA电流模拟量输出 4-20mA Current Output			2		
数据通讯 Data Communication				↓	
不支持485输出 not support				0	
支持485输出 (标配) support 485 (standard configuration)				1	
开关量输出 Setpoints					↓
无开关量 not support					0
1个开关量控制点 1 setpoint					1
2个开关量控制点 2 setpoints					2

客户购买时请精确给出所需产品的订货号，未经特殊声明，本公司售出的均为标配产品，相应的订货号为 CDG500-XXX-0-1-0。
Without a special statement, all products sold by our company are standard configuration products, and the corresponding order number is CDG500-XXX-0-1-0.

参数/SPECIFICATIONS

类型	单位	CDG500
测量范围/Measurement range	mbar	0-1000mbar/0-100mbar/0-10mbar
精度/Accuracy	%of reading	0.2
分辨率/Resolution	%FS	0.0025
耐压/Pressure resistance	bar(absolute)	3
反应时间/Response time	ms	20
容许温度/Admissible temperature		
运行(环境)/Operation (ambient)	°C	-20.....+55
存储/Storage	°C	-40.....+85
电源电压/Supply voltage		
真空计/At gauge	V(DC)	推荐 24VDC(±20%)/0.5A
纹波/Ripple	V(P-P)	≤1
功耗/Power consumption	W	≤1
输出信号(测量信号)/ Output signal (measurement signal)		
电压信号/Voltage range	V	0.....10
电流信号/Current range	mA	4.....20
数据通讯/Data communication		RS485 (非隔离)通讯, Modbus RTU; 波特率 9600 bps
电压与压强/ Voltage vs. pressure		线性关系/Liner
暴露于真空的材料/Materials exposed to vacuum		Stainless steel, Al2O3 , FPM75,AgCuTi hard solder, sealing glass
真空接口/Vacuum Connector		KF16
重量/weight	g	300



单位/unit: mm