

# 气体质量流量计

## KMF1000



KMF1000 系列数位气体质量流量计采用微机电系统流量感测晶片，适用于各种用途的清洁、相对干燥的小流量气体测量和制程控制，特别的封装技术使得此产品满足不同范围的流量测量，能够保证高灵敏度、高可靠性、高稳定性和低成本。

它的原理是基于 MEMS 流量感测单元和高精度数位处理和校准电路。整合  $\Delta-\Sigma$  A/D 转换器以及内部具有校准功能的组合逻辑电路和 MCU 处理器共同确保感测讯号的即时有效撷取，获得准确的流量讯号，并在内部进行相应的补偿演算法处理，因此无需进行任何外部校准和补偿即可确保高精度的流量输出。KMF1000 series digital gas mass flow meter is made of micro- electromechanical system (MEMS) flow sensing chip, suitable for a variety of purposes of clean, relatively dry nature of the small flow gas measurement and process control, unique packaging technology makes the product to meet the different ranges of flow measurement, to ensure high sensitivity, high reliability, high stability and low cost. It is based on a MEMS flow sensing unit and a high precision digital processing and calibration circuit (MCU). The integrated  $\Delta-\Sigma$  A/D converter and the logic circuit with internal calibration function and MCU processor together ensure the real-time effective acquisition of the sensing signal, to obtain the accurate flow signal, and the corresponding compensation algorithm processing in the internal, so there is no need to do any external calibration and compensation to ensure high-precision flow output.

### 产品规格 Specifications

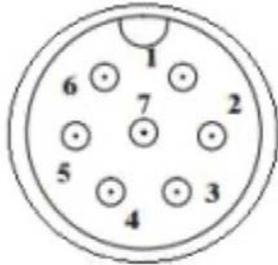
Series 1000			
型号 Type	KMF1005	KMF1008	KMF1019
通孔径 DN(mm)	5	8	19
流量范围 Flow Range(SLPM)	0-50	0-250	0-1000
工作电源 Supply Power(VDc)	7-24 VDc, 50 mA		
精度 Accuracy	±1.5% F.S		
重复精度 Repeatability	0.25%		
量程比 Turndown Ratio	1:100		
响应时间 Response	67 msec		
最大耐压 Max Pressure	0.5 Mpa		
数字信号输出 Serial Com	RS485(modbus)		
输出讯号 Output	1-5 VDc		
	4-20 mA		
显示单位 Display	SLPM(Instant Flow) / SL(Accum Flow)		
工作温度 Temp.	10~65°C (Fluid)		
	-25~85 °C (Ambient)		
空气湿度 Humidity	<100%RH		
重量 Weight	0.245 kg	0.215 kg	0.396 kg
口径 Port	G3/8"		
输出流量标准 Calibration	Air, 20°C, 101.325kPa		

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### 接线方式 Wiring Description



编号 No.	颜色 Color	功能 Function
1	红色 Red	电源 (+)
2	黑色 Black	电源 (-)
3	蓝色 Blue	RS485(A)
4	绿色 Green	RS485(B)
5	黄色 Yellow	V out
6	棕色 Brown	4 - 20 mA

### 外观尺寸 Dimension

