

# 产品规格书

## Product Datasheet

### F5-MA0800A



#### 主要信息 Main

产品系列 Range Of Product	FC5
产品类型 Product Or Component Type	模拟量输入模块 Analog Input module
模拟量输入通道 Analog Input Channels	8
模拟量输入类型 Analog Input Type	Voltage/Current
分辨率 Resolution	16 Bits

## 补充信息 Complementary

### 模拟量输入特性

特性 Input characteristics	参数 Parameter
输入范围 Input range	<ul style="list-style-type: none"> <li>◆ 电压 Voltage input: -10 ~10 V DC or 0~10 V DC</li> <li>◆ 电流 Current input: 0~20mA or 4~20mA</li> </ul>
输入阻抗 Input impedance	<ul style="list-style-type: none"> <li>◆ 电压 Voltage input:&gt;200kΩ</li> <li>◆ 电流 Current input:237.5~262.5Ω</li> </ul>
端子 I/O terminal	可拆卸端子台 Removable terminal block
采样时间 Sampling time	1 ms / channel + 1 scan cycle
总输入系统传递时间 Total input system transfer time	4 ms+1 scan cycle
输入偏差 Input deviation	最大±0.2%*满量程范围 Maximum ±0.2 % of full scale range
分辨率 Resolution	16 位带符号 16-bit Signed
温漂 Temperature drift	±0.06%*满量程范围, 单位为°C ± 0.06% of full scale range /°C
共模抑制 Common-mode rejection	40 dB, DC to 60 Hz
噪声抑制 Noise suppression	400, 60, 50 or 10 Hz
非线性 Non-linear	±0.4 %*满量程 ±0.4 % of full scale range
最高运行输入 Maximum operating input (no damage)	<ul style="list-style-type: none"> <li>◆ 电压 Voltage input: DC ±30 V</li> <li>◆ 电流 Current input: DC ±30mA</li> </ul>
保护类型 Type of protection	<ul style="list-style-type: none"> <li>◆ 输入与内部电源隔离 Input isolated from internal power supply</li> </ul>
错误配置 Misconfiguration (voltage -> current)	<ul style="list-style-type: none"> <li>◆ 当输入介于±30V (DC), 不能造成损坏 When the input is between ±30 V DC, no damage can be caused</li> <li>◆ 当输入超出±30V (DC), 造成永久损坏 When the input exceeds ± 30 V DC, permanent damage is caused</li> </ul>
错误配置 Misconfiguration (current -> voltage)	<ul style="list-style-type: none"> <li>◆ 当输入介于±30mA, 不能造成损坏 When the input is between ±30 mA, no damage can be caused</li> <li>◆ 当输入超出±30mA, 造成永久损坏 When the input exceeds ±30 mA, permanent damage is caused</li> </ul>
电缆类型 Cable type	屏蔽电缆 Shielded cable
电缆长度 Cable length	3~30m

## 环境特性 Environmental Characteristics

类别 Category	特性 Characteristic
运行环境温度 Operating ambient temperature	-10°C~60°C
存储温度 Storage temperature	-20°C~70°C
相对湿度 Relative humidity	55%~95%, 无凝露 without condensation
污染等级 Class of pollution	2 (IEC60664)
防护等级 Class of protection	IP20
涂层 Coating	涂层防护, 干膜厚度 $\geq 20\mu\text{m}$ ; 加强版干膜厚度 $\geq 40\mu\text{m}$ Coated protection, dry film thickness $\geq 20\mu\text{m}$ ; reinforced dry film thickness $\geq 40\mu\text{m}$
海拔高度 Altitude	运行: 0m~3,000m Operation: 0m~3,000m 运输: $\leq 6,000\text{m}$ Transportation: $\leq 6,000\text{m}$
抗震性能 Seismic performance	5Hz~13.2Hz, 振幅 7mm; 13Hz~100Hz, 加速度 2G, X、Y、Z 三轴方向各 20 次 5~13.2Hz Amplitude 7mm, 13Hz~100Hz Acceleration 2G, 20 times each in X, Y and Z axes
抗冲击性能 Impact performance	半正弦波, 加速度 15G, 持续 11ms, X、Y、Z 三轴方向各 6 次 Semi-positive sine wave, acceleration 15G, duration 11ms, 6 times in each of the X, Y and Z directions

## 电磁敏感性 Electromagnetic Susceptibility

Standard	Method	Item
EN IEC 61000-6-4:2019	CISPR 16-2-1	Conducted Emissions at AC Mains Power Port (150kHz-30MHz)
	CISPR 32	Conducted Emissions at Wired Network Port(150kHz-30MHz)
	CISPR 16-2-3	Radiated Emissions(30MHZ-1GHz)
	CISPR 16-2-3	Radiated Emissions(Above 1GHz)

Standard	Method	Item
EN IEC 61000-6-22019	EN 61000-4-6:2014	Conducted Immunity at AC Mains Power Port(150kHz-80MHz)
	EN 61000-4-6:2014	Conducted Immunity at Signal Port150kHz-80MHz
	EN 61000-4-4:2012	Electrical Fast Transients Burst at AC Mains Power Port
	EN 61000-4-4:2012	Electrical Fast Transients Burst at Signal Port
	EN 61000-4-2:2009	Electro static Discharge
	EN 61000-4-8:2010	Power Frequency Magnetic Field
	EN IEC 61000-4-3:2020	Radiated Immunity(80MHZ-6GHz)
	EN 61000-4-5:2014+A1:2017	Surge at AC Mains Power Port
	EN 61000-4-5:2014+A1:2017	Surge at Signal Port
	EN IEC 61000-4-11:2020	Voltage Dips and Interruptions

F5 系列交流电源型 PLC 系统符合下述的安全标准:

The F5 Series AC power supply type PLCs system meets the following safety standards:

- IEC 61010-1:2010 + A1:2019
- AMD1: 2016

### 端子定义 Definition of Terminals

F5-MA0800A	上侧 Upper side	VI0	C0	AI0	VI1	C1	AI1	VI2	C2	AI2	VI3	C3	AI3
	下侧 Lower side	VI4	C4	AI4	VI5	C5	AI5	VI6	C6	AI6	VI7	C7	AI7

标识的含义请参见下表 For the meaning of marks , please refer to the table below.

Mark	Meaning
VI*、AI*	模拟量输入正极 Analog input positive terminal
C*	模拟量输入/输出公共端 Analog input output common terminal

外形尺寸 Dimension:

66\*94\*83 (W\*H\*D)

单位 Unit: mm

