

● **SIO-A-310M: 8AI / 2DO RS485 Analog I/O Module**



Order Information:
Model No.: SIO-A-310M

● **FEATURES**

➤ **Protocol Support**

Modbus RTU/ASCII

➤ **Support Interface**

RS485 up to 115.2kbps

8AI: Analog Input

2DO: Open Collector 0.5A, Photo coupler Isolation

➤ **Configurable Parameters**

Configuration under Configuration Mode

Configure Device ID

Configure Baud Rate

➤ **Supports ModBus Protocol**

Modbus RTU / ASCII Mode

➤ **High Reliability**

Stable and Robust

Working 24 Hours per day

➤ **Multi-Channel and High Resolution**

8 single-ended input channels

16-bit resolution

➤ **Supports 4 Operation Mode**

Voltage Inputs: 0~10V

Voltage Inputs: 1-5V

Current Inputs: 0~20mA

Current Inputs: 4~20mA

➤ **Built-in high/low limitation detection**

Manually adjusted Engineering Limitations

➤ **Low Power Consumption**

Less than 2W Power Consumption

● **APPLICATIONS**

Sensors Input

Temperature Sensor Input

Humidity Sensor Input

Water Sensor Input

Gauge Sensor Input

Pressor Sensor Input

Power Meter

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● **GENERAL DESCRIPTIONS**

SIO-A-310M supports Modbus RTU / ASCII protocol, RS485 interface supports communication transmission rate up to 115.2kbps, input part supports 8AI analog input, 8DO: Open Collector 0.5A, optocoupler isolation, can set transmission baud rate device ID, The AI has 8 single-ended input channels and 16-bit resolution. SIO-A-310M supports 4 working modes, voltage input: 0~10V, voltage input: 1-5V, current input: 0~20mA, current

input: 4~20mA. The SIO-A-310M has built-in upper/lower limit detection for engineering limit adjustment. The SIO-A-310M is useful for analog sensor input front ends. The SIO-A-310M consumes less than 2W and has high reliability and stability. Stability, working 24 hours a day. The SIO-A-310M is your best choice.

● **SPECIFICATION**

• **Analog Input**

Input Type	Single-ended input channels
Number of Input	8
Input Type	Voltage Inputs: 0~10V Voltage Inputs: 1-5V Current Inputs: 0~20mA Current Inputs: 4~20mA
Resolution	16Bit, (A/D sampling 24Bits)

• **Digital Output**

Output Type	Open Collector
Number of Output	2
Maximum Voltage	50VDC
Maximum Current	500mA
Photo Coupler Isolation Protection	3750Vrms or 5000Vrms

• **Modbus Address**

Modbus Setting	8 Pin DIP Switch
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• **Serial Interface**

Protocol	Modbus RTU/ASCII Slave
Number of Ports	1
Serial Standards	RS485-3w x1
Connectors	Terminal Block
ESD Protection	15 kV for all signals
RS-485 Data Direction Control	automatic data direction control
Photo Coupler Isolation Protection	UL recognized: 3750 VAC for 1 min. per U.L.

• **Serial Communication Parameters**

Data Bits	7, 8
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Stop Bits	1, 2
Parity	None, Even, Odd
Flow Control	
Baudrate	300 bps to 115.2 kbps
• Serial Signals	
RS-485-3w	Data+, Data-, SGND
• Software	
Configuration Options	Terminal
• Physical Characteristics	
Housing	PC (polycarbonate)
Weight	300 g
Dimensions	Without ears: 25 x 80 x 102 mm
	With ears: 25 x 94 x 102 mm
• Environmental Limits	
Operating Temperature	0 to 60°C (32 to 140°F)
Storage Temperature	-40 to 85 °C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Altitude	Up to 2000 m (795 hPa), higher altitudes on demand
Note	
• Power Requirements	
Input Voltage	12 to 36 VDC
Power Connector	Terminal block
Power Consumption	60 mA @ DC24V
Isolation	1500Vrms
• Standards and Certifications	
EMC	CE
• Reliability	

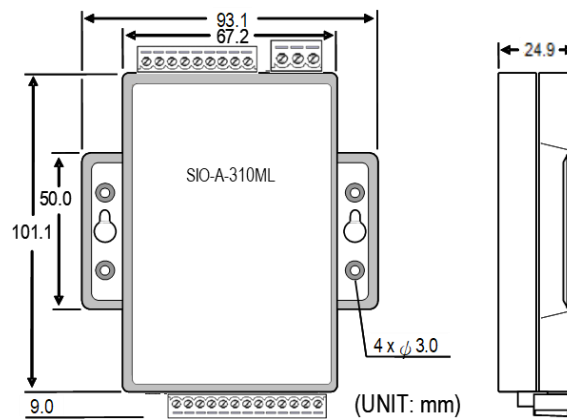
MTBF (mean time between failures)

• **Warranty**

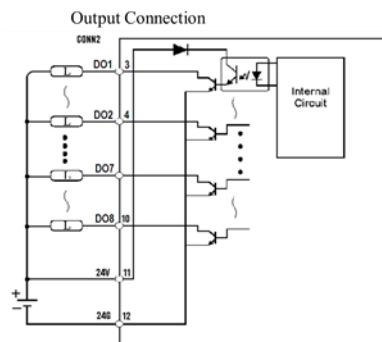
Warranty Period 1 year

Details See <http://www.infosystem.com.tw>

● **Dimension**



● **Connection**



● **Configuration**

- RS485 Console Setting
- DIP Switch for Modbus ID

● **Installation**

- Wall Mount
- Din Rail (Optional Din Rail Kit)