

CM3-AI/AO



CM3-SP04EAO-A



CM3-SP04EOAI



CM3-SP04EAA-A



CM3-SP08EAO-A



CM3-SP04EOAV

MODULE LIST

Category	Part Number	I/O Points	Detail
Analog Input Module	CM3-SP04EAO-A	4 Current/Voltage Inputs	0 – 20 mA -10 – +10 V Screw-based Connector
	CM3-SP08EAO-A	8 Current/Voltage Inputs	0 – 20 mA -10 – +10 V Push-in Terminal Connector
Analog Output Module	CM3-SP04EOAI	4 Current Outputs	4 – 20 mA Screw-based Connector
	CM3-SP04EOAV	4 Voltage Outputs	-10 – 10 V Screw-based Connector
Analog Input/ Analog Output Module	CM3-SP04EAA-A	2 Current/Voltage Inputs 2 Current/Voltage Outputs	Input: 0 – 20 mA -10 – +10 V Output: 0 – 20 mA -10 – +10 V Screw-based Connector

FUNCTIONAL

Analog Output Specifications				
CIMON Part Number		CM3-SP04EAA-A	CM3-SP04EOAV	CM3-SP04EOAI
Analog Output Points		2 Points	4 Points	
Analog Output		Voltage: 0 – 5 V, 1 – 5V, 0 – 10 V, -10 – 10 V Current: 0 – 20 mA, 4 – 20 mA	0 – 10 V, -10 – 10 V (Dip Switch)	4 – 20 mA
Minimum Load Impedance		1 kOhm	3 kOhm	-
Resolution		14-bit, 0 – 16000 16-bit, 0 – 64000	14-bit, 0 – 16000	
Accuracy		±0.05% (Full Scale)	±0.01% (Full Scale)	
Conversion Speed		<2 ms		
Insulation Method		Photocoupler		
Power Supply		External 24 VDC		
Current Consumption (mA)	Internal	@3.3 VDC, 45 mA	@3.3 VDC, 40 mA	
	External	@24 VDC, 75 mA	@24 VDC, 50 mA	@24 VDC, 90 mA

FEATURES

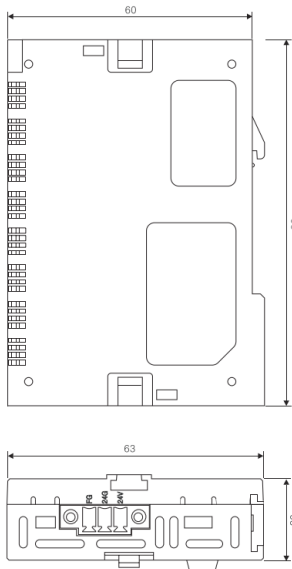
- Compatible expansion with any PLC-S CPU.
- Group-isolated.
- Combination analog input and analog output module.
- Up to 8 analog inputs on a single module.
- Screw-based connectors.

BENEFITS

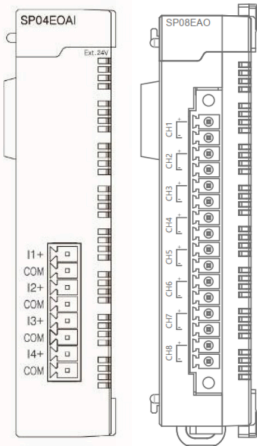
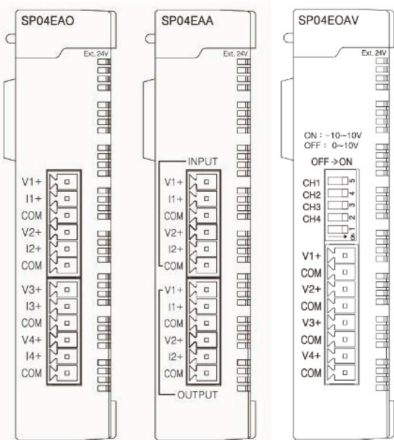
- Diagnostic LEDs.
- Swap between current and voltage input/output from scan logic.

CM3-AI/AO

*All analog modules are the same size.



(Unit: mm)



Analog Input Specifications			
CIMON Part Number	CM3-SP04EAA-A	CM3-SP04EAO-A	CM3-SP08EAO-A
Analog Output Points	2 Points	4 Points	8 Points
Analog Input	Voltage: 0 – 5 V, 1 – 5V, 0 – 10 V, -10 – 10 V Current: 0 – 20 mA, 4 – 20 mA		
Resolution	14-bit, 0 – 16000 16-bit, 0 – 64000		
Accuracy	±0.03% (Full Scale)		
Conversion Speed	<0.5 ms		
Insulation Method	Photocoupler		
Power Supply	External 24 VDC		
Current Consumption (mA)	Internal	@3.3 VDC, 45 mA	@3.3 VDC, 30 mA
	External	@24 VDC, 75 mA	@24 VDC, 35 mA

PHYSICAL

CIMON Part Number	SP04EAO-A	SP08EAO-A	SP04EOAI	SP04EOAV	SP04EAA-A
Dimension (W X D X H)	90 x 20 x 63 mm (3.5 x 0.8 x 2.5 in)				
Product Weight	87 g (0.19 lb)	89 g (0.20 lb)	87 g (0.19 lb)	86 g (0.19 lb)	89 g (0.20 lb)

ENVIRONMENTAL

Item	Specification	Standards
Operating Temperature	-10 – +60 °C (+14 – +140 °F)	-
Storage Temperature	-25 – +80 °C (-13 – +176 °F)	-
Operating/Storage Relative Humidity	5 – 95% Non-condensing	-
Shock	15G	IEC 60068-2-64
Vibration	0.5G - Continuous 1G - Discontinuous	IEC60068-2-64 IEC60068-2-6
Square Wave Impulse Noise	±2 kV	CIMON Standard
ESD Immunity	±4 kV - Contact Discharges ±8 kV - Air Discharges	IEC 61131-2 IEC 61000-4-2
Radiated Electromagnetic Immunity	80–1000 MHz, 10 V/m	IEC 61131-2 IEC 61000-4-3
Surge Transient Immunity	2 kV - CPU, Power 2 kV - Discrete I/O (VAC) 1 kV - Discrete I/O (VDC) 1 kV - Communication	IEC 61131-2 IEC 61000-4-4