



CM3-SP04EAO-A



CM3-SP08EAO-A



CM3-SP04EOAI



CM3-SP04EOAV



CM3-SP04EAA-A

■ 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.



■ Model List

| Category | CIMON 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)

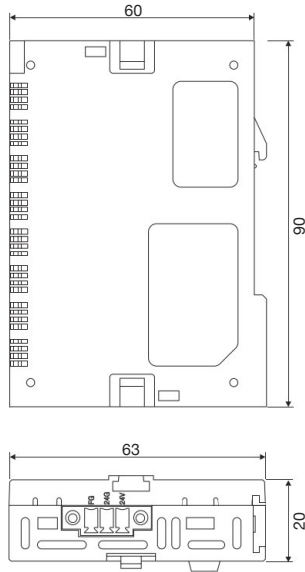
| CIMON Part Number | CM3-SP04EAA-A | CM3-SP04EOAV | CM3-SP04EOAI | |
|--------------------------|--|---|-----------------|----------------|
| Analog Output Points | 2 Points | 4 Points | | |
| Analog Output | Voltage: 0 – 5 V, 1 – 5V, 0 – 10 V, -10 – 10 V Current: 0 – 20 mA, 4 – 20 mA | 0 – 10 V, -10 – 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 |



■ Functional (Analog Input)

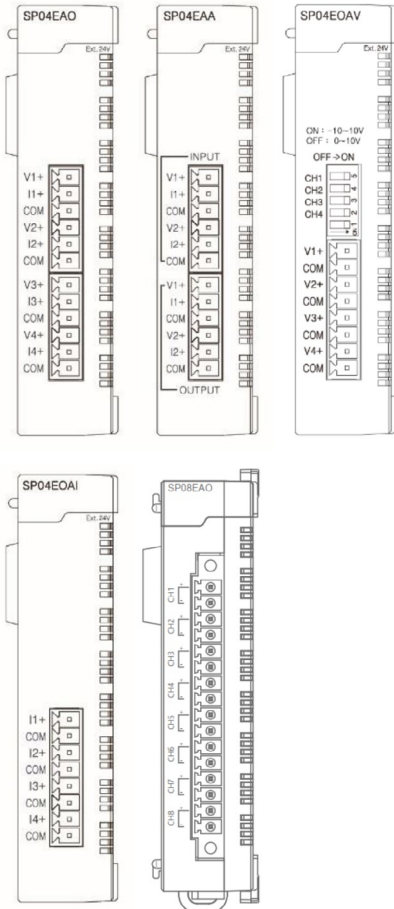
| CIMON Part Number | | CM3-SP04EAA-A | CM3-SP04EAO-A | CM3-SP08EAO-A |
|---------------------------------|-----------------|---|-----------------|---------------|
| Analog Output Points | | 2 Points | 4 Points | 8 Points |
| Analog Input | | Voltage: 0 – 5 V, 1 – 5V, 0 – 10 V, -10 – 10 V Current: 0 – 20 mA, 4 – 20 mA | | |
| Resolution | | 14-bit, 0 – 16000 16-bit, 0 – 64000 | | |
| Accuracy | | ±0.3% (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 | |

*All analog modules are the same size.
(Unit: mm)



■ Physical

| CIMON Part Number | SP04EAO-A | SP08EAO-A | SP04EOAI | SP04EOAV | SP04EAA-A |
|------------------------------|--------------------------------------|----------------|----------------|----------------|----------------|
| Dimension (W X D X H) | 90 x 20 x 60 mm (3.5 x 0.8 x 2.4 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 61131-2 |
| Vibration | 0.5G - Continuous / 1G - Discontinuous | IEC 61131-2 |
| 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 |