

NQ-EP4A

EtherNet/IP™ compatible Temperature/Analog Input Module

*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

Specifications

Model		NQ-EP4A
Network Specifications	Compatible Networks	EtherNet/IP™, Modbus/TCP
	Communication Speed	10 Mbps/100 Mbps
	Connector	M8 4-pin female A-code
Power Supply Specifications	Connector Type	Power supply port IN: M8 4-pin male A-code Power supply port OUT: M8 4-pin female A-code
	Power Voltage	18 to 30 VDC
	Allowable Current	V1 and V2: max. 4 A each V1 and V2: 5.5 A in total
	Current Consumption	Max. 240 mA
Input Specifications	Connector Type	M12 5-pin female A-code
	Number of Inputs	4
	Input Types	Voltage/current/resistance thermometer (RTD)/thermocouple
	Resolution	16 bit
	V1 Power Supply Capacity	Ports 1 to 4: 1 A in total, with short-circuit protection
Voltage Input Specifications	Input Range	Differential/single end 0 to 10 V/±10 V/2 to 10 V/0 to 5 V/1 to 5 V/±1 V/±500 mV/±100 mV/±50 mV
	Input Filters	4 stages
	Absolute Maximum Input	11.85 V
	Input Resistance	100 kΩ or above
	Conversion Speed	4 ms or less
	Conversion Precision (at 25°C 77°F)	0.1% of F.S. or lower
	Conversion Precision (at -40 to +70°C -40°F to +158°F)	0.75% of F.S. or lower
Current Input Specifications	Input Range	Differential/single end 0 to 20 mA/4 to 20 mA/±20 mA
	Input Filters	4 stages
	Absolute Maximum Input	23 mA
	Input Resistance	50 Ω or lower
	Conversion Speed	4 ms or less
	Conversion Precision (at 25°C 77°F)	0.1% of F.S. or lower
	Conversion Precision (at -40 to +70°C -40°F to +158°F)	0.75% of F.S. or lower
Resistance Thermometer (RTD) Input Specifications	Input Range	Pt100/Pt200/Pt500/Pt1000/Ni100/Ni200
	Connection Type	2 wires/3 wires/4 wires
	Input Filters	4 stages

	Conversion Speed	400 ms or lower
	Conversion Precision (Typical Example) (at 25°C 77°F)	Pt100: 0.2% of F.S. or lower (2 wires, -200°C to 850°C -328°F to 1562°F), Pt1000: 0.2% of F.S. or lower (2 wires, -200°C to 850°C -328°F to 1562°F)
	Conversion Precision (Typical Example) (at -40 to +70°C -40°F to +158°F)	Pt100: 0.85% of F.S. or lower (2 wires, -200°C to 850°C -328°F to 1562°F), Pt1000: 0.85% of F.S. or lower (2 wires, -200°C to 850°C -328°F to 1562°F)
Thermocouple Input Specifications	Input Range	K: -270 to 1370°C -454 to 2498°F / B: 100 to 1820°C 212 to 3308°F / E: -270 to 1000°C -454 to 1832°F / J: -210 to 1200°C -346 to 2192°F N: -270 to 1300°C -454 to 2372°F / R: -50 to 1768°C -58 to 3214.4°F / S: -50 to 1768°C -58 to 3214.4°F / T: -270 to 400°C -454 to 752°F C: 0 to 2315°C 32 to 4199°F / G: 0 to 2315°C 32 to 4199°F
	Input Filters	4 stages
	Conversion Speed	400 ms or lower
	Conversion Precision (Typical Example) (at 25°C 77°F)	K thermocouple: 0.7% of F.S. or lower (-200°C to 1370°C -328°F to 2498°F)
	Conversion Precision (Typical Example) (at -40 to +70°C -40°F to +158°F)	K thermocouple: 1.35% of F.S. or lower (-200°C to 1370°C -328°F to 2498°F)
Environmental resistance	Enclosure rating	IP65/IP67/IP69K
	Ambient temperature	-40°C to +70°C -40°F to +158°F (no freezing)
	Vibration resistance	5 to 150 Hz/20 G/10 sweeps each in X, Y, and Z axes
	Shock resistance	15 G/11 ms/3 times each in X, Y, and Z axes
Case Material		Housing: PA6-GF30 Connector: SUS303
Weight		Approx. 190 g

Dimensions

* Download CAD file or product manual for larger image/text and more detail.

NQ-EP4L/EP4A

