



Description

- EM-N-Series: Signal Transmitter (Fixed Input) is an industrial device designed to convert electrical input signals into standard analog signals.
- Supports AC/DC Current, AC/DC Voltage, Resistance, and Multi-Input options for Thermocouples and PT100 (RTD).
- Standard Analog Output 4-20mA, 0-10VDC output signals.
- Isolation between Input and Output.
- Maximum 2 outputs.
- DIN RAIL Mounting Installation.

Operation

EM-N-Series functions as a signal converter that transforms input signals into standard analog outputs, such as 4-20 mA or 0-10 VDC. There is an isolation between Input and Output included separated grounds. The converted output can be connected with various measurement and control instruments. Additionally, users can specify their required output either Direct or Inverse at the time of ordering.

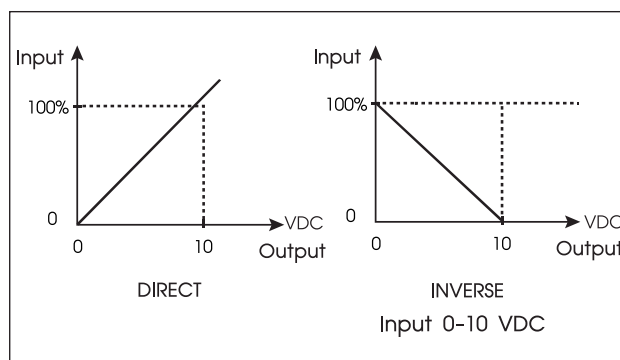
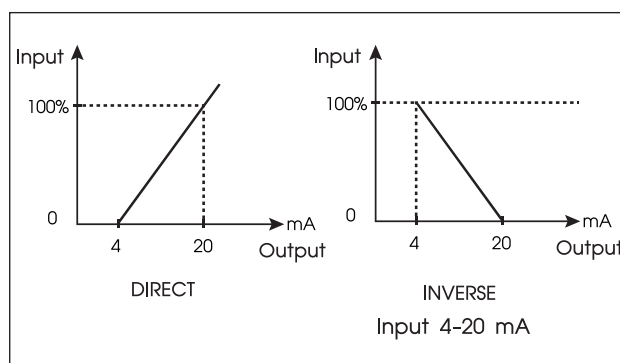
Direct: Input is directly proportional to Output.

Inverse: Input is inversely proportional to Output.

The characteristics of the analog output signal are shown in Graph (1).

Output characteristics Graph

Picture (1)

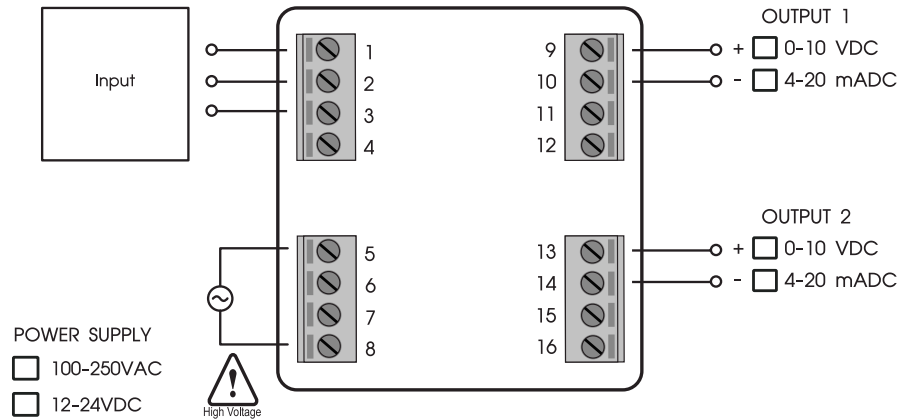


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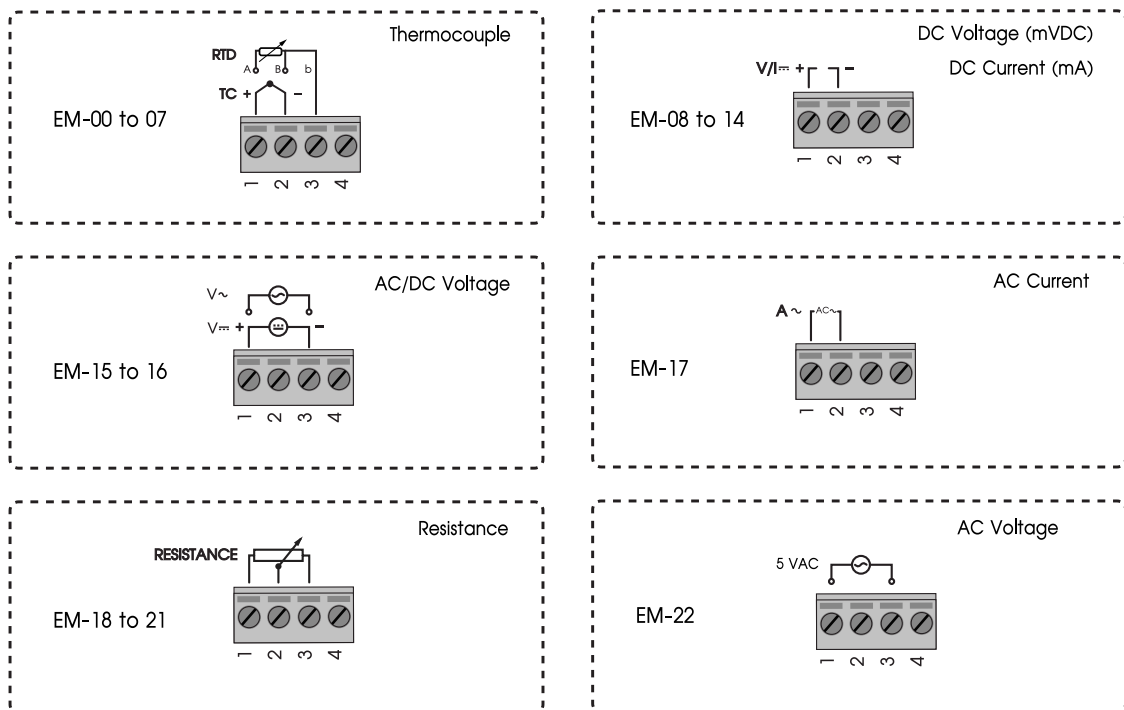
Model		EM-N-SERIES
Power Supply		100-250VAC / 50-60Hz
		12-24VDC
Power Consumption		4 VA Max.
Input	Channel	1 Input Channel
	Thermocouple	Type K, J, R, T, N, S, E
	RTD	PT100
	Resistance	0-100 Ω , 0-1 k Ω , 0-10 k Ω , 0-100 k Ω
	DC Current	0-20mA, 4-20mA, 0-100mA
	AC Current	0-5A
	DC Voltage	75mV, 0-150mV, 0-1V, 0-10V, 0-500V
	AC Voltage	0-5VAC, 0-500VAC
	Sampling Time	250ms
	EM 15	$\pm 1.0\%$ (0-25VDC), $\pm 0.25\%$, (26-500VDC)
	EM 16	$\pm 1.0\%$ (0-200VAC), $\pm 0.25\%$, (201-500VAC)
Output	Channel	2 Output Max.
	Analog Output	4-20 mA Maximum 500 Ω
		0-10 VDC Minimum 1K Ω
	Accuracy	$\pm 0.25\%$ F.S of Input Measurement
Ambient Operation	Temperature	-10 °C to 60 °C
	Humidity	<85 % RH Non-Condensing
Ambient Storage	Temperature	-20 °C to 80 °C
	Humidity	<85 % RH Non-Condensing
Protection Degree		IP20
Installation		DIN RAIL
Material		ABS-V0
Size (mm.)		23 x 113 x 110
Weight (kg.)		150

Wiring Diagram

Input Diagram

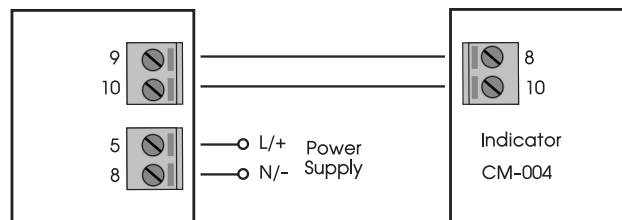


Input Diagram



Output Diagram

Output 0-10 VDC Diagram
EM-N Series



Output 4-20 mA. Diagram
EM-N Series

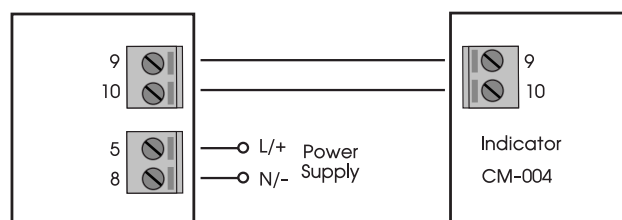
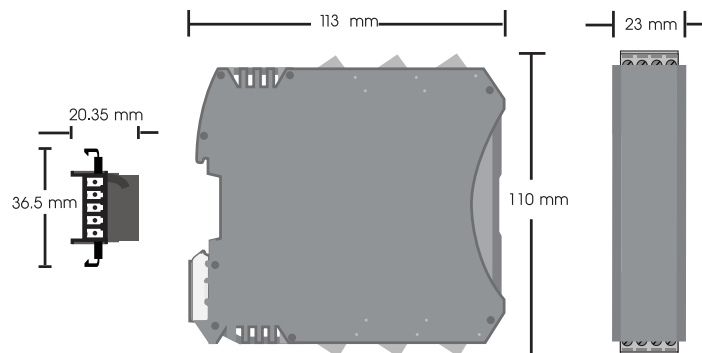


Table 1 [Input table]

Code1	Input Type	Instrument Input Range
00	Thermocouple Type K	-200 to 1372 °C
01	Thermocouple Type J	-200 to 1200 °C
02	Thermocouple Type R	-50 to 1680 °C
03	Thermocouple Type T	-200 to 400 °C
04	Thermocouple Type N	-200 to 1300 °C
05	Thermocouple Type S	-50 to 1768 °C
06	Thermocouple Type E	-200 to 1000 °C
07	PT100	-200 to 680 °C
08	0-20 mA	0 to 20 mA
09	4-20 mA	4 to 20 mA
10	0-100 mA	0 to 100 mA
11	0-75 mVDC	0 to 75 mVDC
12	0-150 mVDC	0 to 150 mVDC
13	0-1 VDC	0 to 1 VDC
14	0-10 VDC	0 to 10 VDC
15	0-500 VDC	0 to 500 VDC
16	0-500 VAC	0 to 500 VAC
17	0-5 A.AC	0 to 5 A.AC
18	0-100Ω	0 to 100Ω
19	0-1 kΩ	0 to 1 kΩ
20	0-10 kΩ	0 to 10 kΩ
21	0-100 kΩ	0 to 100 kΩ
22	0 - 5 VAC	0 to 5 VAC

Dimension

- EM-N-SERIES



Ordering Code

Standard Size (Supply 100-250VAC)

EM- INPUT N- OUTPUT 1 - OUTPUT 2 - POWER SUPPLY - Range Input On Request

POWER SUPPLY	
220	100-250VAC
24	12-24VDC
24A	12-24VAC

OUTPUT 2	
0	NONE
G	0-10 VDC
I	4-20 mA
V	10-0 VDC (Inverse)
C	20-4 mA (Inverse)

OUTPUT 1	
0	NONE
G	0-10 VDC
I	4-20 mA
V	10-0 VDC (Inverse)
C	20-4 mA (Inverse)

INPUT	
<u>X</u> <u>X</u>	For Fix Input (Standard) Select Order Code1.From Table1. ***In case user request Inverse Output. Please specific Code V,C.