



DESCRIPTION

- Input device converter TC, RTD, mA, mVdc, Vdc input converters to 4-20 mA, 0-10 Vdc standard analog signals.
- DC Voltage Converters to standard analog signal 4-20 mA, 0-10 Vdc.
- AC Voltage Converters to standard analog signal 4-20 mA, 0-10 Vdc.
- AC Voltage Converters to standard analog signal 4-20 mA, 0-10 Ydc.
- Frequency converters, RPM to analog signals
- 2 standard analog outputs
 - Current : 4-20 mA
 - Voltage : 0-10 VDC
- Input and Output independent of each other (Isolation)
- Input and output can be set to High-Low Limit range via Push Button So Range can be set in the conversion signal as needed
- Can be programmed to select the output signal as Direct or Inverse
- 7-Segment digital display, 1 row, 4 digits, can display input and output signals
- Have function Peak hold for display maximum value
- Function Lock Key Prevents changing settings via the Button Switch
- DIN RAIL Mounting Installation
- 4 Alarm Functions
- Modbus RTU communication via RS-485 (via Output 2)

OPERATION

IM-SERIES (Signal Transmitter) It is a device that converts electrical signals from temperature sensors (Thermocouple,RTD). mA, mVdc, or Vdc is a standard analog signal 4-20 mA, 0-10 Vdc, RS485 or Relay Alarm. The IM-A can output up to two outputs per Signal Input

IM-SERIES is a measurement system for input and output Isolate. To prevent input/ output problems interfering with each other

The IM-SERIES has a 7-Segment 4-digit display for measuring input or display. Analog Outputs 4-20 mA, 0-10 Vdc makes it easy to analyze and monitor the input/ output of Sensor easily

IM-SERIES can set Input Type, Input Scaling, Output Scaling. By setting the Parameter within the IM-SERIES with the key pad on it without the need to use Signal Simulator to simulate the signal to set the Scaling anymore. This is to reduce the use. And more convenient. You do not need a Signal Simulator or return the input/ output signal to the manufacturer, because the user can configure the desired value with the keypad

IM-SERIES can communicate with Modbus RTU by choosing to purchase Output 2 as RS-485, which is compatible with SCADA system

TECHNICAL SPECIFICATION

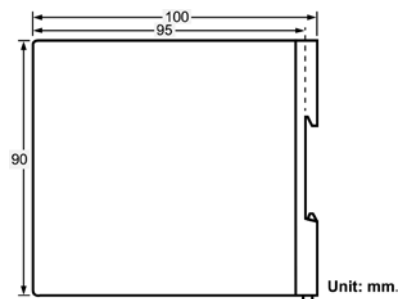
Model.	IM-A	IM-B	IM-C	IM-D	IM-F	
Power Supply	100 - 240 VAC 50-60 Hz					
	24VAC/VDC					
Power Consumption	3.5 VA					
Display	7-Segment size 0.4 inch 4 Digit					
Input	Thermocouple	Type : K, J, R, T, N, S, E	-	-	-	
	RTD	PT100	-	-	-	
	DC Current	0-20mA, 4-20mA	-	-	-	
	AC Current	-	-	-	0-5A.AC	
	DC Voltage	0-75 mVDC, 0-150 mVDC, 0-1 VDC, 0-5 VDC, 1-5 VDC, 0-10 VDC	0-500VDC	-	-	
	AC Voltage	-	-	0-500VAC	-	
	Freequency	-	-	-	-	0-10kHz
	RPM	-	-	-	-	0-9999 RPM
	Accuracy	±0.25% FS @ 25 °C				
	Sampling Time	0.25 Sec				

TECHNICAL SPECIFICATION

Model.		IM-A	IM-B	IM-C	IM-D	IM-F
Output	Max	2 Output				
	Alarm Relay	Relay contact, 250VAC/5A				
	Current	4-20mA DC				
	Voltage	0-10VDC				
	Impedance	Maximum Load 500Ω for 4-20mA Output				
		Minimum Load 1kΩ for 0-10VDC Output				
	Accuracy	±0.05% FS				
±0.05% FS						
Supply for Sensor	24VDC Max 30mA					
Communication	Protocol	MODBUS RTU				
	Baud Rate	2400, 4800, 9600, 19200, 38400, 57600 bps				
	Parity	None, Even, Odd				
	Data Bit	8 Bit				
	Stop Bit	1, 2				
	Support Device Node	128				
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	Front Protection Rating	IP52				
	Case Protection Rating	IP30				
Installation		DIN RAIL Mounting				
Material		ABS-V0				
Size		36x100x90 mm.				
Weight		225 g.				

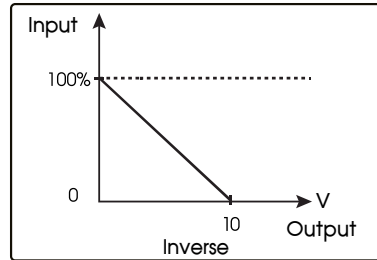
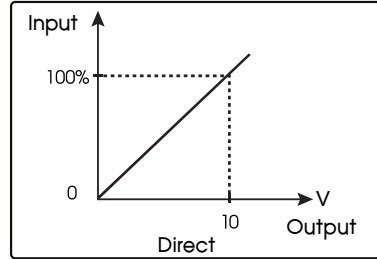
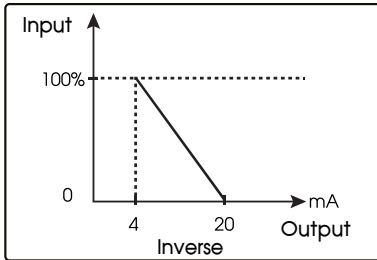
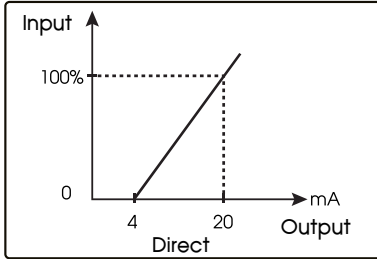
SIZE AND DIMENSION

IM-SERIES



OUTPUT SIGNAL

(1)

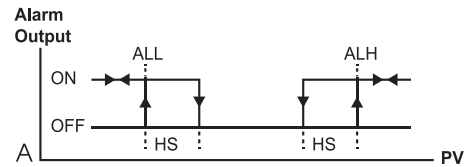


INPUT TABLE

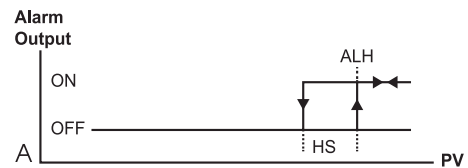
Order code	Input Type	Range
A	Thermocouple Type K	- 200 to 1372°C
	Thermocouple Type J	-200 to 1200°C
	Thermocouple Type R	-50 to 1768°C
	Thermocouple Type T	-200 to 400°C
	Thermocouple Type N	-200 to 1300°C
	Thermocouple Type S	-50 to 1768°C
	Thermocouple Type E	-200 to 1000°C
	Pt100	-200 to 850°C
	0-20mA	0 to 20 mA
	4-20mA	4 to 20mA
	0-75mVDC	0 to 75mVDC
	0-150mVDC	0 to 150mVDC
	0-1 VDC	0 to 1 VDC
	0-5 VDC	0 to 5 VDC
1-5 VDC	1 to 5 VDC	
0-10 VDC	0 to 10 VDC	
B	0-500VDC	0 to 500VDC
C	0-500VAC	0 to 500VAC
D	0-5 AAC	0 to 5 AAC
F	Frequency	0-10 kHz
	RPM	0-9999 RPM

ALARM OUTPUT

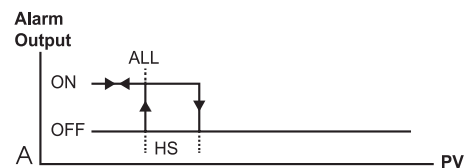
1. Absolute value High Low Band Alarm



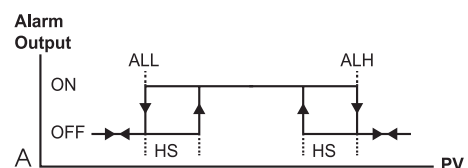
2. Absolute value High Alarm

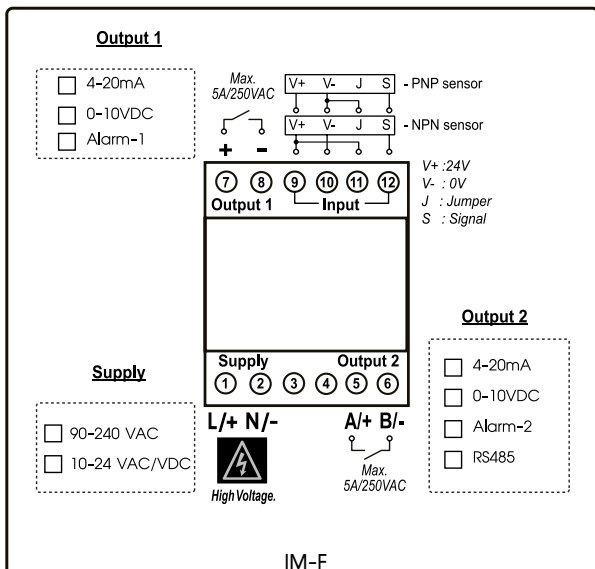
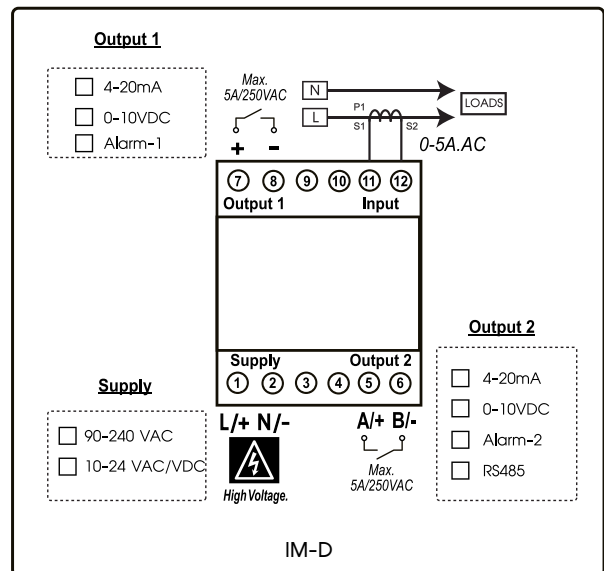
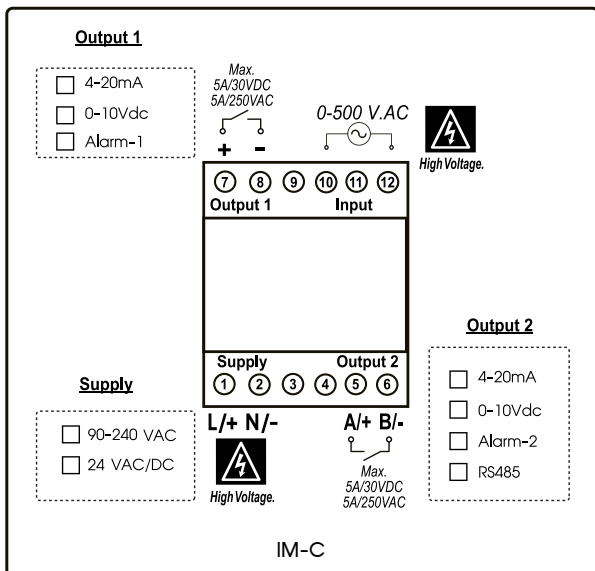
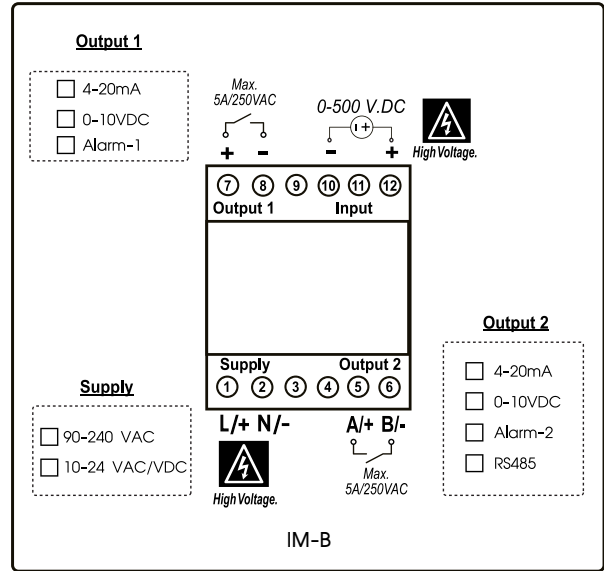
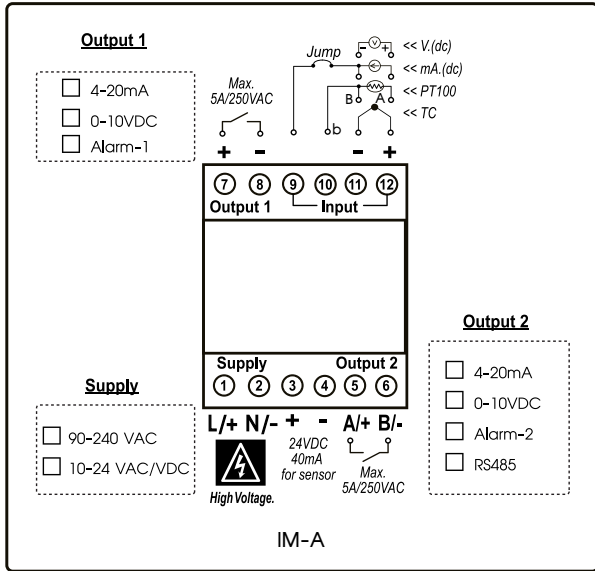


3. Absolute value Low Alarm



4. Absolute value High Low Range Alarm

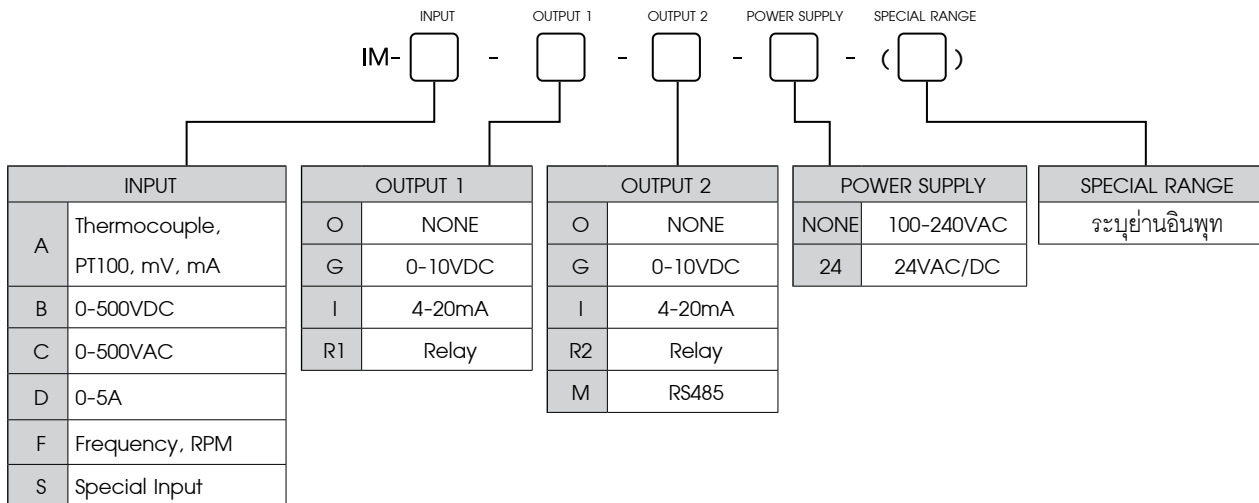


WIRING DIAGRAM


WARNING

- Make sure the correct wiring connection before turning on electricity. Mis-wiring may cause malfunction of the unit and fire.
- Never modify the unit to prevent damage or incident such as malfunction and fire etc.

ORDERING CODE



Example : IM-A-R1-I-220

- IM Model Input is Thermocouple Type K, Out1 is Alarm Relay (R1), Out2 is 4-20mA (I), Supply 100-240VAC