

RTD TRANSMITTER

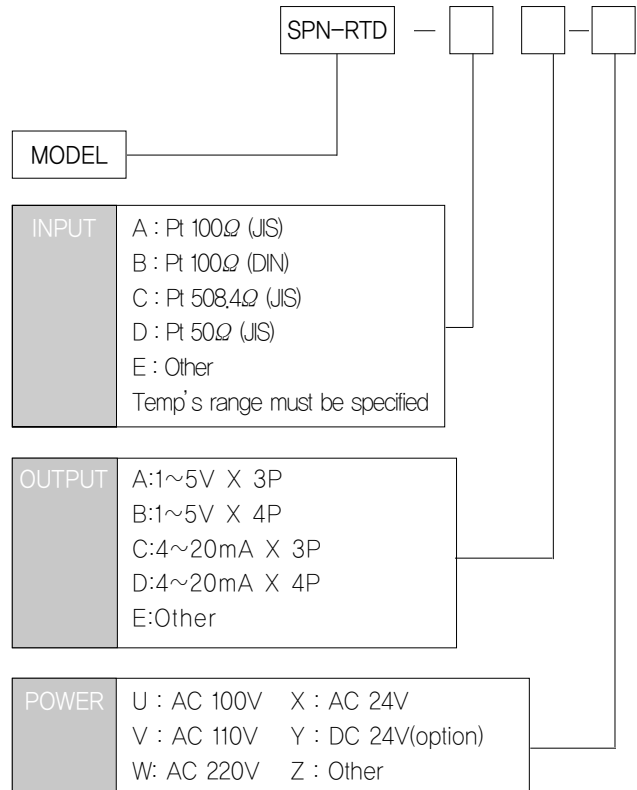
SPN-RTD



A converter is designed for converting the input signal that receives from RTD temperature sensor into isolated process signal.

- Long distance transmission between the RTD and the transmitter
- Combination with intrinsic safety barriers.
- Contains linearizer circuit.
- 3 or 4 outputs are available from 1 input.
- Contains overvoltage protection circuit.
- Transformer isolation type.

MODEL & SUFFIX CODE SELECTION



GENERAL SPECIFICATIONS

Isolation/Type	Input to output to power/Transformer isolation type		
Power Supply	AC rating ±10%, approx. 3.5VA DC rating ±10%, (ripple 10%)100mA		
Accuracy	±0.25%(Max)		
Temp Coefficient	±0.015% / °C(±0.008%/°F)		
Linearity	±0.02% F.S		
Insulation Resistance	Greater than 100MΩ with DC 500V		
Dielectric Strength	Input - Power	AC 2500V	1 minute
	Input - Output		
	Output 1 - Output 2	AC 1000V	
	GND - Power		
Front Adjustments	Zero and Span ±5%		
Overrange Output	approx. -10% ~ 110% at DC 1~5V		
Response Time	≤0.5 sec (0~90%)		
Operating Temperature/Humidity	-20~60°C / 90%(N.C)		
Storage Temperature/Humidity	-20~80°C / 95%(N.C)		
Dimensions	W81×H129×D138(mm)		
Case Material	Aluminum		
Weight	about 980g		
Mounting	Wall mounting		

SIGNAL CONVERTER SPN-RTD

INPUT & OUTPUT SPECIFICATIONS

Input Specification

- (1)Sensing current:DC 2mA
(2)Temperature range(°C)

RTD	Usable Range		Min		SPAN	
	°C	°F	°C	°F	°C	°F
Pt100Ω /JIS	-200 to+650	-328 to+1202	50	122		
Pt100Ω /DIN	-200 to+650	-328 to+1202	50	122		
Pt 50Ω	-200 to+500	-328 to+ 932	100	212		
Ni508.4Ω	- 50 to+200	- 58 to+ 392	50	122		

Output Load Resistance

Output	Out-1	Out-2	Out-3	Out-4	Remark
4 ~ 20mA	460Ω	460Ω	460Ω	460Ω	(Max)
0 ~ 20mA	460Ω	460Ω	460Ω	460Ω	(Max)
2 ~ 10mA	950Ω	950Ω	950Ω	950Ω	(Max)
1 ~ 5V	5000Ω	5000Ω	5000Ω	5000Ω	(Min)
0 ~1V	1000Ω	1000Ω	1000Ω	1000Ω	(Min)

BLOCK DIAGRAM

