

Ω (2-wire) SIGNAL TRANSMITTER & ISOLATOR

NT-RS

FEATURES

- Measures 2 Wire resistances 0 ~ 100KΩ
- 4 Programmable Input Ranges
- 6 Popular Output Ranges Programmable by dip switch
- Dual output available (isolated)
- Plugs into 11 pin DIN rail mounted base
- Low cost and high stability
- CE Approved



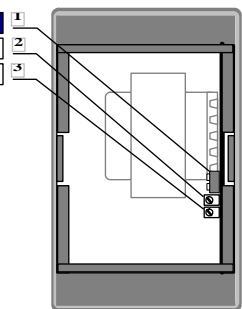
SPECIFICATION

Input Range	Input Impedance	Output Range	Load Resistance
0 ~ 50 ohm	≥ 1M ohm	0 ~ 100 mV	≥ 100K ohm
0 ~ 100 ohm	≥ 1M ohm	0 ~ 1 V	≥ 50 ohm
0 ~ 200 ohm	≥ 1M ohm	0 ~ 5 V	≥ 250 ohm
0 ~ 500 ohm	≥ 1M ohm	0 ~ 10 V	≥ 250 ohm
0 ~ 1K ohm	≥ 1M ohm	1 ~ 5 V	≥ 250 ohm
0 ~ 2K ohm	≥ 1M ohm	2 ~ 10 V	≥ 500ohm
0 ~ 5K ohm	≥ 1M ohm	-10 ~ 0 ~ +10 V	≥ 1K ohm
0 ~ 10K ohm	≥ 1M ohm	0 ~ 1 mA	≥ 15K ohm
0 ~ 20K ohm	≥ 1M ohm	0 ~ 10 mA	≥ 1500 ohm
0 ~ 50K ohm	≥ 1M ohm	0 ~ 20 mA	≥ 750 ohm
0 ~ 100 K ohm	≥ 1M ohm	4 ~ 20 mA	≥ 750ohm

Accuracy: ±0.1% of F.S.
Range: Resistance: 0 ~ 100K ohm (2 wired)
Response time: ≤ 250 msec.
Span adjustment: ≤ 10% of F.S.; Option: 50% of F.S.
Zero adjustment: ≤ 5% of F.S.; Option: 50% of F.S.
Output ripple: ≤ 0.1% of F.S.
Power Supply: AC 115 or 230V ±15%, 50/60 Hz
 AC 380 or 415V ±10%, 50/60 Hz
 Option: DC/AC 20V~90V, (Isolated)
Power consumption: DC 5W, AC 6.5VA
Operating temperature: 0~60 °C
Operating relative humidity: 20~95 %RH, non-condensing
Temperature coefficient: ≤ 100 PPM/°C
Storage temperature: -10~70 °C
Isolation: Between Power / Input / Output
 ≥ 100M ohm at 500Vdc
Surge test: 4 KV, 1.2 x 50 μ sec.
 Common mode & differential mode
Dielectric Strength: AC 2.0 KV for 1 min
 Between Power / Input / Output / Case
Standard: Comply with EN50081-1, EN50082-2
Dimensions: 50mm(W) x 87mm(H) x 123mm(D)-with
Mounting: Surface and DIN rail 35mm WIDE
Weight: 500g

ADJUSTMENT

Dip Switch: Programming for O/P - 6 Ranges selectable
 O/P Span Adjust Pot (Clockwise: o/p increase)
 O/P Zero Adjust Pot (Clockwise: o/p increase)



Programming for input (on input module)

INPUT Resistance : (CODE: P1)

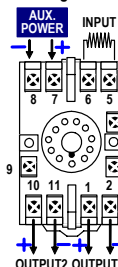
SIGNAL RANGE	DIP-SWITCH (INPUT)			
	SW1	SW2	SW3	SW4
0Ω ~ 1KΩ	on	on		
0Ω ~ 2KΩ		on	on	
0Ω ~ 5KΩ			on	on
0Ω ~ 10KΩ		on		

OUTPUT V / mA : (CODE: P)

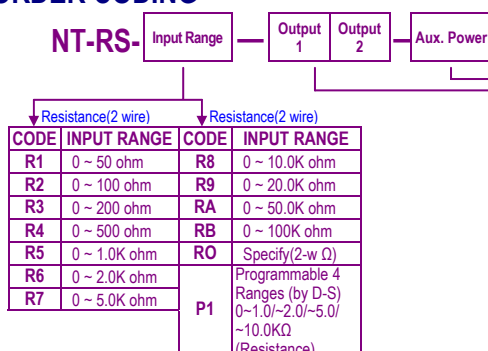
SIGNAL RANGE	DIP-SWITCH (OUTPUT)				
	SW1	SW2	SW3	SW4	SW5
0 ~ 5 V		on	on	on	
1 ~ 5 V	on	on	on	on	
0 ~ 10 V			on	on	
2 ~ 10 V	on		on	on	
0 ~ 20 mA					on
4 ~ 20 mA	on				on

CONNECTION DIAGRAM & SOCKET (11 PIN)

I/P: Resistance (2 Wire)
 O/P: Analogue V/mA x 1 (or 2)



ORDER CODING



Remark:

- > When you select coding P1 or P for input and output range, please specify initial range.
- > After changing input or output range by dip switch, re-calibration is required.

CODE	OUTPUT	CODE	OUTPUT
A	0 ~ 1 mA	1	0 ~ 100 mV
B	0 ~ 10 mA	2	0 ~ 1 V
C	0 ~ 20 mA	3	0 ~ 5 V
D	4 ~ 20 mA	4	0 ~ 10 V
I	Specify (mA o/p)	5	1 ~ 5 V
P	Programmable 6 ranges (by D-S): 4~20/0~20 mA 0~5/0~10/1~5/2~10 V	6	2 ~ 10 V
		7	-10 ~ +10 V
		V	Specify
		N	None

CODE	AUX. POWER
A1	AC 115 V
A2	AC 230 V
A3	AC 380 V
A4	AC 415 V
AD1	DC/AC 20~90V
AD2	DC/AC 20~90V