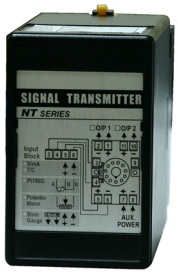
NT-VA DC SIGNAL CONVERTER & DISTRIBUTOR

FEATURE

- Measuring DC current: 0~20mA / 5A, DC voltage: 0~50mV / 600V
- 6 Popular Input and Output Ranges Programmable by Dip-Switch
- Input type Changeable by difference Input Modules
- Dual difference signal output available(Isolated)
- Low cost and high stability
- CE Approved



ORDERING INFORMATION

NT－VA [Output Loops] － [Input Range] － [Output 1 Range] [Output 2 Range] － [Excit. Supply] － [Aux. Power]

CODE	OUTPUT
1	Single output
2	Dual output

CODE	V/mA I/P RANGE
A1	0 ~ 100 μA
A2	0 ~ 1 mA
A3	0 ~ 10 mA
A4	0 ~ 20 mA (*P1)
A5	4 ~ 20 mA (*P1)
A6	0 ~ 1 A
A7	0 ~ 5 A
AL	4~20mA(loop pw)
AO	Specify mA i/p
VO	Specify V i/p
P1	Programmable 6 ranges(by D-S)

CODE	V/mA I/P RANGE
V1	0 ~ 50 mV
V2	0 ~ 100 mV
V3	0 ~ 1 V
V4	0 ~ 5 V (*P1)
V5	0 ~ 10 V (*P1)
V6	1 ~ 5 V (*P1)
V7	2 ~ 10 V (*P1)
V8	-10 ~ 0 ~ +10 V
VA	0 ~ 150 V
VB	0 ~ 300 V
VC	0 ~ 600 V

CODE	O/P RANGE
A	0 ~ 1 mA
B	0 ~ 10 mA
C	0 ~ 20 mA
D	4 ~ 20 mA
I	Specify mA o/p
P	Programmable 6 ranges(by D-S): **4~20/0~20 mA 0~5/0~10/1~5/ 2~10 V**

CODE	O/P RANGE
1	0 ~ 100 mV
2	0 ~ 1 V
3	0 ~ 5 V
4	0 ~ 10 V
5	1 ~ 5 V
6	2 ~ 10 V
7	-10 ~ +10 V
V	Specify V o/p
N	None

CODE	EXCIT SUPPLY
N	None
E1	DC 10 V
E2	DC 12 V
E3	DC 24 V
EO	Specify V o/p

CODE	AUX. POWER
A1	AC 115 V
A2	AC 230 V
D12	DC 12 V
D24	DC 24 V
D48	DC 48 V
D11	DC 110 V
D22	DC 220 V

Remark:
- When you select coding P1 or P for input and output range, please specify initial range.
- After change input or output range by dip switches (D-S), re-calibration is to be requested.

TECHNICAL DATA

Signal input (change input type & range by input modules & dip-switch)

Input Range		Input Impedance	Input Range		Input Impedance
Current	0~1 mA	1K ohm	Voltage	0~100 mV	≧5M ohm
	0~10 mA	100 ohm		0~1 V	≧1M ohm
	0~20 mA	250 ohm		0~5 V	≧1M ohm
	4~20 mA	250 ohm		0~10 V	≧1M ohm
	0~1 A	1 ohm		1~5 V	≧1M ohm
	0~5 A	0.02 ohm		0~150 V	≧1M ohm
				0~300 V	≧1M ohm
				0~600 V	≧1M ohm

Analogue output (change output range by dip-switch)

Output Range	Output Resistance	Output Range	Output Resistance
0 ~ 10mAdc	≦600Ω	0 ~ 5Vdc	250Ω
0 ~ 20mAdc	≦600Ω	1 ~ 5Vdc	250Ω
4 ~ 20mAdc	≦600Ω	0 ~ 10Vdc	500Ω
		2 ~ 10Vdc	500Ω

- **Accuracy:** ≦0.1% of F.S. (delivered in customer's specify) ≦1% of F.S. (range changed by dip-switch)
- **Linearity:** ≦0.1% of F.S.
- **Response time:** ≦250msec
- **Output ripple:** ≦0.1% of F.S.
- **Span adjustment:** ≦20% of F.S.
- **Zero adjustment:** ≦20% of F.S.

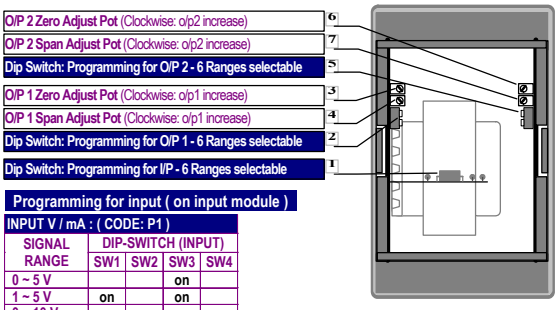
Power
- **Power supply:** AC 115V or 230V ± 15%, 50/60 Hz
- **Power consumption:** DC 4W, AC 5.0VA
- **Loop powered:** DC 10V, 24 V ± 5%, 60mA

Environmental
- **Operating temperature:** 0~60 ºC
- **Operating humidity:** 20~95% RH, Non-condensing
- **Temperature coefficient:** ≦100PPM/ ºC (0~50 ºC)
- **Storage temperature:** -10~70 ºC
- **Protection:** IP 42

Mechanical
- **Dimensions:** 50mm(W) x 87mm(H) x 130mm(D) with socket
- **Housing:** Self-extinguishing, black, UL94V0
- **Socket:** 11pin, female, black, UL94V0
- **Terminals:** Screw terminal, up to 2 x 2.5mm² wire
- **Mounting:** 35mm DIN rail (EN50022)
- **Weight:** 400g

Specification
- **Electrical Safety:** IEC 61010 (Installation category 3)
- **EMC:** EN 61326
- **Electric Isolation:** AC 2.0KV for 1min Between Power / Input / Output1 / Output2 / Case
- **Insulation resistance:** ≧100MΩ at 500Vdc

ADJUSTMENT



Programming for input (on input module)

INPUT V / mA : (CODE: P1)

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

INPUT mV : (CODE: P2)

SIGNAL RANGE	DIP-SWITCH (INPUT) SW1	SW2	SW3	SW4
0 ~ 50 mV			on	
0 ~ 60 mV	on		on	
0 ~ 75 mV		on		
0 ~ 100 mV	on	on		
0 ~ 150 mV				on
0 ~ 200 mV	on			on

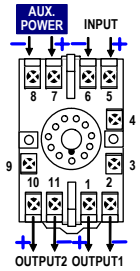
Programming for output

OUTPUT V / mA : (CODE: P)

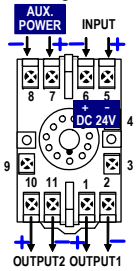
SIGNAL RANGE	DIP-SWITCH (OUTPUT) SW1	SW2	SW3	SW4	SW5
0 ~ 5 V		on	on	on	
1 ~ 5 V	on	on	on	on	
0 ~ 10 V			on	on	
2 ~ 10 V	on		on	on	
0 ~ 20 mA					on
4 ~ 20 mA	on				on

CONNECTION DIAGRAM & SOCKET(11 PIN)

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



I/P: Loop powered mA (with Excitation DC 24V)
O/P: Analogue V/mA x 1 (or 2)



DO NOT UNPLUG IF LIVE

NT-VA