

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	CODE	V/mA I/P RANGE	CODE	V/mA I/P RANGE	CODE	O/P RANGE	CODE	O/P RANGE	CODE	EXCIT SUPPLY	CODE	AUX. POWER		
1	Single output	A1	0 ~ 100 μ A	V1	0 ~ 50 mV	A	0 ~ 1 mA	1	0 ~ 100 mV	N	None	A1	AC 115 V		
2	Dual output	A2	0 ~ 1 mA	V2	0 ~ 100 mV	B	0 ~ 10 mA	2	0 ~ 1 V	E1	DC 10 V	A2	AC 230 V		
		A3	0 ~ 10 mA	V3	0 ~ 1 V	C	0 ~ 20 mA	3	0 ~ 5 V	E2	DC 12 V	D24	DC 24 V		
		A4	0 ~ 20 mA (*P1)	V4	0 ~ 5 V (*P1)	D	4 ~ 20 mA	4	0 ~ 10 V	E3	DC 24 V	D24	DC 24 V		
		A5	4 ~ 20 mA (*P1)	V5	0 ~ 10 V (*P1)	I	Specify mA o/p	5	1 ~ 5 V	EO	Specify V o/p	D48	DC 48 V		
		A6	0 ~ 1 A	V6	1 ~ 5 V (*P1)	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			D11	DC 110 V		
		A7	0 ~ 5 A	V7	2 ~ 10 V (*P1)			7	-10 ~ +10 V					D22	DC 220 V
		AL	4~20mA(loop pw)	V8	-10 ~ 0 ~ +10 V			V	Specify V o/p						
		A0	Specify mA i/p	VA	0 ~ 150 V			N	None						
		VO	Specify V i/p	VB	0 ~ 300 V										
		P1	Programmable 6 ranges (by D-S)	VC	0 ~ 600 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		
	0~10 mA	100 ohm		0~100 mV	\geq 5M ohm
	0~20 mA	250 ohm		0~1 V	\geq 1M ohm
	4~20 mA	250 ohm		0~5 V	\geq 1M ohm
	0~1 A	1 ohm		0~10 V	\geq 1M ohm
0~5 A	0.02 ohm	1~5 V	\geq 1M ohm		
		0~150 V	\geq 1M ohm		
		0~300 V	\geq 1M ohm		
		0~600 V	\geq 1M ohm		

Analogue output (change output range by dip-switch)

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

- Accuracy: \leq 0.1% of F.S. (delivered in customer's specify)
- Linearity: \leq 0.1% of F.S.
- Response time: \leq 250msec
- Output ripple: \leq 0.1% of F.S.
- Span adjustment: \leq 20% of F.S.
- Zero adjustment: \leq 20% of F.S.

Power

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

Environmental

- Operating temperature: 0~60 $^{\circ}$ C
- Operating humidity: 20~95% RH, Non-condensing
- Temperature coefficient: \leq 100PPM/ $^{\circ}$ C (0~50 $^{\circ}$ C)
- Storage temperature: -10~70 $^{\circ}$ C
- 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: IEC 61010 (Installation category 3)
- Electrical Safety: EN 61326
- EMC: AC 2.0KV for 1min
- Electric Isolation: \geq 100M Ω at 500Vdc
- Insulation resistance: \geq 100M Ω at 500Vdc

ADJUSTMENT

O/P 2 Zero Adjust Pot (Clockwise: o/p2 increase)

O/P 2 Span Adjust Pot (Clockwise: o/p2 increase)

Dip Switch: Programming for O/P 2 - 6 Ranges selectable

O/P 1 Zero Adjust Pot (Clockwise: o/p1 increase)

O/P 1 Span Adjust Pot (Clockwise: o/p1 increase)

Dip Switch: Programming for O/P 1 - 6 Ranges selectable

Dip Switch: Programming for I/P - 6 Ranges selectable

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

Programming for output

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

CONNECTION DIAGRAM & SOCKET(11 PIN)

