

MT-SG STRAIN GAUGE Converter & Isolator

FEATURE

- 6 Popular Output Ranges Programmable by dip switches
- Load cell: 0 ~ 40.0mV / V ,4 range input by the DIP switch, easy maintain and save stock
- Low cost & high stability
- Design by CE standard



SPECIFICATION

Input Range	Input Impedance	Output Range	Load Resistance
1.0 mV/V	≥ 1MΩ	0 ~ 100 mV	≥ 100KΩ
1.25 mV/V	≥ 1MΩ	0 ~ 1 V	≥ 100Ω
1.5 mV/V	≥ 1MΩ	0 ~ 5 V	≥ 500Ω
2.0 mV/V	≥ 1MΩ	0 ~ 10 V	≥ 1KΩ
3.0 mV/V	≥ 1MΩ	1 ~ 5 V	≥ 500Ω
4.0 mV/V	≥ 1MΩ	2 ~ 10 V	≥ 1KΩ
5.0 mV/V	≥ 1MΩ	-10 ~ 0 ~ +10 V	≥ 10KΩ
10.0 mV/V	≥ 1MΩ	0 ~ 1 mA	≤ 10KΩ
20.0 mV/V	≥ 1MΩ	0 ~ 10 mA	≤ 1KΩ
40.0 mV/V	≥ 1MΩ	0 ~ 20 mA	≤ 500Ω
		4 ~ 20 mA	≤ 500Ω

Accuracy: ±0.1% of F.S.
Response time: ≤ 250 mS
Span adjustment:: ≤ 10% of F.S.
Zero adjustment:: ≤ 5% of F.S.
Output ripple: ≤ 0.1% of F.S.
Excitation Supply: DC 5V/10V/24V, 40 mA, adjustable±10%

Power Supply: AC 115 or 230V ±10%, 50/60 Hz
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

Insulation resistance: ≥100MΩ @500Vdc
Surge test: 4 KV, 1.2 x 50 μ S

Dielectric Strength: AC 2KV, 50/60Hz, 1 min.
 Between Power / Input / Output / Case

Standard: Comply with EN50081-1, EN50082-2
Dimensions: 50mm(W) x 87mm(H) x 123mm(D) with socket
Mounting: Surface and DIN rail 35mm wide
Weight: 60g

ADJUSTMENT

Dip Switch: Programming for O/P - 4 Ranges selectable
 O/P Span Adjust Pot (Clockwise: o/p increase)
 O/P Zero Adjust Pot (Clockwise: o/p increase)

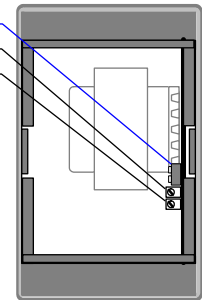
Programming for input (on input module)

INPUT mV : (CODE: P1)

SIGNAL RANGE	SW1	SW2	SW3	SW4
1.0 mV/V	on			
1.5 mV/V		on		
2.0 mV/V			on	
3.0 mV/V				on

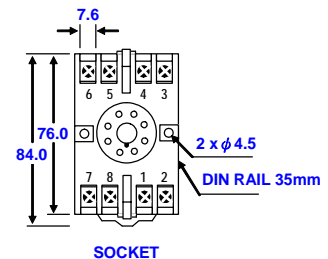
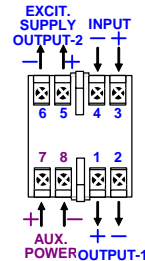
Programming for output

SIGNAL RANGE	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

MT-SG WITH Analogue Output



ORDERING INFORMATION



CODE	INPUT RANGE	CODE	OUTPUT 1 (A)	CODE	OUTPUT 1 (V)	CODE	OUT 2 (EXCIT.)	CODE	AUX. POWER
V1	1.0 mV/V(*P1)	A	0 ~ 1 mA	1	0 ~ 100 mV	E5	DC 5 V	A1	AC 115 V
V2	1.25 mV/V	B	0 ~ 10 mA	2	0 ~ 1 V	E1	DC 10 V	A2	AC 230 V
V3	1.5 mV/V(*P1)	C	0 ~ 20 mA	3	0 ~ 5 V	E2	DC 24 V	D12	DC 12 V
V4	2.0 mV/V(*P1)	D	4 ~ 20 mA	4	0 ~ 10 V	E0	Specify	D24	DC 24 V
V5	3.0 mV/V(*P1)	I	Specify (mA o/p)	5	1 ~ 5 V			D48	DC 48 V
V6	4.0 mV/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			D11	DC 110 V
V7	5.0 mV/V			7	-10 ~ +10 V				
V8	10.0 mV/V			V	Specify (Vo/p)				
V9	20.0 mV/V			N	None				
VA	40.0 mV/V								
VO	Specify (mV/V)								
P1	Programmable 4 Ranges(by D-S) 1.0 mV/V, 1.5 mV/V 2.0 mV/V, 3.0 mV/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.