

3 1/2 DIGITAL PANEL METER- 1/32 DIN

CSMS-321

CSM-321S

FEATURE

- Measuring DCA, DCV, ACA, ACV, Temperature
- Accuracy: DC : $\pm 0.1\%$; AC : $\pm 0.25\%$;
Pt100 : $\pm 0.2\%$; Type K, J : $\pm 1\%$
- 3 1/2 Digital display: 1999
- Easy-to-wire, screw type terminal
- Outside dimensions is 1/32 DIN standard (48x24mm)
- High stability & low cost

Miniature panel meter



MEASUREMENT

Measuring Range	Resolution	Input Impedance	Variable to be measured
Current	199.9 μ A	0.1 μ A	$\leq 1K$ ohm
	1.999 mA	0.001 mA	≤ 100 ohm
	19.99 mA	0.01 mA	≤ 10 ohm
	199.9 mA	0.1 mA	≤ 1 ohm
	1.999 A	0.001 A	≥ 0.05 ohm
Voltage	199.9 mV	0.1 mV	$\geq 5M$ ohm
	1.999 V	0.001 V	$\geq 1M$ ohm
	19.99 V	0.01 V	$\geq 1M$ ohm
	199.9 V	0.1 V	$\geq 1M$ ohm
	250 V	1 V	$\geq 1M$ ohm
Temp.	T/C: Type K	0~1200°C	$\geq 1M$ ohm
	T/C: Type J	0~750°C	$\geq 1M$ ohm
	RTD: Pt100	-40.0~199.9°C	$\geq 1M$ ohm
	RTD: Pt100	0~600°C	$\geq 1M$ ohm

- ___Measuring accuracy: DC: $\pm 0.1\%$ F.S. ± 1 digit
AC: $\pm 0.25\%$ F.S. ± 1 digit
T/C: $\pm 1\%$ F.S. ± 1 digit
Pt100: $\pm 0.2\%$ F.S. ± 1 digit
- ___Measuring range: Selectable soldering pads on pcb of rear side
- ___Decimal point: Selectable soldering pads on pcb of rear side
- ___Span adjustment: Rough adjustment 10~100% of F.S..
Fine adjustment $\leq 10\%$ of F.S.
 $\leq 5\%$ of F.S.
- ___Zero adjustment: $\leq 5\%$ of F.S.
- ___Sampling time: About 3 cycles/sec.
- ___Polarity indication: When input is negative " - "
- ___Over-range indication: " 1 " display
- ___Max. input over capability: Voltage: 1.2 x rated continuous
1.5 x rated for 10 seconds
Current: 1.2 x rated continuous
- ___Operating temperature: 0~60 °C
- ___Operating relative humidity: 20~95 %RH
- ___Temperature coefficient: ≤ 100 PPM/°C (0~50°C)
 ≤ 50 PPM/°C (23 \pm 3°C)
- ___Storage temperature: -10~70 °C
- ___Power Supply: DC 5V, 12V, 24V $\pm 10\%$ (Isolated)
- ___Power consumption: 700 mW
- ___Dielectric Strength: AC 500V for 1 min (Between Power / Input)
AC 2.0KV for 1 min (Between Terminal / Case)
- ___Weight: 350g

ADJUSTMENT

Voltage, Current input

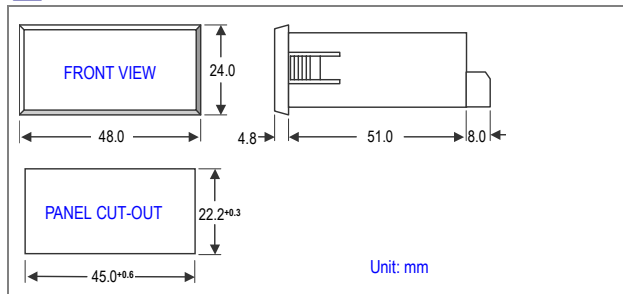
Pt100, Type K, J input

Input Range pads and Decimaal point pads

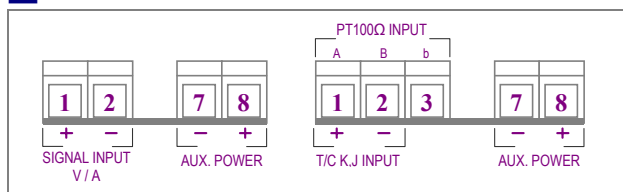
Input Range	Pads Closed
0 ~ 50 mV	J4, J12, J13
0 ~ 100 mV	J4, J12, J14
0 ~ 200 mV	J4, J12
0 ~ 2 V	J5, J12
0 ~ 20 V	J6, J12
0 ~ 200 V	J7, J12
0 ~ 20 mA	J4, J12, R=100

Decimal Point	Pads Closed
1.999	J1
19.99	J2
199.9	J3

DIMENSIONS



CONNECTION DIAGRAM



ORDER INFORMATION

CSMS-321 Input Type — Input Range — Aux. Power

CODE	INPUT TYPE	CODE	INPUT RANGE	CODE	INPUT RANGE	CODE	INPUT RANGE	CODE	AUX. POWER
D	DC	A	199.9 μ A	1	0 ~ 50 mV	K	K 0~1200°C	D5	DC 5 V
A	AC	B	1.999 mA	2	199.9 mV	J	J 0 ~ 750°C	D12	DC 12 V
T	Temperature	C	19.99 mA	3	1.999 V	P1	Pt100 -40.0~199.9°C	D24	DC 24 V
		D	199.9 mA	4	19.99 V	P2	Pt100 0~600°C	DO	Specify DC
		E	1.999 A	5	199.9 V	O	Specify		
		F	4 ~ 20 mA	6	250 V				
		G	0 ~ 1 mA	7	1 ~ 5 V				
		H	0 ~ 10 mA	8	0 ~ 10 V				
		I	0 ~ 20 mA	9	0 ~ 5 V				
		AO	Specify (A,i/p)	VO	Specify (V,i/p)				

A-01