4½ Digit *4~20mA* and other process signals

CSR-421

► FEATURES

- Measures & Displays process signals mA, Vdc, Potentiometer, Pulse/u.
- Accuracy: ±0.1%
- 4½ Digit display: 19999
- Easy-to-wire, screw type terminals
- High stability & low cost

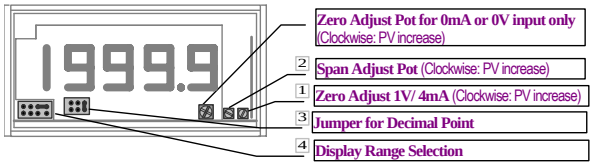
► MEASUREMENT

Measuring Range		Resolution	Input Impedance
Current	0 ~ 1 mA	0.0001 mA	≤200 ohm
	0 ~ 10 mA	0.001 mA	≤20 ohm
	0 ~ 20 mA	0.01 mA	≤10 ohm
	4 ~ 20 mA	0.01 mA	≤10 ohm
Voltage	0 ~ 50 mV	0.01 mV	≥5M ohm
	0 ~ 1 V	0.0001 V	≥1M ohm
	0 ~ 5 V	0.001 V	≥1M ohm
	0 ~ 10V	0.001 V	≥1M ohm
	1 ~ 5 V	0.001 V	≥1M ohm
	50 ~ 100.0K ohm		≥1M ohm
Pulse/u.	3.00 ~ 30.0K Hz		≥1M ohm

► SPECIFICATION

Measuring accuracy:	±0.04% F.S. ±1 digit
Span adjustment:	≤10% of F.S.
Zero adjustment:	≤2% of F.S.
Sampling time:	Circa 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: 10 x rated continuous
Decimal point:	Set by jumper behind front
Operating temperature:	0~60°C
Operating relative humidity:	20~95 %RH
Temperature coefficient:	≤100 PPM/°C (0~50°C) ≤50 PPM/°C (23±3°C)
Storage temperature:	-10~70°C
Power Supply:	AC 115/230V ±10%, 50/60 Hz Option: DC 5 V, 12V, 24V, 48V ±10% (Isolated)
Excitation supply:	Option: DC 10V, 12V, 24V, 30mA
Power consumption:	DC 3W, AC 4.5VA
Dielectric Strength:	AC 2.0KV for 1 min (Between Power / Input) AC 3.0KV for 1 min (Between Terminal / Case)
Weight:	350g

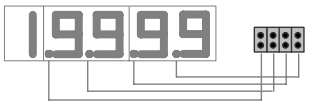
► ADJUSTMENT



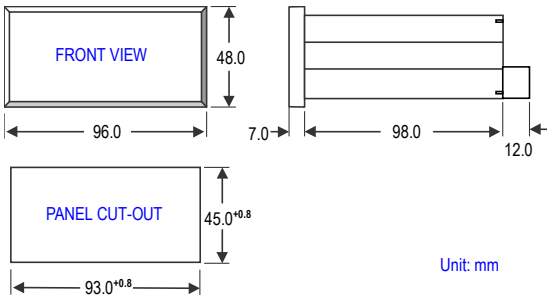
4 Display Range Selection:

Section	Jumper	Display Range	Section	Jumper	Display Range
1		19999~17000	5		9000~ 6250
2		17250~13000	6		6250~ 4250
3		13000~ 9000	7		4250~ 3000
4		12000~ 8250	8		3000~ 2000

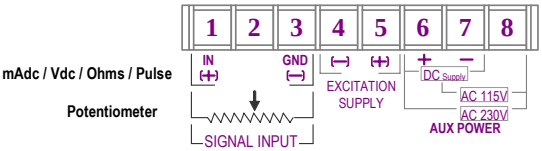
3 Decimal Point Jumper:



► DIMENSIONS



► CONNECTION DIAGRAM



► ORDER CODING

CSR-421 [Input Range] — [Excitation Supply] — [Aux. Power]

Current

CODE	INPUT RANGE
A1	0 ~ 1 mA
A2	0 ~ 10 mA
A3	0 ~ 20 mA
A4	4 ~ 20 mA
AO	Specify (mA)

Voltage

CODE	INPUT RANGE
V1	0 ~ 50 mV
V2	0 ~ 60 mV
V3	0 ~ 1 V
V4	0 ~ 5 V
V5	0 ~ 10 V
V6	1 ~ 5 V
V7	0 ~ 100 mV
VO	Specify (V)

Potentiometer or Ohm

CODE	INPUT RANGE
RP1	50 ~ 10K ohm
RP2	10K ~ 100K ohm
RPO	Specify (3-w Ω)
R1	199.9 ohm
R2	1999 ohm
R3	10.00K ohm
RO	Specify (2-w Ω)

Strain Gauge

CODE	INPUT RANGE
S1	1.0 mV / V
S2	1.3 mV / V
S3	1.5 mV / V
S4	2.0 mV / V
S5	2.5 mV / V
S6	3.0 mV / V
S7	4.0 mV / V
S8	3.33 mV / V
SO	Specify (mV/V)

Frequency

CODE	INPUT RANGE
H1	0 ~ 100 Hz
H2	0 ~ 200 Hz
H3	0 ~ 500 Hz
H4	0 ~ 1 KHz
H5	0 ~ 2 KHz
H6	0 ~ 5 KHz
H7	0 ~ 10 KHz
H8	0 ~ 40 KHz
HO	Specify (Hz)

CODE	EXCIT. SUPPLY
N	None
E1	DC 10 V
E2	DC 12 V
E3	DC 24 V
E4	DC 5 V
EO	Specify

Aux. Power

CODE	AUX. POWER
A	AC 115/230 V
A3	AC 380 V
A4	AC 415 V
D12	DC 12 V
D24	DC 24 V
D48	DC 48 V
DO	Specify DC
AO	Specify AC