

CSR-321 3 1/2 DIGITAL PROCESS METER

FEATURE

- Measuring process signal mA, Vdc, Potentiometer, Pulse/u.
- Accuracy: $\pm 0.1\%$
- 3 1/2 Digital display: 1999
- Easy-to-wire, screw type terminal
- Outside dimensions is 1/8 DIN standard (96x48 mm)
- High stability & low cost

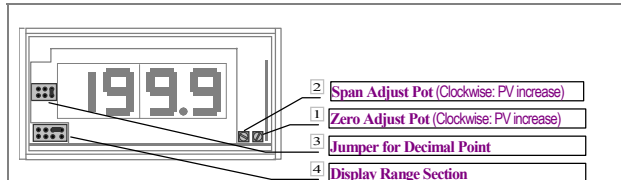


MEASUREMENT

| Measuring Range | Resolution | Input Impedance | |
|-----------------|-----------------|-----------------|----------------|
| | | | |
| Current | 0 ~ 1 mA | 0.001 mA | ≤ 200 ohm |
| | 0 ~ 10 mA | 0.01 mA | ≤ 20 ohm |
| | 0 ~ 20 mA | 0.1 mA | ≤ 10 ohm |
| | 4 ~ 20 mA | 0.1 mA | ≤ 10 ohm |
| Voltage | 0 ~ 50 mV | 0.1 mV | $\geq 5M$ ohm |
| | 0 ~ 1 V | 0.001 V | $\geq 1M$ ohm |
| | 0 ~ 5 V | 0.01 V | $\geq 1M$ ohm |
| | 0 ~ 10V | 0.01 V | $\geq 1M$ ohm |
| | 1 ~ 5 V | 0.01 V | $\geq 1M$ ohm |
| Potentiometer | 50 ~ 100.0K ohm | | $\geq 1M$ ohm |
| Pulse/u. | 3.00 ~ 30.0K Hz | | $\geq 1M$ ohm |

| | |
|------------------------------|--|
| Measuring accuracy: | $\pm 0.1\%$ F.S. ± 1 digit |
| Span adjustment: | $\leq 10\%$ of F.S. |
| Zero adjustment: | $\leq 2\%$ 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: 10 x rated continuous |
| Decimal point: | Settable to any position by front jumper |
| 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: | AC 115/230V $\pm 10\%$, 50/60 Hz Option: DC 5 V, 12V, 24V, 48V $\pm 10\%$ (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 |

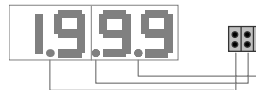
ADJUSTMENT



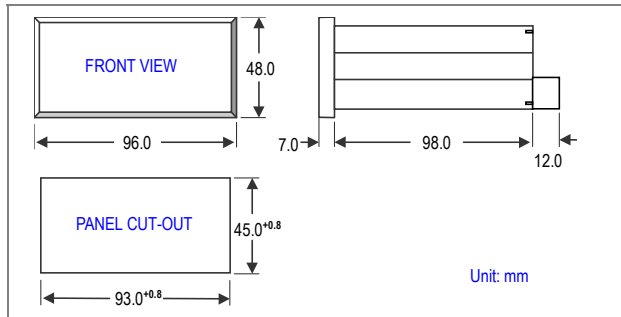
4 Display Range Section:

| Section | Jumper | Display Range | Section | Jumper | Display Range |
|---------|-----------|---------------|---------|-----------|---------------|
| 1 | [Diagram] | 1999~1700 | 5 | [Diagram] | 900~ 625 |
| 2 | [Diagram] | 1725~1300 | 6 | [Diagram] | 625~ 425 |
| 3 | [Diagram] | 1300~ 900 | 7 | [Diagram] | 425~ 300 |
| 4 | [Diagram] | 1200~ 825 | 8 | [Diagram] | 300~ 200 |

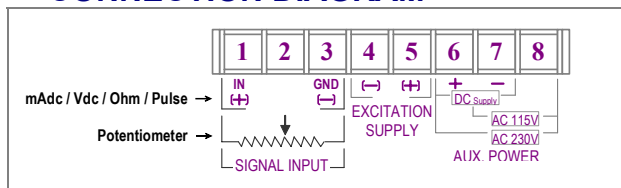
3 Decimal Point Jumper:



DIMENSIONS



CONNECTION DIAGRAM



ORDERING INFORMATION

CSR-321 Input Range — Excitation Supply — Aux. Power

| Current | | Voltage | | Potentiometer or Ohm | | Strain Gauge | | Frequency | | Aux. Power | |
|---------|--------------|---------|-----------------|----------------------|-----------------|--------------|----------------|-----------|--------------|------------|---------------|
| CODE | INPUT RANGE | CODE | INPUT RANGE | CODE | INPUT RANGE | CODE | INPUT RANGE | CODE | INPUT RANGE | CODE | EXCIT. SUPPLY |
| A1 | 0 ~ 1 mA | V1 | 0 ~ 50 mV | RP1 | 50 ~ 10K ohm | S1 | 1.0 mV / V | H1 | 0 ~ 100 Hz | N | None |
| A2 | 0 ~ 10 mA | V2 | 0 ~ 60 mV | RP2 | 10K ~ 100K ohm | S2 | 1.3 mV / V | H2 | 0 ~ 200 Hz | E1 | DC 10 V |
| A3 | 0 ~ 20 mA | V3 | 0 ~ 1 V | RPO | Specify (3-w.Ω) | S3 | 1.5 mV / V | H3 | 0 ~ 500 Hz | E2 | DC 12 V |
| A4 | 4 ~ 20 mA | V4 | 0 ~ 5 V | R1 | 199.9 ohm | S4 | 2.0 mV / V | H4 | 0 ~ 1 KHz | E3 | DC 24 V |
| AO | Specify (mA) | V5 | 0 ~ 10 V | R2 | 1999 ohm | S5 | 2.5 mV / V | H5 | 0 ~ 2 KHz | E4 | DC 5 V |
| | | V6 | 1 ~ 5 V | R3 | 10.00K ohm | S6 | 3.0 mV / V | H6 | 0 ~ 5 KHz | EO | Specify |
| | | V7 | 0 ~ 100 mV | RO | Specify(2-w.Ω) | S7 | 4.0 mV / V | H7 | 0 ~ 10 KHz | | |
| | | VO | Specify (V i/p) | | | S8 | 3.33 mV / V | H8 | 0 ~ 40 KHz | | |
| | | | | | | SO | Specify (mV/V) | HO | Specify (Hz) | | |
| | | | | | | | | | | A | AC 115/230 V |
| | | | | | | | | | | A3 | AC 380 V |
| | | | | | | | | | | A4 | AC 415 V |
| | | | | | | | | | | A24 | AC 24 V |
| | | | | | | | | | | D12 | DC 12 V |
| | | | | | | | | | | D24 | DC 24 V |
| | | | | | | | | | | D48 | DC 48 V |
| | | | | | | | | | | DO | Specify DC |
| | | | | | | | | | | AO | Specify AC |