

# CSM-321 3 1/2 DIGITAL PANEL Meter

CSM-321

## FEATURE

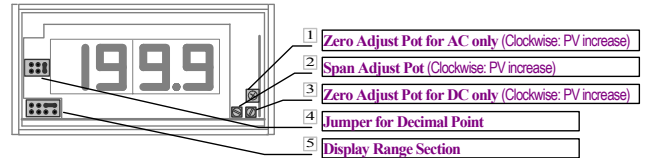
- Measuring DCA, DCV, ACA, ACV, Hz
- Accuracy: DC:  $\pm 0.1\%$ , AC:  $\pm 0.2\%$
- 3 1/2 Digital display: 1999
- Easy-to-wire, screw type terminal
- Outside dimensions is 1/8 DIN standard (96x48 mm)
- High stability & low cost



## MEASUREMENT

Measuring Range	Resolution	Input Impedance	Variable to be Measured	
Current	199.9 $\mu$ A	0.1 $\mu$ A	$\geq 1$ K ohm	DC AC TRMS
	1.999 mA	0.001 mA	$\geq 100$ ohm	
	19.99 mA	0.01 mA	$\geq 10$ ohm	
	199.9 mA	0.1 mA	$\geq 1$ ohm	
	1.999 A	0.001 A	$\geq 0.05$ ohm	
	5.00 A	0.01 A	$\geq 0.02$ ohm	
	10.00 A	0.01 A	$\geq 0.01$ ohm	
Voltage	199.9 mV	0.1 mV	$\geq 5$ M ohm	
	1.999 V	0.001 V	$\geq 1$ M ohm	
	19.99 V	0.01 V	$\geq 1$ M ohm	
	199.9 V	0.1 V	$\geq 1$ M ohm	
	300 V	1 V	$\geq 1$ M ohm	
	600 V	1 V	$\geq 1$ M ohm	
Freq.	199.9 Hz	0.1 Hz	$\geq 1$ M ohm	
	1999 Hz	1 Hz	$\geq 1$ M ohm	

## ADJUSTMENT



### 5 Display Range Section:

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

### 4 Decimal Point Jumper:



## SPECIFICATION

### Measuring:

DC:  $\pm 0.1\%$  F.S.  $\pm 1$  digit  
 AC:  $\pm 0.2\%$  F.S.  $\pm 1$  digit  
 Option: Current: 20 Amax. Volt: 1000 Vmax.  
 $\leq 10\%$  of R.O.

### Span adjustment:

### Zero adjustment:

$\leq 2\%$  of R.O.

### Sampling time:

About 3 cycles/sec.

### Polarity display:

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 for 10 seconds

### Decimal point:

Settable to any digit position

### Operation temperature:

0~60  $^{\circ}$ C

### Operation relative humidity:

20~95 %R.H.

### Temperature coefficient:

$\leq 100$  PPM/ $^{\circ}$ C (0~50 $^{\circ}$ C)  
 $\leq 50$  PPM/ $^{\circ}$ C (23 $\pm 3$  $^{\circ}$ C)

### Storage temperature:

-10~70 $^{\circ}$ C

### Power Supply:

AC 115/230V  $\pm 10\%$ , 50/60Hz

### Power consumption:

DC 3W, AC 4.5VA

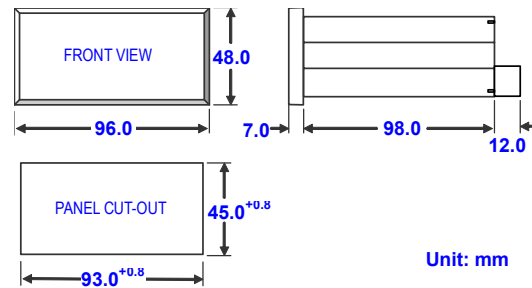
### Dielectric Strength:

AC 2.0 KV for 1 min. (Between Power / Input)  
 AC 3.0 KV for 1 min. (Between Terminal / Case)

### Weight:

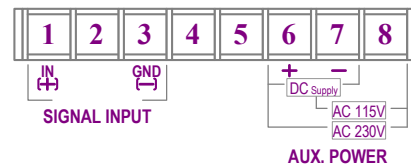
370g

## DIMENSIONS



Unit: mm

## CONNECTION DIAGRAM



## ORDERING INFORMATION

CSM-321 Input Type N Input Range Aux. Power

CODE	INPUT TYPE
D	DC
A	AC
TR	TRMS
F	Frequency

CODE	INPUT RANGE	Current		Voltage		Frequency	
		CODE	INPUT RANGE	CODE	INPUT RANGE	CODE	INPUT RANGE
A	199.9 $\mu$ A	1	199.9 mV	1	199.9 Hz		
B	1.999 mA	2	1.999 V	2	1999 Hz		
C	19.99 mA	3	19.99 V	F	Specify Hz		
D	199.9 mA	4	199.9 V	1	AC 2~200V		
E	1.999 A	5	300 V	2	AC 30~600 V		
F	5.00 A	6	600 V	3	Pulse 5 V		
G	10.00A	V	Specify (V i/p)	4	Pulse 12 V		
I	Specify (A i/p)			5	Pulse 24 V		
				O	Specify		

CODE	AUX. POWER
A	AC 115/230 V
DO	Specify DC
AO	Specify AC