

### FEATURES

- ▶ Low-cost, high-performance replacement for many OEM DPMs
- ▶ Mounting choices:  
Window mount for custom OEM  
Surface mount with minimum space behind the panel  
Snap-in bezel mount eliminates mounting hardware
- ▶ Low power: choice of 1.5mA (9V) or 2.6mA (+5V)
- ▶ Space-saving design: only 1" (25 mm) deep
- ▶ Occupies less than 2.5 X 1.1 inches of front panel space
- ▶ 4½ digits with high-contrast LCD



### SPECIFICATIONS

#### DISPLAY

Digits: 4 ½ digits ( $\pm 19999$  counts)  
 Type: 0.5" (13mm) 7 segment LCD  
 Polarity: automatic, "-" displayed  
 Annunciators: "LoBat" when power  $< 7.2$  VDC  
 Decimal Points: 4 position, user-selectable  
 Overrange: four lower order digits blank for inputs  $> 19999$  &  $< -19999$

#### INPUTS

Ranges:  $\pm 200.0$  mV,  $\pm 2.000$  V,  $\pm 20.00$  VDC  
 Configuration: single ended for 9 V powered,  
 differential for 5 V powered  
 Protection:  $\pm 10$  VDC on 200 mV ;  
 $\pm 100$  VDC on @ 2V ;  
 $\pm 350$  VDC on 20 V range  
 Impedance:  $> 100$  M $\Omega$  on  $\pm 200$  mV ;  
 ( $> 1$  M $\Omega$  on 2 V & 20 V range)  
 Bias Current: 10 pA typical

#### PERFORMANCE

Accuracy:  $\pm (0.06\% \text{ fs} + 1 \text{ count})$  maximum  
 Conversion Rate: 2 per second  
 Normal Mode Rejection:  $> 30$  dB @ 60 Hz  
 Common Mode Range:  $\pm 1$  VDC (5 V powered)  
 Common Mode Rej.:  $> 86$  dB  
 Zero Adjustment: automatic  
 Warmup: 10 minutes typical  
 Temperature Coeff.:  $\pm 50$  ppm per  $^{\circ}\text{C}$  typical  
 $\pm 100$  ppm max for 200 mV range  
 $\pm 100$  ppm per  $^{\circ}\text{C}$  typical  
 $\pm 200$  ppm max for 2V and 20V ranges

#### ENVIRONMENT

Operating Range: 0 to 50  $^{\circ}\text{C}$   
 Storage Range: -10 to 70  $^{\circ}\text{C}$

#### POWER SUPPLY

5V powered: +5 VDC (4.65 - 5.35) at 2.6 mA  
 9V powered: +7.2 to +12 V at 1.5 mA

#### MOUNTING

4W: surface or window mount  
 4S: snap-in bezel mount

#### CONNECTION

4W, 4S: 13 pins, 0.025" square on 0.1" centers

### ORDERING INFO

#### 4S SERIES

PART NUMBER	METER INPUT	METER POWER
4S0040N	200mV	+5VDC
4S0140N	.2V	+5VDC
4S0240N	.20V	+5VDC

#### 4W SERIES

PART NUMBER	METER INPUT	METER POWER
4W0040	200mV	+5VDC
4W0090	200mV	9V
4W0140	.2V	+5VDC
4W0190	.2V	9V

#### ACCESSORIES

J4C13	13 Pin Connector / Wire Assembly
PW2-5	Regulated 120V AC to 5V DC Power Supply
PW2-12	Regulated 120V AC to 12V DC Power Supply
CVC	Calibrator

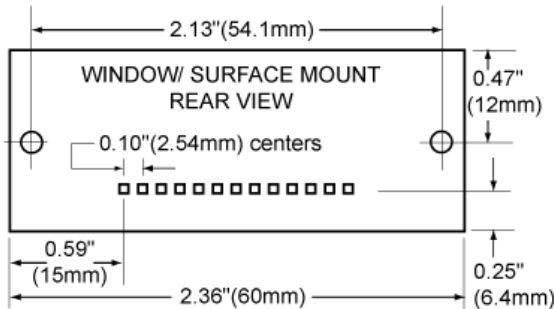
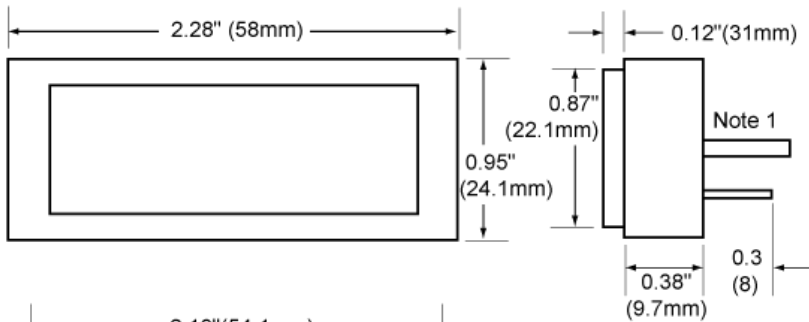


# LCD Digital Panel Meters

Low Cost 4½ Digit LCD Display

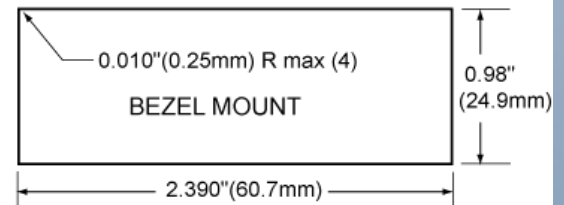
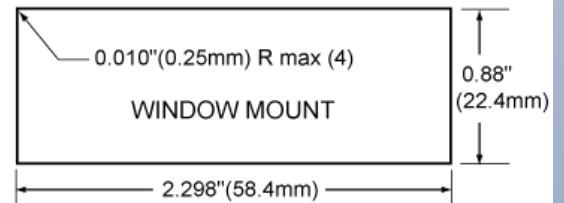
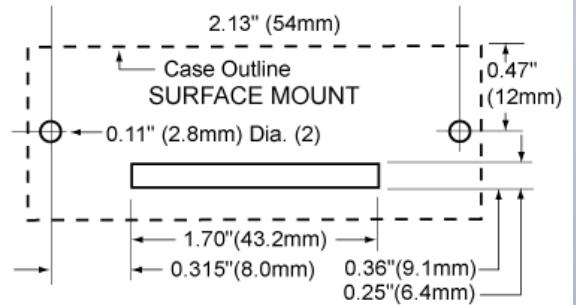


## WINDOW/SURFACE MOUNT DIMENSIONS

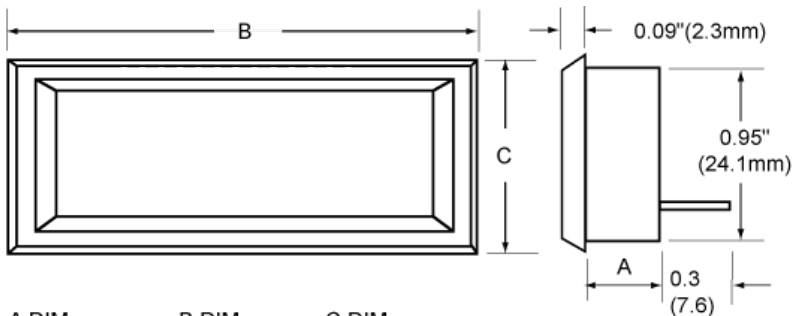


**NOTES:**  
 1. Mounting studs (2) are #2-56, length 0.5 (13) min. Snap in bezel mount does not have mounting studs.

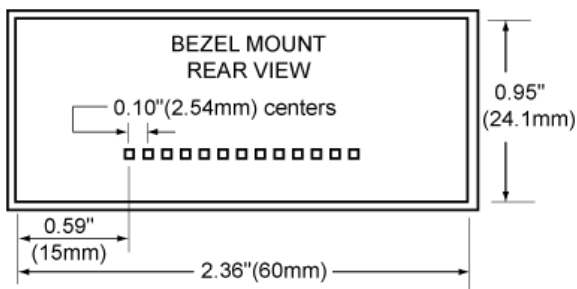
## PANEL CUTOUTS



## BEZEL MOUNT DIMENSIONS



A DIM.	B DIM.	C DIM.
0.44"(11.2mm)	2.51"(63.8mm)	1.10"(28mm)



INCHES (mm)

## WIRING CONNECTIONS

### PIN # PIN NAME DESCRIPTION

PIN #	PIN NAME	DESCRIPTION
1	V+	POSITIVE SUPPLY CONNECTION
2	V-	NEGATIVE SUPPLY CONNECTION
3	INHI	INPUT HIGH TERMINAL
4	INLO	INPUT LOW TERMINAL
5	D1	DECIMAL POINT = 000.0
6	D2	DECIMAL POINT = 00.00
7	D3	DECIMAL POINT = 0.000
8	D4	DECIMAL POINT = .0000
9	DP	DP COMMON CONNECT TO DECIMAL POINTS TO ACTIVATE
10	RNG	10:1 RANGE CONNECT TO V+ POINTS TO ACTIVATE
11	NC	NO CONNECTION REQUIRED
12	NC	NO CONNECTION REQUIRED
13	NC	NO CONNECTION REQUIRED