

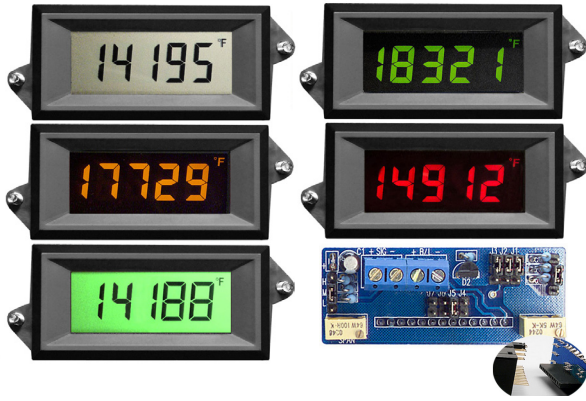


# LCD Digital Panel Meters

4½ Digit LCD with Loop Powered Board

## FEATURES

- ▶ Low-cost, high-performance replacement for many OEM DPMs
- ▶ Optional RED, GREEN, AMBER or POS GREEN backlit LCD
- ▶ Snap-in bezel mount eliminates mounting hardware
- ▶ Resistant to RF and EMI
- ▶ 4½ digits with high-contrast LCD
- ▶ 4-20 mA loop powered input
- ▶ User selectable, displayed engineering units
- ▶ Clamp and gasket for NEMA applications



## SPECIFICATIONS

### DISPLAY

Digits: 4 ½ digits (±19999 counts)  
 Type: 0.45" (11.4 mm) 7 segment LCD  
 Backlighting: Optional Red Negative (red numbers/black background)  
 Optional Green Negative (green numbers/black background)  
 Optional Amber Negative (amber numbers/black background)  
 Optional Green Positive (black numbers/green background)  
 automatic, "-" displayed

Polarity: °F, °C, PSI, % , user selectable  
 Annunciators: 4 position, user selectable  
 Decimal Points: four lower order digits blank for  
 Overrange: inputs >19999 & < -19999

### INPUTS

Ranges: 4-20 mA DC  
 Configuration: bipolar differential  
 Impedance: 300Ω nominal

### PERFORMANCE

Accuracy: ±(0.1% fs + 2 count)  
 Conversion Rate: 3 per second  
 Normal Mode Rejection: >30 dB @ 60 Hz  
 Common Mode Range: ±1 VDC max  
 Common Mode Rej.: >86 dB  
 Adjustments: span (gain) and zero (offset)  
 Warmup: 10 minutes typical  
 Temperature Coeff.: ± 100 ppm per °C typical

### ENVIRONMENT

Operating Range: 0 to 50 °C  
 Storage Range: -10 to 70 °C

### POWER SUPPLY

Optional Backlight: powered by the milliamp control loop  
 24 VDC at 35 mA typical

### MOUNTING

snap-in bezel mount or clamp and gasket

### CONNECTION

2 screw terminal (4 with backlight)

## ORDERING INFO

PART NUMBER	BACKLIGHT COLOR	BACKLIGHT POWER
LPI-4-XEC.....	NO BACKLIGHT .....	NONE
LPI-4A-XEC.....	NEG AMBER .....	24VDC
LPI-4R-XEC.....	NEG RED.....	24VDC
LPI-4G-XEC .....	NEG GREEN.....	24VDC
LPI-4GP-XEC .....	POS GREEN.....	24VDC

### ACCESSORIES

PW2-24.....	Regulated 120V AC to 24V DC Power Supply
PW1.0.....	24V AC to adjustable DC output
PW1.5.....	24V AC to adjustable DC output
CVC .....	Calibrator

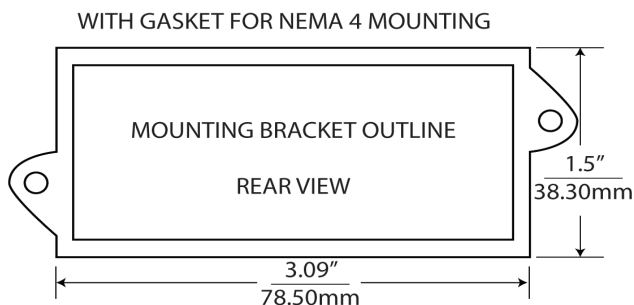
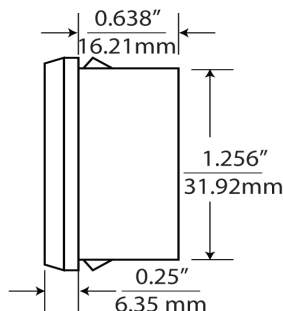
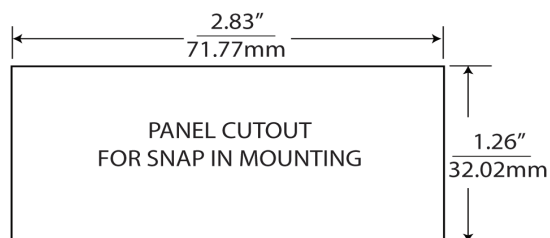
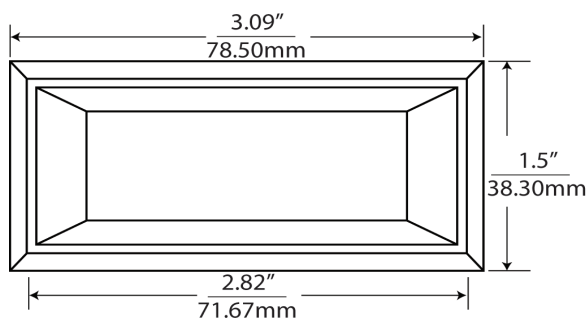


# Specifications Installation and Operating Instructions LCD Digital Panel Meters

4½ Digit LCD with Loop Powered Board

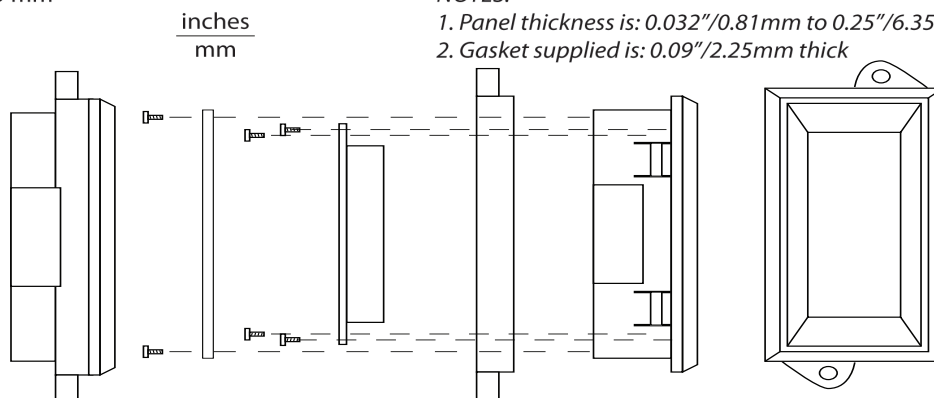


## DIMENSIONS



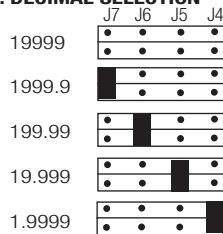
### NOTES:

- Panel thickness is: 0.032"/0.81mm to 0.25"/6.35mm
- Gasket supplied is: 0.09"/2.25mm thick



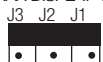
## JUMPER SELECTION & WIRING

### 1. DECIMAL SELECTION

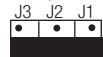


### 2. J1, J2, J3 SELECTION

**IF:** MIN DISPLAY IS = 0 **or**  
MIN DISPLAY IS > 0 **and**  
MAX DISPLAY ÷ MIN DISPLAY ≥ 5



**IF:** MIN DISPLAY IS > 0 **and**  
MAX DISPLAY ÷ MIN DISPLAY < 5



### 3. SPAN JUMPER SECTION:

SPAN FACTOR	SET JUMPERS
0-12	L
10-22	M
22-32	H

**IF:** MIN DISPLAY IS ≤ 0 **or**  
MIN DISPLAY IS > 0 **and** MAX DISPLAY ÷ MIN DISPLAY > 5

**THEN:** SPAN FACTOR =  $\frac{2.5 (\text{MAX DISPLAY} - \text{MIN DISPLAY})}{4000 + 0.02 (\text{MIN DISPLAY}) - 0.004 (\text{MAX DISPLAY})}$

**IF:** MIN DISPLAY IS > 0 **and** MAX DISPLAY ÷ MIN DISPLAY ≤ 5

**THEN:** SPAN FACTOR =  $\frac{\text{MAX DISPLAY} - \text{MIN DISPLAY}}{1600}$

### 4. ZERO (OFFSET) JUMPER SELECTION:

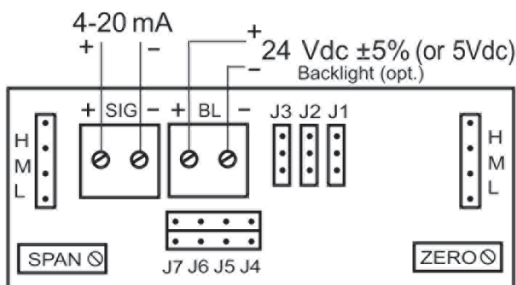
ZERO FACTOR	SET JUMPERS
0-3994	H
3320-7314	M
6640-10634	L

**IF:** MIN DISPLAY IS ≤ 0 **or**  
MIN DISPLAY IS > 0 **and** MAX DISPLAY ÷ MIN DISPLAY > 5

**THEN:** ZERO FACTOR =  $\frac{(250000 + \text{MIN DISPLAY}) \times (83834) - 73200}{(250000 + 400 (\text{SPAN FACTOR}))}$

**IF:** MIN DISPLAY IS > 0 **and** MAX DISPLAY ÷ MIN DISPLAY ≤ 5

**THEN:** ZERO FACTOR =  $10634 - \frac{(\text{MIN DISPLAY} - 400 (\text{SPAN FACTOR})) \times 83834}{250000}$



### WIRING

