



# LCD Digital Panel Meters

## Digital Meters

4½ Digit LCD with Loop Powered Board



### DISPLAY

Digits: 4 ½ digits ( $\pm 19999$  counts)

Type: 0.45" (11.4 mm) 7 segment LCD

Backlighting:

Optional Red Negative (red number/black background)

Optional Green Negative (green number/black background)

Optional Green Positive (black numbers/green background)

Optional Amber Negative (amber numbers/black background))

Polarity Ind.: automatic, "-" displayed

Annunciators: °F, °C, PSI, %, user-selectable or V, A, KW, PF

Decimal Points: 4 position, user-selectable

Overrange: 4 lower order digits blank for inputs  $>1999$  &  $<-1999$

### INPUTS

Ranges: 4-20 mA DC

Configuration: bipolar differential

Impedance: 300 $\Omega$  nominal @ 20 mA

### PERFORMANCE

Conversion Rate: 3 per second

Normal Mode Rejection:  $>30$  dB @ 60 Hz

Adjustments: span (gain) and zero (offset) with course setting

Warmup: 10 min typical

Temperature Coeff:  $\pm 100$  ppm per °C typical

### ENVIRONMENT

Operating Range: 0 to 50 °C, Storage Range: -10 to 60 °C

### POWER SUPPLY

powered by the milliamp control loop.

Optional Backlight: 24 VDC at 35 mA

**MOUNTING:** Snap-in panelmount

**CONNECTION:** 2 screw terminal (4 with backlight)

## FEATURES

Low-cost, high-performance replacement for many OEM DPMs.

Optional Red, Green or Amber backlighting.

Snap-in bezel mount eliminates mounting hardware.

Resistant to RF and EMI.

4 1/2 digits with high-contrast LCD.

4- 20 mA loop-powered input.

User-selectable, displayed engineering units.

**Hoyt Electrical Instrument Works, Inc.**

[www.hoytmeter.com](http://www.hoytmeter.com)

23 Meter Street  
Penacook, NH 03303

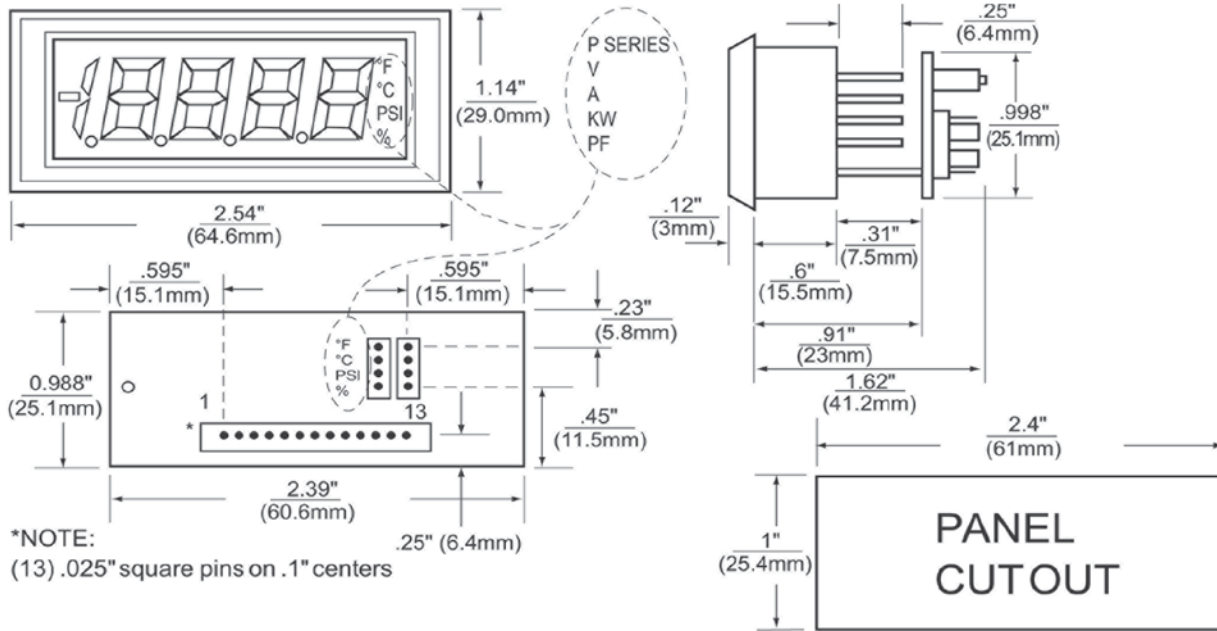
Phone: (800) 258-3652  
Fax: (603) 753-9592  
Email: [sales@hoytmeter.com](mailto:sales@hoytmeter.com)

Page 1 (2)



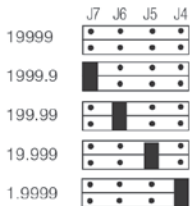
### DIMENSIONS

4½ Digit LCD with Loop Powered Board



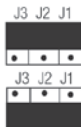
### JUMPER SELECTION & WIRING

#### 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

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 =  $\frac{\text{MAX DISPLAY} - \text{MIN DISPLAY}}{1600}$

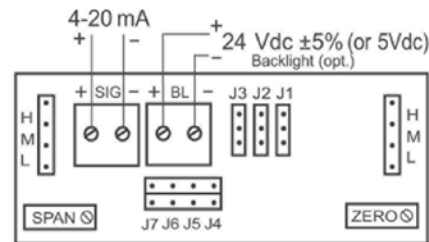
ZERO FACTOR	SET JUMPERS
0-3994	H
3320-7314	M
6640-10634	L

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

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

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

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



WIRING