



## 4.5 Digit Loop Powered LCD Panel Meter

4½ Digit LCD with Loop Powered Board



### Specifications

#### Display

Digits: 4 ½ digits (±19999 counts)  
 Type: 0.45" (11.4 mm) 7 segment LCD

Backlighting: Red Negative (red numbers/black background)  
 Optional: Green Negative (green numbers/black background)  
 Amber Negative (amber numbers/black background)  
 Green Positive (black numbers/green background)

Polarity: automatic, "-" displayed  
 Annunciators: °F, °C, PSI, % user-selectable or V, A, KW, PF  
 Decimal Points: 4 position, user-selectable  
 Overrange: four lower order digits blank for inputs  
 >19999 & < -19999

#### Inputs

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

#### Performance

Accuracy: ±(0.1% fs + 2 count)  
 Conversion Rate: 3 per second  
 Normal Mode Rejection: >30 dB @ 60 Hz  
 Adjustments: span (gain) and zero (offset)  
 with course setting  
 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: 24 VDC at 35 mA typical

#### Mounting

snap-in bezel mount

#### 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.
- 4½ digits with high-contrast LCD.
- 4-20 mA loop powered input.
- User-selectable, displayed engineering units.

### Ordering Info

Part #	Backlight Color	Backlight Power
HLPI-4*E	No Backlight	None
HLPI-4*EAN	Neg Amber	24VDC
HLPI-4*EGN	Neg Green	24VDC
HLPI-4*ERN	Neg Red	24VDC
HLPI-4*EGP	Pos Green	24VDC

\*Add (P) for Power Engineering Units V, A, KW, PF

#### Accessories

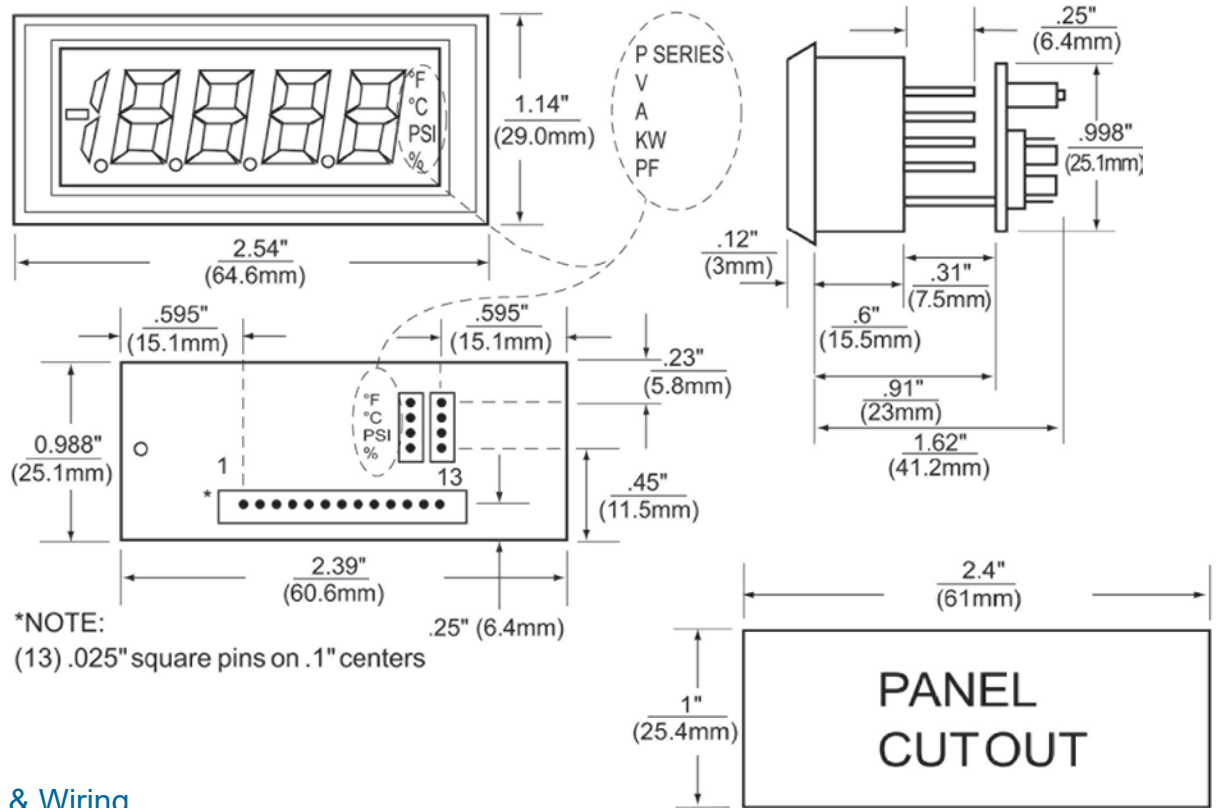
HPW2-24	Regulated 120V AC to 24V DC Power Supply
HCVC	Calibrator



Dimensions

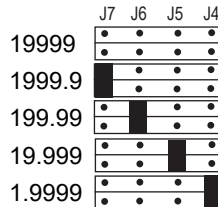
# HLPI-4E Series

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### Jumper Selection & Wiring

**1. Decimal Selection:**

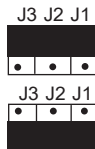


**2. J1, J2, J3 Selection:**

**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

$$\text{Span Factor} = \frac{2.5 (\text{Max display} - \text{Min display})}{4000 + 0.02 (\text{Min display}) - 0.004 (\text{Max display})}$$

**IF:** Min display is > 0 **AND** Max display ÷ Min display ≤ 5

$$\text{Span Factor} = \frac{\text{Max display} - \text{Min display}}{1600}$$

**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

$$\text{Zero Factor} = \frac{(250000 + \text{Min display})}{(250000 + 400 (\text{Span Factor}))} \times (83834) - 73200$$

**IF:** Min display is > 0 **and** Max display ÷ Min display ≤ 5

$$\text{Zero Factor} = \frac{10634 - (\text{Min display} - 400 (\text{Span Factor}))}{250000} \times 83834$$

