



HLPI-4EW Series

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

powered by the milliamp control loop

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.
- Window mount.
- 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*EW | No Backlight | None |
| HLPI-4*EANW | Neg Amber | 24VDC |
| HLPI-4*EGNW | Neg Green | 24VDC |
| HLPI-4*ERNW | Neg Red | 24VDC |
| HLPI-4*EGPW | Pos Green | 24VDC |

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

Accessories

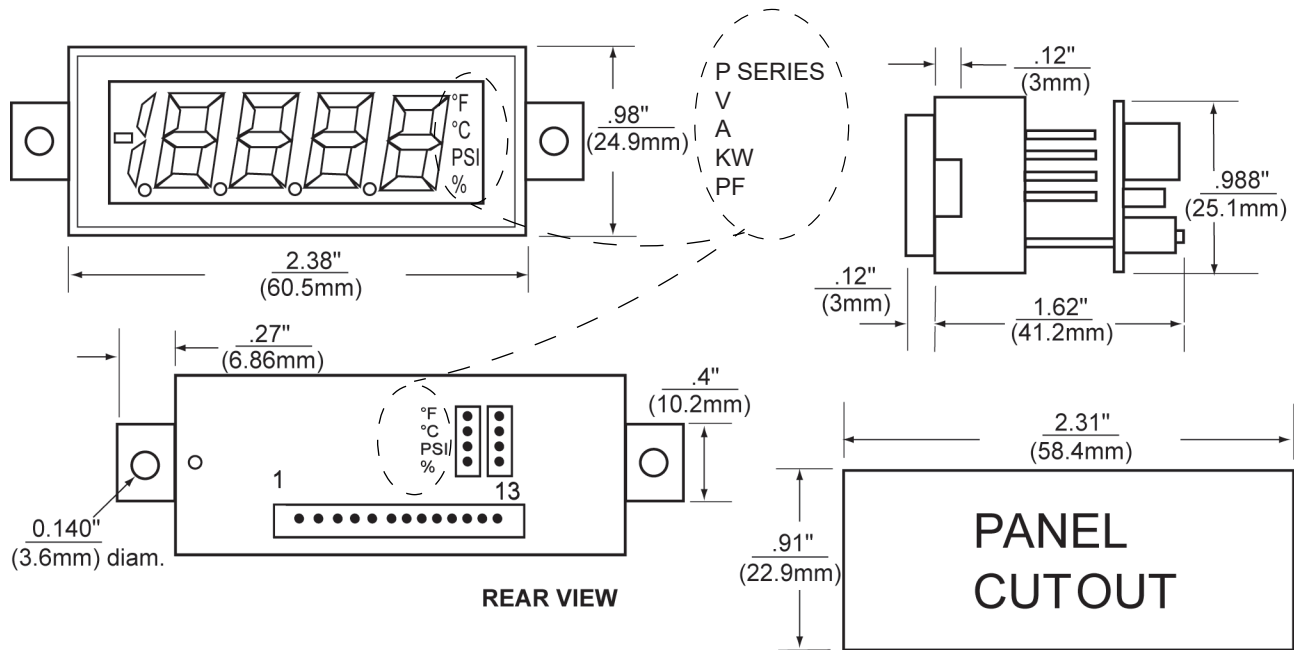
| | |
|---------|--|
| HPW2-24 | Regulated 120V AC to 24V DC Power Supply |
| HCVC | Calibrator |



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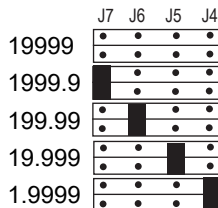
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Dimensions



Jumper Selection & Wiring

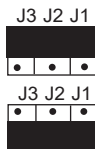
1. Decimal Selection:



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

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

