

LOOP POWERED LCD DIGITAL PANEL METERS - EPIC SERIES

4 1/2 Digit LCD Display with Loop Powered Adder Board



Amber Negative

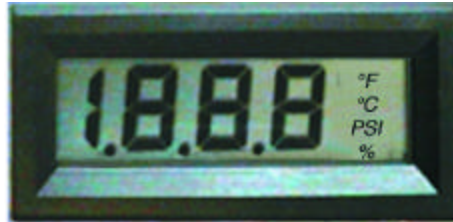


Red Negative



Green Negative

Bezel Mount



No 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 Display
- 4- 20 mA loop powered input
- User selectable, displayed engineering units

Specifications:

Display:	
Digits:	4 1/2 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)
Polarity:	Automatic, "- -" displayed
Annunciators:	°F, °C, PSI, %
Decimal Points:	4 position, user selectable
Overload:	Four lower order digits blank for inputs >19999
Inputs:	
Ranges:	4-20mA DC
Configuration:	Bipolar Differential
Impedance*:	300 nominal
Performance:	
Accuracy:	±(0.1% fs + 2 count)
Conversion Rate:	3 per second
Normal Mode Rejection:	>30 db @ 60 Hz
Common Mode Range:	±1V DC 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:	-20 to 70 °C
Power Supply:	
	Powered by the Milliamp Control Loop
Optional Backlight:	24V DC at 35 mA typical
Mounting:	
	Snap-in Bezel mount
Connection:	
	2 screw terminal (4 with backlight)

*Impedance is rated at 24 Vdc and 20mA. Exercise caution to avoid too much impedance in the current loop. Most transmitters are rated 500 to 750Ω.

**Negative backlighting is lighted numerals.
Positive backlighting is lighted background.

Ordering Information:

EPIC Series Loop Powered LCD DPM Part Numbering

Backlight Type:

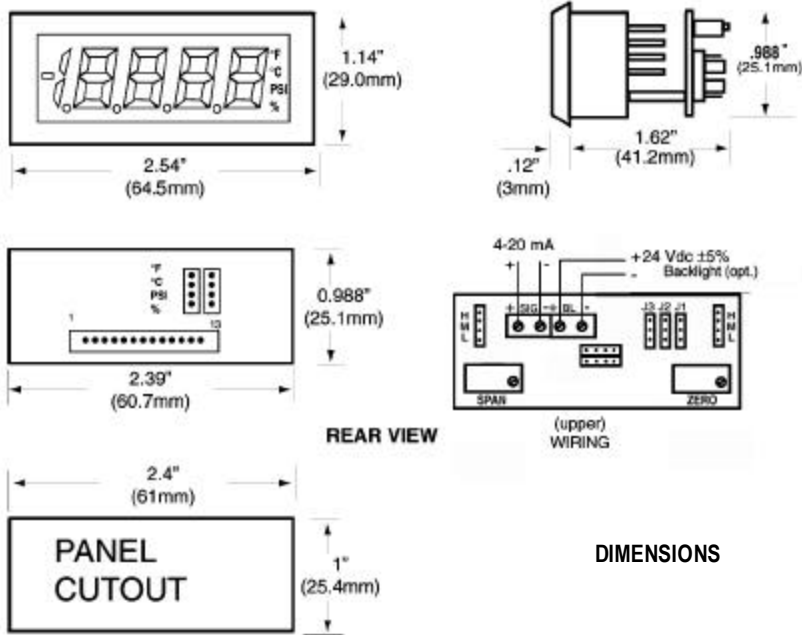
- DK791** = Amber Negative
- DK793** = Green Negative
- DK794** = Red Negative
- DK790** = No Backlight

PW2-24Regulated 120V AC to 24V DC Adaptor



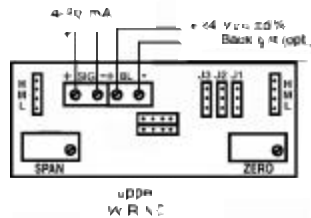
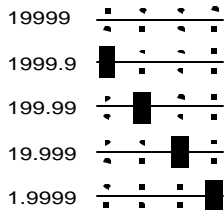
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Dimensions



JUMPER SELECTION AND WIRING

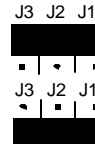
1. DECIMAL SELECTION:



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