# 31/2 DIGIT LCD USER ADJUSTABLE DIGITAL PANEL METERS

## SPECIFICATIONS

## <u>INPUTS</u>

#### DC Voltage & Current

Accuracy: ±(0.1% + 1 Count) Typ. ±(0.2% + 1 Count) Max.

Protection: mV DC; 200V Continuous, 350V Int. V DC; 350V Continuous, 500V Int. DC Shunt; 5V Maximum.

#### DC Shunt

Accuracy:  $\pm (0.1\% + 1 \text{ Count})$  Typ.  $\pm (0.2\% + 1 \text{ Count})$  Max.

Protection: 5V DC Maximum.

## • AC TRMS Voltage & Current

Accuracy: ±(0.5% + 1 Count) Typ. Res 1Meg.

Protection: AC Volt; 350V Continuous, 500V Int. AC Current; 300% Full Scale. 2A & 5A; 120% Full Scale.

#### Frequency

Accuracy: 40.0 to 199.9Hz Range; ±0.2Hz, 40 to 70Hz ±0.5Hz, 70 to 199.9Hz 40 to 600Hz Range; ±2Hz, 40 to 600Hz Less than 0.2 Hz error for up to 20% Third Harmonic Distortion

## Loop Powered Process (4 to 20 mA DC)

Accuracy:  $\pm (0.1\% + 1 \text{ Count}).$ 

Protection: 30mA Forward, 75mA DC Reverse. Burden: 2.2V Maximum with Reverse Current Protection. 1.5V Option Contact Factory.

## Process (4 to 20 mA DC)

Accuracy:  $\pm (0.1\% + 1 \text{ Count})$  Typ.  $\pm (0.2\% + 1 \text{ Count})$  Max. Protection: 100mADC. Burden: 240mVDC @ 20mADC.

## Process (1 to 5V DC)

Accuracy:  $\pm (0.1\% + 1 \text{ Count})$  Typ.  $\pm (0.2\% + 1 \text{ Count})$  Max. Protection: 200V DC Continuous. 350V Int.

#### • Temperature (K-Type Thermocouple) Accuracy:

-40° to -30°F: ±0.5 of reading + 3 -30° to 550°F: ±0.5 of reading + 2 550° to 650°F: ±1 of reading + 3

-40° to -30°C: ±0.5 of reading + 3 -30° to 250°C: ±0.5 of reading + 2 250° to 320°C: ±1 of reading + 2 Resolution: 1 degree °C/°F

## <u>DISPLAY</u>

Digits: $3\frac{1}{2}$  (±1999).Type:Height:7-Segment LCD. 0.5" (12.7mm).Polarity:Automatic, (-) Displayed.Overload:Three lower order digits blank for >1999 counts.Decimal Point:3 Position, Switch Selectable.

#### PERFORMANCE

Conversion Rate:2.5 Per Second.Normal Mode Rejection:>30dB @ 60Hz.Warmup:10 minutes Typ.

#### **POWER OPTIONS**

115 & 230V AC: 50 to 60 Hz. & (110 & 220V DC): -15%, +10%, < 2VA at 115V AC, < 3VA at 230V AC. 12 & 24V DC Isolated: -15%, +20%, 105mA DC with Backlighting. 10 to 15 DC & 16 to 32V DC Non-Isolated: 105 mA DC with Backlighting.

<u>SCALING</u> (AC TRMS, Process, DC Isolated Inputs) Full Scale SPAN Adjustment:

Coarse Adjustment: Four Ranges set by DIP Switch. 100 to 400 Counts 400 to 800 Counts 1500 to 2000 Counts Fine Adjustment: 25 Turn Potentiometer.

#### Zero OFFSET Adjustment:

Fine Adjustment with 25 Turn Potentiometer. ±15% of Full Scale (for Process Input). ±10% of Full Scale (for AC TRMS Input).

SCALING (Loop Power, DC Shunt & Non-Isolated Inputs) Full Scale SPAN Adjustment:

Coarse Adjustment: Four Ranges set by DIP Switch. 100 to 250 Counts 500 to 1000 Counts 250 to 500 Counts 1000 to 2000 Counts Fine Adjustment: 25 Turn Potentiometer.

#### Zero OFFSET Adjustment (Loop Powered Only):

Three choices set by DIP Switch: -20 to +20% of SPAN. True Zero (4 mA DC = 20% of SPAN). +20 to +60% of SPAN. Fine Adjustment: 25 Turn Potentiometer.

## **ENVIRONMENT**

Operating Range: Storage Range: 0 to +40°C Standard -20 to +60°C Optional -10 to +60°C Standard -30 to +70°C Optional

## **BACKLIGHT OPTION**

Non-backlit Positive Green Positive Red Positive Blue

Negative Green Negative Red Negative Blue