



## FEATURES

- ▶ Low-cost, high-performance replacement for many OEM DPMs
- ▶ Mounting:  
Snap-in bezel mount eliminates mounting hardware
- ▶ Low power: choice of 180µA (9V) or 2.5mA (+5V)
- ▶ Space-saving design: only 1" (25 mm) deep
- ▶ Occupies less than 2.5 X 1.1 inches of front panel space
- ▶ 3 1/2 digits with high-contrast LCD
- ▶ Optional loop powered 4 to 20mA process inputs available (see DK590)

## SPECIFICATIONS

### DISPLAY

Digits: 3 1/2 digits ( $\pm 1999$  counts)  
 Type: 0.5" (12mm) high-contrast reflective LCD  
 Polarity: automatic, "-" displayed  
 Decimal Points: 3 position, user-selectable  
 Overrange: three lower order digits blank for inputs  $>1999$  &  $< -1999$   
 Hold: available OEM option, contact factory

### INPUTS

Ranges:  $\pm 200.0$  mV,  $\pm 2.000$  V,  $\pm 20.00$  VDC  
 Configuration: bipolar & differential  
 Protection:  $\pm 350$  VDC, ( $\pm 100$  VDC on 200 mV range)  
 Impedance:  $>10$  M $\Omega$ , ( $>1$  M $\Omega$  on 20 V range)

### PERFORMANCE

Accuracy:  $\pm(0.1\% + 1$  count) typical  
 $\pm(0.1\% + 2$  counts) maximum  
 Conversion Rate: 2.5 per second  
 Normal Mode Rejection:  $>30$  dB @ 60 Hz  
 Common Mode Range:  $\pm 1$  VDC  
 Common Mode Rej.:  $>86$  dB  
 Zero Adjustment: automatic  
 Warmup: 10 minutes typical  
 Temperature Coefficient:  $\pm 100$  ppm per  $^{\circ}\text{C}$  typical

### ENVIRONMENT

Operating Range: 0 to 50  $^{\circ}\text{C}$   
 Storage Range: -10 to 70  $^{\circ}\text{C}$

### POWER SUPPLY

5V powered: +5 VDC ( $\pm 5\%$ ) at 2.5 mA  
 9V( $\pm 5\text{V}$ ) powered: +7.2 to +12 V at 180  $\mu\text{A}$

### MOUNTING

snap-in bezel mount

### CONNECTION

13 pins, 0.025" square on 0.1" centers - pin 3 missing

## ORDERING INFO

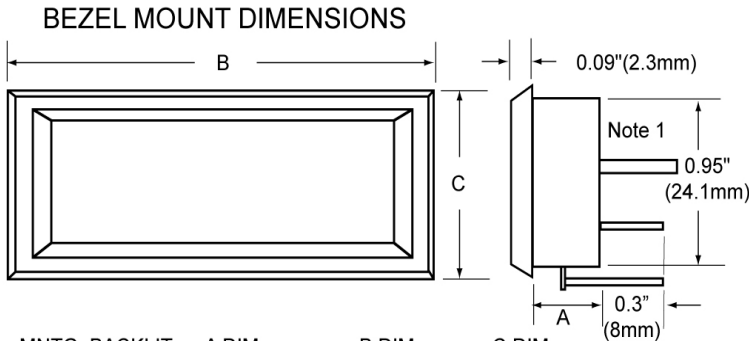
PART NUMBER	BACKLIGHT COLOR	METER INPUT	METER POWER	BACKLIGHT POWER
DK500	NO BACKLIGHT	200mV	+5VDC	NONE
DK501	NO BACKLIGHT	2V	+5VDC	NONE
DK502	NO BACKLIGHT	20V	+5VDC	NONE
DK503	NO BACKLIGHT	200mV	+9VDC	NONE
DK504	NO BACKLIGHT	2V	+9VDC	NONE
DK505	NO BACKLIGHT	20V	+9VDC	NONE

### ACCESSORIES

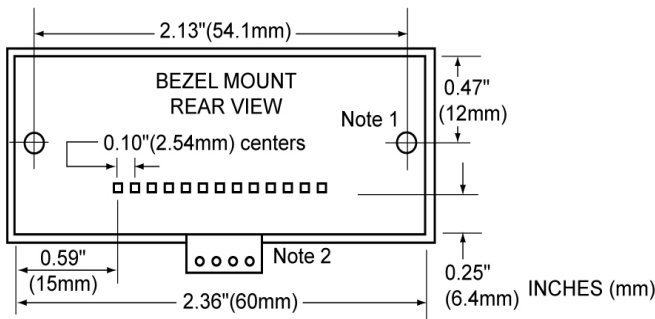
J1C4	4 Pin Connector / Wire Assembly
J1C13	13 Pin Connector / Wire Assembly
PW2-5	Regulated 120V AC to 5V DC Power Supply
PW2-12	Regulated 120V AC to 12V DC Power Supply
CVC	Calibrator



**BEZEL MOUNT DIMENSIONS**



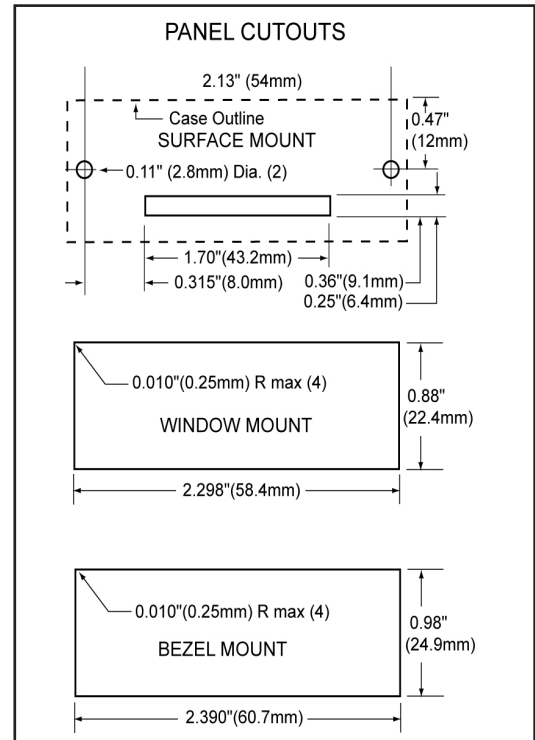
MNTG	BACKLIT	A DIM.	B DIM.	C DIM.
5B	NO	0.33" (8.4mm)	2.45" (62.2mm)	1.03" (26.2mm)
5B	YES	0.52" (13.2mm)	2.45" (62.2mm)	1.03" (26.2mm)
5S	NO	0.45" (11.4mm)	2.51" (63.8mm)	1.10" (28mm)



**NOTES:**

1. Mounting studs (2) are #2-56, length 0.5 (13) min.  
Snap in Bezel Mount does not have mounting studs.
2. Backlight Option is on 0.50" (12.4mm) wide X 0.22" (5.4mm) high tab

**PANEL CUTOUTS**



**WIRING CONNECTIONS**

PIN #	PIN NAME	DESCRIPTION
1	V+	POSITIVE DPM POWER SUPPLY
2	V-	NEG POWER FOR 9V OR ±5V DPMS
3	NC	NO PIN
4	GND	NEGATIVE POWER FOR +5V DPMS
5	COM	ANALOG COMMON
6	INLO	DISPLAY INPUTS: DISPLAY NEGATIVE
7	INHI	IF INHI IS LOWER THAN INLO
8	RFL (CLK)	NEG REFERENCE INPUT (AND OPTIONAL HOLD)
9	RFH	POSITIVE REFERENCE INPUT
10	ROH	INTERNAL REFERENCE OUTPUT
11	D3	DECIMAL POINT = 1XX.X*
12	D2	DECIMAL POINT = 1X.XX*
13	D1	DECIMAL POINT = 1.XXX*

\*Connect to Pin 1