

Excellent Integrated System Limited

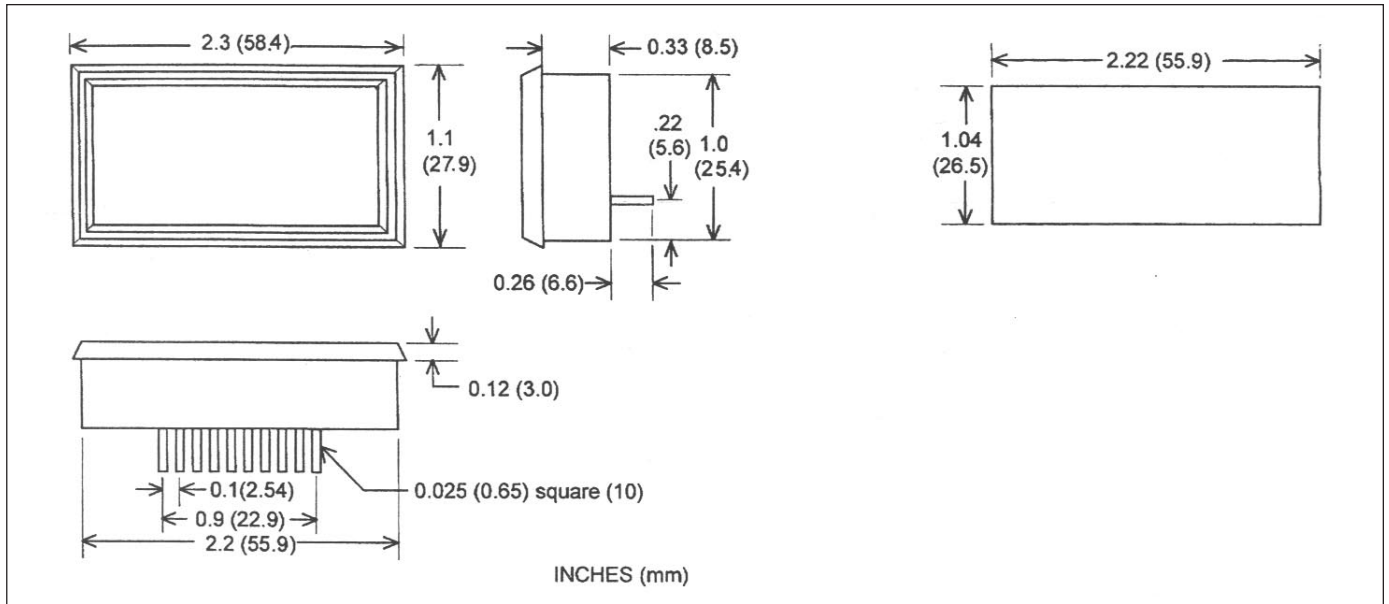
Stocking Distributor

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[Martel Electronics](#)
[DPM65](#)

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Dimensions

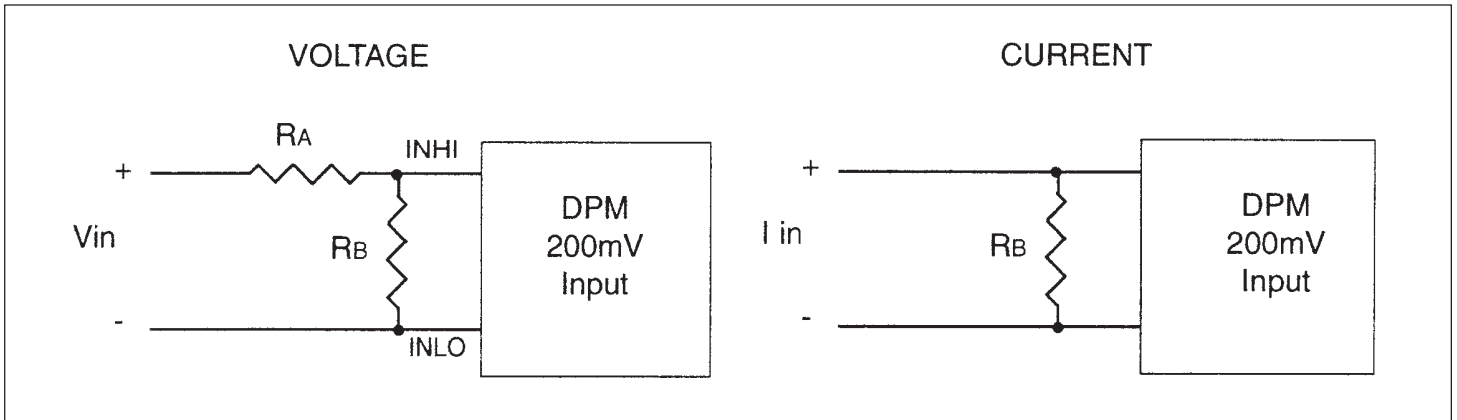


Specifications

| Display: | |
|-----------------|---|
| Digits: | 3 1/2 Digits (± 1999 counts) |
| Type: | 0.39" (10mm) High Contrast Reflective LCD |
| Polarity: | Automatic, "-" displayed |
| Decimal Points: | 3 Position, user selectable |
| Overload: | Three lower order digits blank for inputs > 1999 and < -1999 |
| Hold: | Display Hold Function is standard |
| Inputs: | |
| Ranges: | $\pm 200.0\text{mV}$, $\pm 2.000\text{V}$, $\pm 20.00\text{V}$ DC Process Inputs, 4 to 20mA (with optional adder board) |
| Configuration: | Bipolar, Differential |
| Protection: | $\pm 350\text{V}$ DC, ($\pm 100\text{V}$ DC on 200mV Range) |
| Impedance: | > 1 Megohm, (> 10 Megohm on 200mV Range) |
| Loop Burden: | 300 Ω nominal @ 20 mA DC (loop powered) |

| Performance: | |
|----------------------|---|
| Accuracy: | $\pm (0.1\% + 1 \text{ count})$ typical $\pm (0.2\% + 2 \text{ counts})$ maximum |
| Conversion Rate: | 3 per second |
| Normal Mode Rej.: | > 30 dB @ 60 Hz |
| Common Mode Range: | $\pm 1\text{V}$ DC |
| Common Mode Rej.: | > 86 dB |
| Zero Adjustment: | Automatic |
| Warmup: | 10 minutes typical |
| Temperature Coeff.: | ± 100 ppm per $^{\circ}\text{C}$ typical |
| Environment: | |
| Operating Range: | 0 to 50 $^{\circ}\text{C}$ |
| Storage Range: | -20 to 70 $^{\circ}\text{C}$ |
| Power Supply: | |
| Voltage: | +5V DC ($\pm 5\%$) |
| Current: | 3mA |
| Mounting: | |
| | Snap-in Bezel Mount |
| Process Adder Board: | Plugs onto DPM pins, adds approx. 0.6" (16mm) to depth |
| Connections: | |
| | Pins, 0.025" square on 0.1" centers |
| | Screw terminals on Process Adder Board |

Ranging DPMs for Voltage & Current



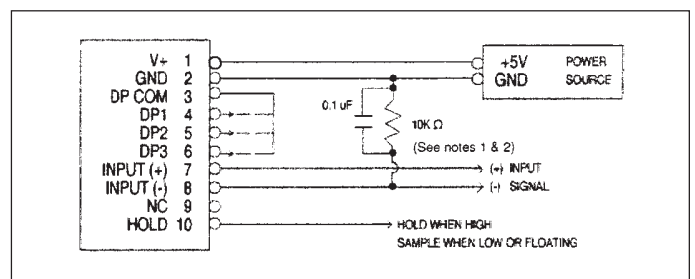
| VIN | RA** | RB** | I in | RB** |
|--------|-----------|-------|--------|------|
| 2V | 1 Meg | 110 k | 2 mA | 100 |
| 20V | 1 Meg | 10 k | 20 mA | 10 |
| 200V | 1 Meg | 1 k | 200 mA | 1 |
| 1000V* | 10 Meg*** | 1 k | | |

- * When attenuating voltages above 20V care must be used to use components rated for higher voltages and that proper creepage and clearance distances are used. Refer to UL3111 or IEC 1010.
- ** Resistors should be 1%, 1/4 wattt with a 100 or 50 ppm temperature coefficient (Note: Recalibration of span required if accuracy better than $\pm 1.4\%$ is desired.)
- *** Use (2) 4.99 Meg in series if 10 Meg is not available.

Connection Descriptions

| PIN | Description |
|-----------|-------------------------|
| V + | +5V DPM Power Supply |
| GND | DPM Power Supply Ground |
| DP COM | Decimal Point Return |
| DP1 | 1XX.X |
| DP2 | 1X.XX |
| DP3 | 1.XXX |
| Input (+) | Positive Input Signal |
| Input (-) | Negative Input Signal |
| NC | No Connection Required |
| HOLD | Hold Last Display |

Wiring Connections



1. Floating Input, DPM65: The input common mode range is $\pm 1V_{dc}$. If INPUT (-) is not directly connected to GND, a 10k resistor network can be connected as shown to reduce unstable readings.
2. Single-Ended Input, DPM65S: The 10K resistor network is not required. The INPUT (-) is internally connected to GND.

Unused pins should be left open.

CAUTION: Damage to the unit can occur if the power source polarity is reversed, or greater than 6V is applied between pins 1 & 2.