0.56" LEDs

0.8" LEDs

UM-Series

FUNCTION SPECIFIC METERS

UM-35MV

50mV DC Full Scale Meter 3 1/2 DIGIT with 0.56" or 0.8" LEDs in a Traditional NEMA Style Case

Measuring DC signals as low as 50mV full scale, this meter is ideal for high DC current measurement using low voltage drop current shunts, or for other precision low DC mV measurements.

General Features

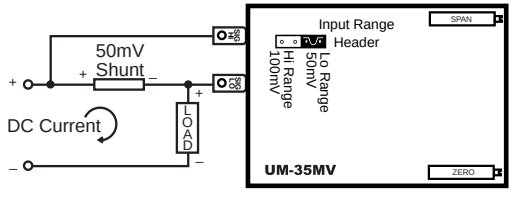
The UM-35MV is an economical, low DC voltage measuring meter with two header selectable full scale ranges of 50mV and 100mV which facilitate scaling in engineering units. The meter is particularly suited for measuring DC current using 50mV standard current shunts.

An economical option is the dummy (non-functional) right-hand-side zero which allows the UM-35MV to display readings from –19990 to +19990 without going to the expense of a 4.5 digit meter. The apparent resolution with the dummy zero option would be 10 counts.

The standard meter is provided with TB-KIT screw terminal blocks and insulated quick- disconnects. For the greatest convenience and ease of use, order the optional preconfigured Push-On screw terminal connectors. (see Push-On Screw Terminals and Ordering Information)

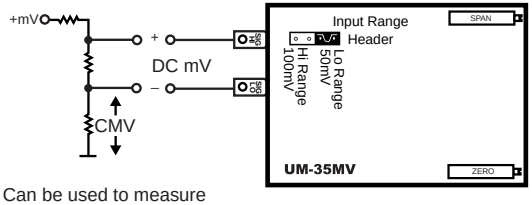
Typical Application Connections

DC Current measurement using 50mV Shunt.
Easily User Scaled to Display Currents up to 1999 Amps.



Shunt may be in Hi or Lo side of Load.

DC mV measurement with a Resolution of 100 microVolts.
Easily User Scaled to Display Voltages up to 199.9 mV.



Can be used to measure
single-ended or differential inputs.
Max CMV = 50V (common mode voltage)*

Compatibility

The UM-Series NEMA case style is complementary to Texmate's Classic RP-Series. For economy, each UM model is dedicated to a specific application. UMs are ideal for upgrading or replacing the traditional USA NEMA case panel meters presently in use.

Traditional NEMA STYLE USA CASE

Specifications

Input Configuration: .....Single-ended, however isolated power supply enables differential measurements up to a maximum common mode of 50V.* A Zero Potentiometer is provided that can offset the displayed reading ±500 counts.

Full Scale Ranges: .....Two header selectable ranges of ±50mV DC and ± 100mV DC

Input Impedance:.....50KΩ/100KΩ in 50mV/100mV ranges

A/D Converter: .....12 Bit Dual Slope

Accuracy: .....±(0.05% of reading + 2 counts)

Temperature Coefficient: 100 ppm/°C (Typical)

Warm Up Time:.....2 minutes to specified accuracy

Conversion Rate:.....3 conversions per second (Typical)

Display:.....3 1/2 digit 0.56" Red LED display (std), (optn) Green or Super Bright Red, 0.8" Red or Green. Range 0 to 1999 counts.

Decimal Selection:.....Header under face plate, X•X•X•X•

Over-range Indication: ....1 (MSD) displayed all other digits blank

Power Supply (std):.....120/240V AC, 50/60/400 Hz. approx 1.5W.

(Optn) VO-DC/ISO .....Isolated Switcher. 9 to 36V DC/12 to 24V AC

(Optn) VO-24V .....Isolated Transformer 24V AC ±10%

(Optn) VO-5V DC.....Non-isolated 5V DC ±10%

Operating Temperature: ..–10 to 50 °C

Storage Temperature:.....–20 to 70 °C.

Relative Humidity: .....95% (non-condensing)

Case Dimensions: .....Bezel 4.06"Wx1.89"H (102.7Wx47.9Hmm) Depth behind bezel 3.64" (92.22 mm) Plus 0.5 to .9" (12.7 to 22.8mm) depending on connector used.

Weight:.....10oz., 13oz. when packed.