

TEXMATE



0.56"
LEDs



0.8"
LEDs



UM-35AC

199.9V AC to 700V AC Meter 3 1/2 DIGIT with 0.56" or 0.8" LEDs in a Traditional NEMA Style Case

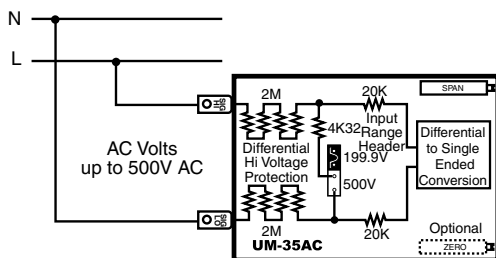
**A low cost utility meter for AC voltage measurement
with safe resistively isolated differential inputs.**

General Features

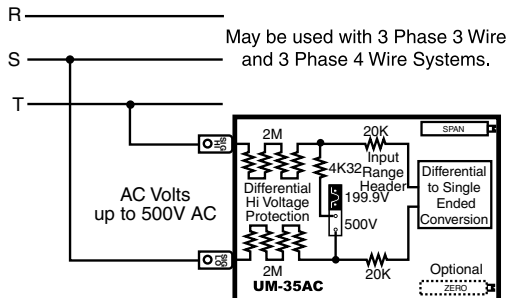
The UM-35AC is a low-cost, utility, AC voltage measuring meter with two built-in ranges of 199.9V AC and 700V AC. The unique resistively isolated differential input of this meter allows safe measurement of phase to phase voltages, making it a effective solution to most AC voltage measuring applications. 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

AC Voltage measurement in Single-phase Systems.



AC Phase to Phase Voltage measurement in Multi-phase Systems.



The unique differential input allows safe phase to phase AC line voltage measurements up to 500V AC.

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:**Differential input. Inputs resistively isolated to 1400V from internal ground of meter by 1.94MΩ, so that phase to phase measurements up to 700V AC can be safely made.
- Full Scale Ranges:**Two built in header selectable ranges of 199.9V AC and 700V AC full scale .
- Input Impedance:**4MΩ minimum.
- 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•
- Overrange Indication:**1 (MSD) displayed with all other digits blank
- Power Supply (std):**120/240V AC, 50/60/400 Hz. approx 1.5W.
(Optn) VO-DC/ISOIsolated Switcher. 9 to 36V DC/12 to 24V AC
(Optn) VO-24VIsolated Transformer 24V AC ±10%
(Optn) VO-5V DCNon-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.

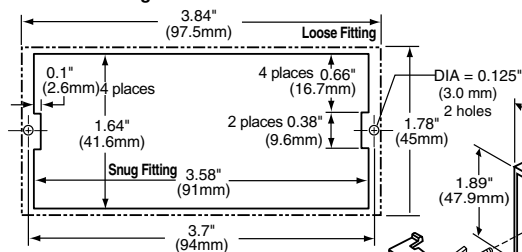
UM-Series low cost utility meters for switchboard and process indication

- UM-35AC1I/5**AC amps, Scaled RMS, (1 or 5 Amp internal shunt), 3.5 digit
- UM-35AC**AC volts, Scaled RMS. 199.9V AC/700V AC Header Selectable Ranges, 3.5 digit
- UM-40AC**AC volts, Scaled RMS. 700.0V AC full scale, high resolution 4 digit
- UM-35HZ**15Hz to 199.9Hz or optionally 40Hz to 500Hz up to 500V AC input, 3.5 digit
- UM-35**DC Volts ±2/20V DC Header selectable or optionally ±2/200V DC, 3.5 digit
- UM-35MV**DC mV ±50mV and ±100mV select inputs to suit DC current shunts, 3.5 digit
- UM-45**DC Volts ±2V/±20V/±200V DC Header selectable ranges 4.5 digit
- UM-45MV**DC mV ±50 mV, ±100mV, or ±200mV selectable inputs to suit DC current shunts, 4.5 digit

- UM-35CL**Process 4 to 20mA (100.0), easily user scalable, 3.5 digit
- UM-35CLE**Process 4 to 20mA (100.0) with 24V DC excitation, easily user scalable in engineering units anywhere from -1999 to +1999. 3.5 digit
- UM-45CL**Process 4 to 20mA (100.00), easily user scalable, 4.5 digit
- UM-35P**Pressure, strain gage and load cell, 4 and 6 wire, 5V DC excitation, Header Selectable Sensitivity 2mV/V, 5mV/V, 10mV/V, 20mV/V, 3.5 digit
- UM-35J/K**J or K thermocouple input, 1° resolution, order °C or °F, 3.5 digit
- UM-35RTD**100Ω platinum RTD, 3 or 4 wire, order °C or °F and 0.1° or 1°, 3.5 digit

UM Case Dimensions and Panel Cutouts

This NEMA Case will fit any existing cutout with dimensions that are between the Snug and Loose Fitting dimensions shown below.

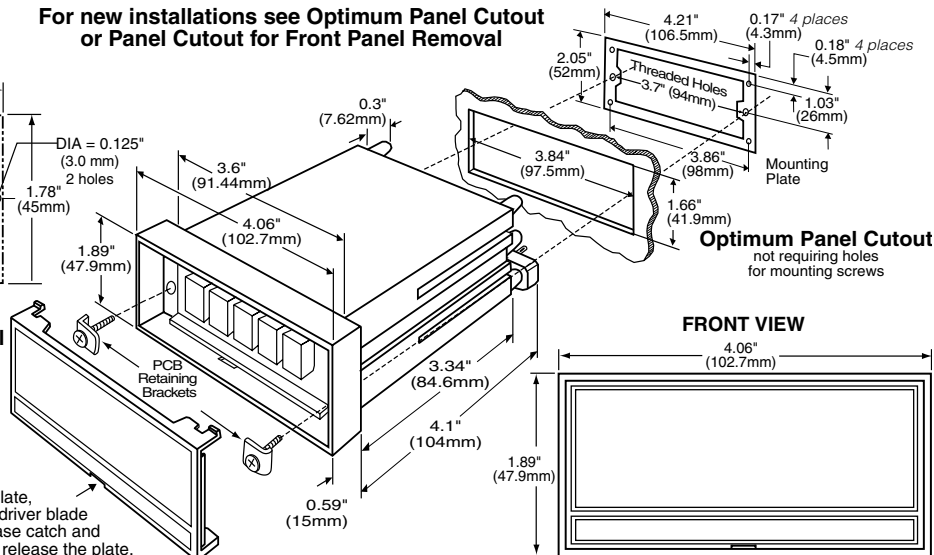


Panel Cutout for Front Panel Removal

To enable removal of the panel meter from a mounting panel without requiring rear access, make the panel cutout as shown above, using the mounting plate supplied with the meter as a template. The mounting holes should then be tapped to match the mounting screws.

To remove the face plate, carefully insert screwdriver blade at bottom slot to release catch and gently pry outward to release the plate.

For new installations see Optimum Panel Cutout or Panel Cutout for Front Panel Removal



Ordering Information

Standard Options for this Model Number

Part Number

Description

► **BASIC MODEL NUMBER** Includes 2 TB-KITs, standard display and standard power supply unless optional versions are ordered.

UM-35ACDPM, AC Volts, **199.9** and 700V AC Header Selectable

► DISPLAY

STANDARD0.56\" Red LEDs

UM-BRIGHTSuper bright Red LEDs, 0.56 inch high

UM-GREENGreen LEDs, 0.56 inch high

UM-GREEN4.5Green LEDs, 0.56 inch high Dummy Zero Option for UM-35s

UM-LARGE/GRN ...Green LEDs, 0.8 inch high for UM-35 Series

UM-LARGE/REDRed LEDs, 0.8 inch high for UM-35 Series

UM-RED4.5Red LEDs, 0.56 inch high Dummy Zero Option for UM-35s

► POWER SUPPLY

STANDARD100/120 or 200/240VAC User selectable

V0-DC/ISOIsolated auto-sensing AC/DC 9 to 36V DC/12 to 24V AC

V0-24VIsolated transformer 12V AC or 24V AC user selectable

► SPECIAL OPTIONS (Specify Inputs or Outputs & Req. Reading)

HD-CHANGERange change from the standard input as shown in **BOLD** type

V0-50KZero offset Potentiometer 50K

CB-FS35Non-Std Range and Scale changes for UM-35 meters

Special Options and Accessories

Part Number

Description

► ACCESSORIES (Specify Serial # for Custom Artwork Installation)

75-RPCLEARReplacement Clear Lens for meter

75-RPFILTERReplacement Red Lens for meter

CN-L15Connector: Dual Row, 30 Pin Edge Conn., 0.156\"

CN-PUSH/UMConnector: Push-on Terminal Block, 120V AC Pwr

CN-PUSH/UM01Connector: Push-on Terminal Block, 200-240V AC Pwr

CN-PUSH/UM02Connector: Push-on Terminal Block, 120/240V AC select

CN-PUSH/UM03Connector: Push-on Terminal Block, 24V AC pwr

CN-PUSH/UM04Connector: Push-on Terminal Block, 9 to 36V DC/12 to 24V AC

CN-PUSH/UM05Connector: Push-on Terminal Block, 5V DC

CN-UM/ANLGCConnector: Pinout Changer to match Analogic AN20M02 etc

OP-N4SEAL/UMNEMA 4 lens cover for UM Series meters

RP•CASECase: Replacement with Mounting Hardware

TB-KITConnector: xtra Screw Terminal Blocks (3 sets=1 kit)

ART-FS-S/DNRC for Artwork & set-up Custom Faceplate and/or Descriptor

ART-FS-S/D/CNRC for Artwork & set-up Custom Faceplate and Custom Logo

ART-FS-001Produce & Install Custom Faceplate per meter - 1 color no-min

ART-FS-002Produce & Install Custom Faceplate per meter - 2 color no-min

ART-FS-003Produce & Install Custom Faceplate per meter - 3 color no-min

ART-FUM-001Custom Faceplate, 100 piece Min. (\$3.00 each) - 1 color

ART-FUM-002Custom Faceplate, 100 piece Min. (\$4.20 each) - 2 color

ART-FUM-003Custom Faceplate, 100 piece Min. (\$5.40 each) - 3 color

Many other options and accessories are available. See full price list for more details.

WARRANTY

Textmate warrants that its products are free from defects in material and workmanship under normal use and service for a period of one year from date of shipment. Textmate's obligations under this warranty are limited to replacement or repair, at its option, at its factory, of any of the products which shall, within the applicable period after shipment, be returned to Textmate's facility, transportation charges pre-paid, and which are, after examination, disclosed to the satisfaction of Textmate to be thus defective. The warranty shall not apply to any equipment which shall have been repaired or altered, except by Textmate, or which shall have been subjected to misuse, negligence, or accident. In no case shall Textmate's liability exceed the original purchase price. The aforementioned provisions do not extend the original warranty period of any product which has been either repaired or replaced by Textmate.

USER'S RESPONSIBILITY

We are pleased to offer suggestions on the use of our various products either by way of printed matter or through direct contact with our sales/application engineering staff. However, since we have no control over the use of our products once they are shipped, **NO WARRANTY WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE, OR OTHERWISE** is made beyond the repair, replacement, or refund of purchase price at the sole discretion of Textmate. Users shall determine the suitability of the product for the intended application before using, and the users assume all risk and liability whatsoever in connection therewith, regardless of any of our suggestions or statements as to application or construction. In no event shall Textmate's liability, in law or otherwise, be in excess of the purchase price of the product.

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