



0.56"  
LEDs



0.8"  
LEDs



**Easily user scaled, this meter is ideal for indication of 4-20mA process loop signals in any engineering unit.**

## UM-35CL

### 4-20mA Process Loop

### 3 1/2 DIGIT with 0.56" or 0.8" LEDs

### in a Traditional NEMA Style Case

#### General Features

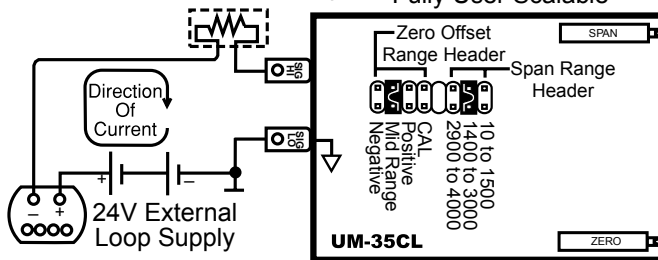
The UM-35CL is an economical 4-20mA process loop measuring meter. It is easily user adjustable to any reading between -1999 and +1999 with header selectable signal conditioning.

#### Typical Application Connections

##### 4 to 20mA Process Loop Measurement

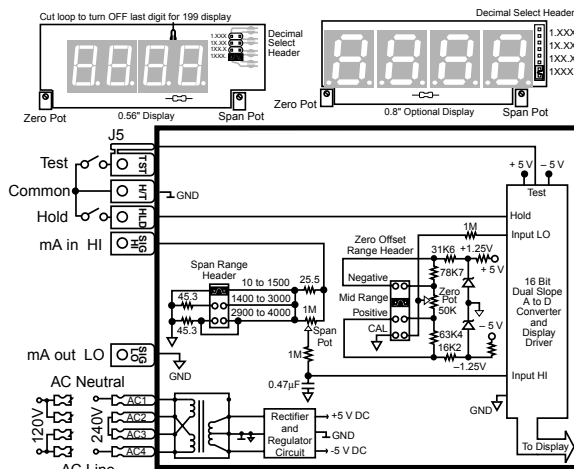
Other devices can also be added to the loop.

Fully User Scalable



Order the UM-35CLE, if you require the loop excitation voltage to be supplied by the meter.

#### Functional Diagram



#### 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:** .....Series connection to 4-20mA process loop.

**Full Scale Ranges:** .....User adjustable to any scaling between -1999 to +1999.

**Input Impedance:** .....70Ω. Maximum 1.4V drop

**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.

**Polarity:** .....Bipolar. Assumed positive displays negative.

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

**Overrange 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:** .....10 oz., 13 oz when packed.

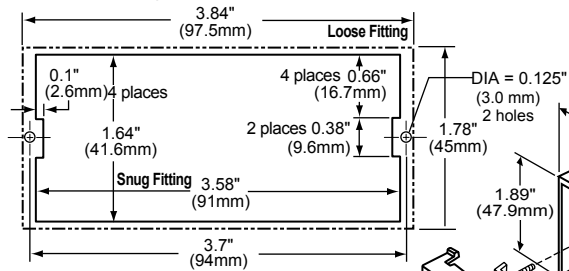
#### UM-Series low cost utility meters for switchboard and process indication

**UM-35AC11/5** AC amps, Scaled RMS, (1 or 5 Amp internal shunt), 3.5 digit  
**UM-35AC** .....AC volts, Scaled RMS. **199.9V AC/500V AC** Header Selectable Ranges, 3.5 digit  
**UM-40AC** .....AC volts, Scaled RMS. **500.0V 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.

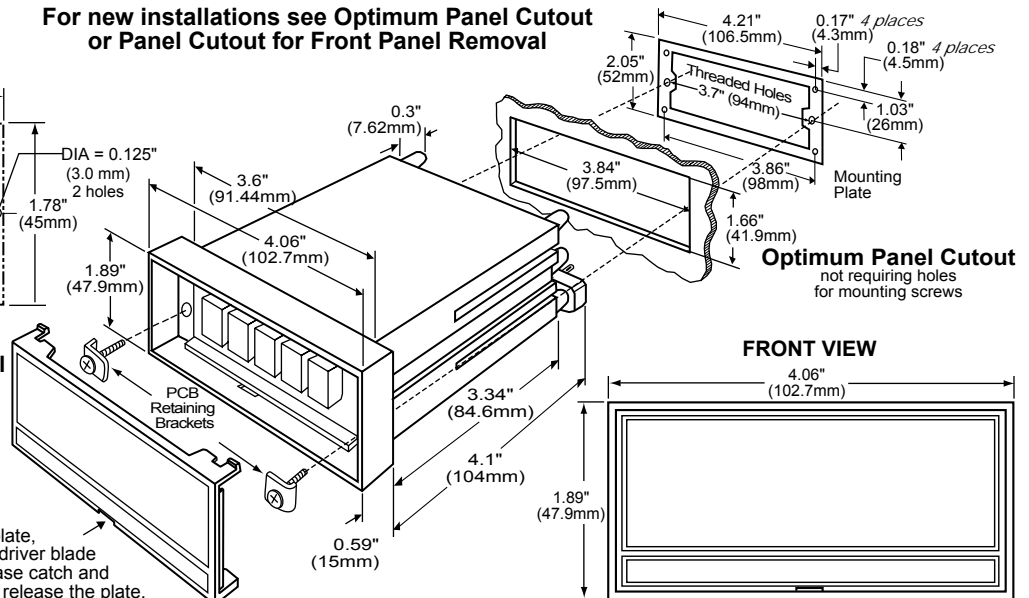


### Panel Cutout for Front Panel Removal

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
<b>► BASIC MODEL NUMBER</b> Includes 2 TB-KITs, standard display and standard power supply unless optional versions are ordered.	
UM-35CL.....	DPM, Process 4-20mA .....
<b>► DISPLAY</b>	
<b>STANDARD ....0.56\"</b> Red LEDs .....	
UM-BRIGHT .....	Super bright Red LEDs, 0.56 inch high .....
UM-GREEN .....	Green LEDs, 0.56 inch high .....
UM-GREEN4.5 .....	Green 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/RED .....	Red LEDs, 0.8 inch high for UM-35 Series .....
UM-RED4.5 .....	Red LEDs, 0.56 inch high Dummy Zero Option for UM-35s .....
<b>► POWER SUPPLY</b>	
<b>STANDARD ....100/120 or 200/240VAC</b> User selectable .....	
V0-DC/ISO .....	Isolated auto-sensing AC/DC 9 to 36V DC/12 to 24V AC .....
V0-24V .....	Isolated transformer 12V AC or 24V AC user selectable .....
V0-5V DC .....	Non-isolated 5V DC only .....
<b>► SPECIAL OPTIONS (Specify Inputs or Outputs &amp; Req. Reading)</b>	
HD-CHANGE .....	Range change from the standard input as shown in BOLD type...
CB-FS35 .....	Non-Std Range and Scale changes for UM-35 meters .....

### Special Options and Accessories

Part Number	Description
<b>► ACCESSORIES (Specify Serial # for Custom Artwork Installation)</b>	
75-RPCLEAR .....	Replacement Clear Lens for meter .....
75-RPFILTER .....	Replacement Red Lens for meter .....
CN-L15 .....	Connector: Dual Row, 30 Pin Edge Conn., 0.156\"
CN-PUSH/UM .....	Connector: Push-on Terminal Block, 120V AC Pwr .....
CN-PUSH/UM01 .....	Connector: Push-on Terminal Block, 200-240V AC Pwr .....
CN-PUSH/UM02 .....	Connector: Push-on Terminal Block, 120/240V AC select. ....
CN-PUSH/UM03 .....	Connector: Push-on Terminal Block, 24V AC pwr .....
CN-PUSH/UM04 .....	Connector: Push-on Terminal Block, 9 to 36V DC/12 to 24V AC ...
CN-PUSH/UM05 .....	Connector: Push-on Terminal Block, 5V DC .....
CN-UM/ANLGC .....	Connector: Pinout Changer to match Analogic AN20M02 etc ..
OP-N4SEAL/UM .....	NEMA 4 lens cover for UM Series meters .....
RP•CASE .....	Case: Replacement with Mounting Hardware .....
TB-KIT .....	Connector: xtra Screw Terminal Blocks ( 3 sets=1 kit) .....
ART-FS-S/D .....	NRC for Artwork & set-up Custom Faceplate and/or Descriptor ...
ART-FS-S/D/C .....	NRC for Artwork & set-up Custom Faceplate and Custom Logo ...
ART-FS-001 .....	Produce & Install Custom Faceplate per meter - 1 color no-min ...
ART-FS-002 .....	Produce & Install Custom Faceplate per meter - 2 color no-min ...
ART-FS-003 .....	Produce & Install Custom Faceplate per meter - 3 color no-min ...
ART-FUM-001 .....	Custom Faceplate, 100 piece Min. (\$3.00 each) - 1 color .....
ART-FUM-002 .....	Custom Faceplate, 100 piece Min. (\$4.20 each) - 2 color .....
ART-FUM-003 .....	Custom 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 MERCHANT ABILITY, 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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