

# TEXMATE



## DU-35

**2V to 200V DC Meter**  
**3 1/2 Digit with 0.56" LEDs**  
**in a 1/8 DIN Case**

**A low cost easily installed meter, for Switchboard and Process Indication of single, or differential DC voltage signals.**

### General Features

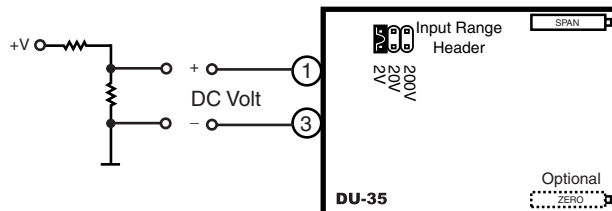
The DU-35 is an economical DC voltage measuring meter with three header selectable full scale ranges of 2V, 20V and 200V. This meter may be used to measure single-ended as well as differential signals and is easily scaled to any desired process engineering unit. After selecting a new range, re-calibration is required. Display Hold and Display Test functions are also provided.

An economical option is the dummy (non-functional) right hand side zero which allows the meter 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.

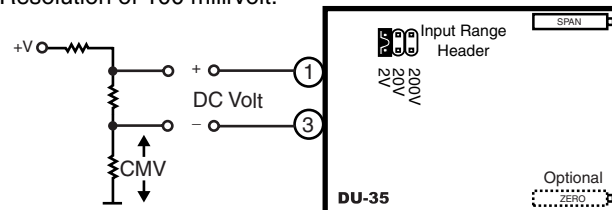
The standard meter has a high efficiency red LED display and user selectable AC power inputs of 100V AC to 120V AC or 200V AC to 240V AC are provided. An Optional 24V AC or an auto sensing isolated AC/DC 24V switching power supply can be ordered. (See ordering information)

### Typical Application Connections

**DC Volts Single-ended** measurement with a Resolution of 100 millivolt.



**DC Volts Differential** measurement with a Resolution of 100 millivolt.



Max CMV (common mode voltage) is 50V.\*

\*Because CMV is common with meter ground, higher CMV inputs to a max of 1KV, require mechanical isolation of all contactable meter parts.

### Compatibility

The DU-Series have a matching DIN case style that is complementary to the Lynx, Leopard and Tiger family of meters. DU-Meters are the OEM's choice for economical switchboard and process indication. For economy, each model is dedicated to a specific application and designed for quick and easy installation.



### Specifications

**Input Configuration:** .....Single-ended, however isolated power supply enables differential measurements up to a maximum common mode of 50V.\*  
Provision for optional zero pot to offset the reading displayed. (See Ordering Information)

**Full Scale Ranges:** .....Three header selectable ranges of 2V, 20V, and 200V DC full scale

**Input Impedance:** .....1M $\Omega$  (minimum)

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

**Accuracy:** ..... $\pm(0.05\%$  of reading plus 3 digits)

**Temperature Coefficient:** 100ppm/ $^{\circ}$ C (Typical)

**Warm Up Time:** .....One minute to specified accuracy

**Conversion Rate:** .....3 readings per second

**Display:** .....0.56" hi efficiency Red or optional Green LEDs. Display Hold and Display Test are provided.

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

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

**Over-range Indication:** ...The MSD digit 1 is displayed with all other digits blank

**Power Supply (std):** .....120/240V AC, 50/60Hz. approx 2.5W.  
 (Optn) VO-DC/ISO .....Isolated Switcher. 9 to 36V DC/12 to 24V AC  
 (Optn) VO-24V .....Isolated Transformer 24V AC  $\pm 10\%$   
 (Optn) VO-5V DC .....Non-isolated 5V DC  $\pm 10\%$

**Operating Temperature:** .....-10 to 50  $^{\circ}$ C

**Storage Temperature:** .....-20 to 70  $^{\circ}$ C

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

**Case Dimensions:** .....1/8 DIN, Bezel: 96x48mm (3.78"x1.89")  
 Depth behind bezel 117 mm (4.61") plus 11.8mm (0.47") for Right-angled Connector or 20mm (0.79") for Straight-through Connectors.

**Weight:** .....11oz., 14 oz. when packed

### DU-Series, the OEMs choice for switchboard and process indication

**DU-35AC1/5** .....AC amps, Scaled RMS. (1 or 5 Amp Internal shunt), 3.5 digit  
**DU-35ACIRMS1/5** .....AC amps, True RMS. (1 or 5 Amp Internal shunt), 3.5 digit  
**DU-40AC1/5** .....AC amps, Scaled RMS. (1 or 5 Amp Internal shunt), 4 digit  
**DU-35AC** .....AC volts, Scaled RMS. 199.9/700V AC Header Selectable Ranges, 3.5 digit  
**DU-35ACRMS** .....AC volts, True RMS 199.9/700V AC Header Selectable Ranges, 3.5 digit  
**DU-40AC** .....AC volts, Scaled RMS. 700.0V AC full scale, 4 digit  
**DU-35HZ** .....15.0Hz to 199.9Hz or 15/500Hz. Up to 700V AC input, 3.5 digit  
**DU-35** .....DC volts  $\pm 2V/\pm 20V/\pm 200V$  Header Selectable Ranges, 3.5 digit  
**DU-35MV** .....DC mV  $\pm 50mV, \pm 100mV, \pm 200mV$  Header Selectable Ranges, 3.5 digit

**DU-45** .....DC volts  $\pm 2V/\pm 20V/\pm 200V$  Header Selectable Ranges, 4.5 digit  
**DU-45MV** .....DC mV  $\pm 50mV/\pm 100mV/\pm 200mV$  Header Selectable Ranges, 4.5 digit  
**DU-35CL** .....Process 4 to 20mA (100.0), easily user scalable, 3.5 digit  
**DU-35CLE** .....Process 4 to 20mA (100.0) with 24V DC excitation, scalable, 3.5 digit  
**DU-45CL** .....Process 4 to 20mA (100.00), easily user scalable, 4.5 digit  
**DU-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  
**DU-35J/K** .....Order J or K Thermocouple and  $^{\circ}$ C or  $^{\circ}$ F, 3.5 digit  
**DU-35RTD** .....100 $\Omega$  platinum RTD, 3 or 4 wire, order  $^{\circ}$ C or  $^{\circ}$ F and 0.1 $^{\circ}$  or 1 $^{\circ}$ , 3.5 digit