



0.56"  
LEDs



0.8"  
LEDs

UM-Series



# TEXMATE

## UM-35J & UM-35K

Thermocouple Temperature Meters  
3 1/2 Digit with 0.56" or 0.8" LEDs  
in a Traditional NEMA Style Case

Low cost utility, J or K thermocouple temperature meters with 1° resolution pre-calibrated in °F or °C.

### General Features

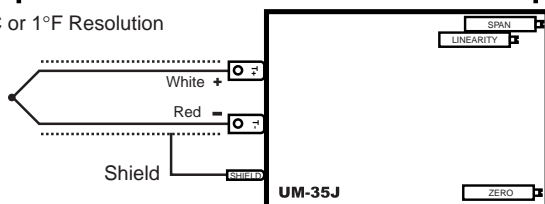
The UM-35J and UM-35K are economical thermocouple input temperature meters with a resolution of 1°. The meters are ordered factory calibrated for either a °F or °C indication. Automatic cold junction compensation, Thermocouple Break Detection, Display Hold and Display Test functions are provided as standard features.

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

#### Temperature Measurement with J Thermocouple

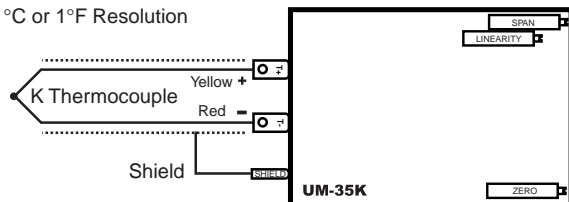
1°C or 1°F Resolution



Grounded or Ungrounded thermocouples may be used.

#### Temperature Measurement with K Thermocouple

1°C or 1°F Resolution



Grounded or Ungrounded thermocouples may be used.

### 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

**Full Scale Ranges:**.....UM-35JC 0 to 760°C  
UM-35JF 0 to 1400°F  
UM-35KC 0 to 1260°C  
UM-35KF 0 to 1999°F

**Lead Resistance Effects:** ..20μV per 10Ω of lead resistance

**Cold Junction**

**Compensation:**.....Automatic ±0.1°C/°C (Cal. @25°C)

**Input Protection:** .....25V AC/DC

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

**Conformity Error**

(at 25°C):.....UM-35JC ±(2°C + 1 digit) typical  
UM-35JF ±(4°F + 1 digit) maximum  
UM-35KC ±(3°C + 1 digit) typical  
UM-35KF ±(5°F + 1 digit) maximum

**Temperature Coefficient:** ..100ppm/°C (Typical)

**Warm Up Time:**.....Two minutes to specified accuracy

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

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

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

**Overrange/ Open**

**Thermocouple Indication:**..Most significant "1" digit is displayed with 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.