



#### DU-Series



# TEXMATE

## DU-35J & DU-35K

**Thermocouple Temperature Meter  
3 1/2 Digit with 0.56" LEDs  
in a 1/8 DIN Case**

**Economical J or K Thermocouple Temperature Meters pre-calibrated °C or °F.**

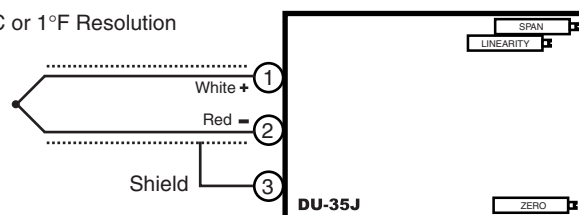
### General Features

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

### Typical Application Connections

#### Temperature Measurement with J Thermocouple

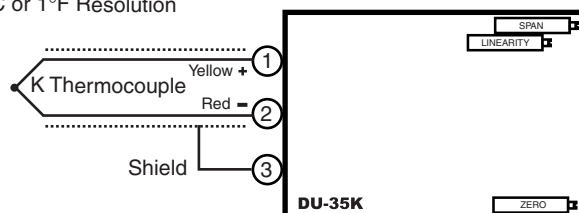
1°C or 1°F Resolution



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 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:** .....Differential

**Full Scale Ranges:**.....DU-35JC 0 to 760°C  
DU-35JF 0 to 1400°F  
DU-35KC 0 to 1260°C  
DU-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):**.....DU-35JC ±(2°C + 1 digit) typical  
DU-35JF ±(4°F + 1 digit) maximum  
DU-35KC ±(3°C + 1 digit) typical  
DU-35KF ±(5°F + 1 digit) maximum

**Temperature Coefficient:** ..100ppm/°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 & Display Test are provided.

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

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

**Overrange/ Open**

**Thermocouple Indication:**..Most significant "1" digit is displayed with all other digits blank

**Power Supply (std):** .....120/240V AC, 50/60 Hz. approx 2.5W.

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

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

**DU-35AC11/5** .....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-40AC11-5** .....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 ±2V/±20V/±200V Header Selectable Ranges, 3.5 digit  
**DU-35MV** .....DC mV ±50mV, ±100mV, ±200mV Header Selectable Ranges, 3.5 digit

**DU-45** .....DC volts ±2V/±20V/±200V Header Selectable Ranges, 4.5 digit  
**DU-45MV** .....DC mV ±50mV/±100mV/±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 °C or °F, 3.5 digit  
**DU-35RTD** .....100Ω platinum RTD, 3 or 4 wire, order °C or °F and 0.1° or 1°, 3.5 digit