



## DU-35HZ

**AC Line Frequency**  
**3 1/2 Digit with 0.56" LEDs**  
**in a 1/8 DIN Case**

**An economical meter for 50Hz, 60Hz, or 400Hz AC line frequency measurement. Quick and easily installation make it the OEM's choice for switchboard upgrades.**

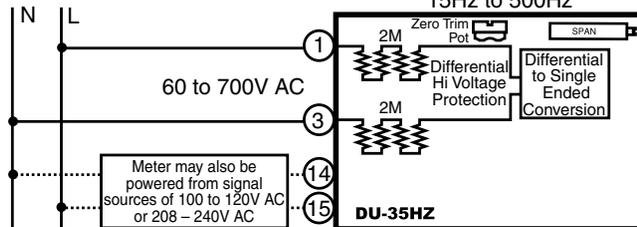
### General Features

The DU-35HZ is a low-cost, AC line frequency measuring meter with a factory installed range of 15.0Hz to 199.9Hz or optionally 15Hz to 500Hz. The unique input structure allows safe phase to phase line frequency measurements in multi-phase systems. Display Hold and Display Test functions are also provided. The standard meters have 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

#### AC Line Frequency measurement in Single-phase Systems.

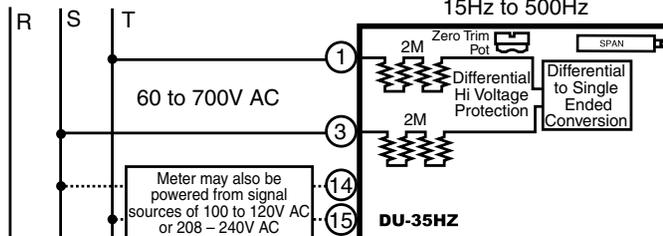
Two factory installed ranges of 15.0Hz to 199.9Hz or 15Hz to 500Hz



#### AC Phase to Phase Line Frequency measurement in Multi-phase Systems.

May be used with 3 Phase 3 Wire and 3 Phase 4 Wire Systems.

Two factory installed ranges of 15.0Hz to 199.9Hz or 15Hz to 500Hz



The unique differential input allows safe phase to phase AC line frequency measurements.

### 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 with Frequency to Voltage converter. Inputs resistively isolated to 1400V from the internal ground of meter by 1.94MΩ, so that phase to phase measurements up to 700V AC can be safely made.

**Full Scale Ranges:** .....Factory installed range of 15.0Hz to 199.9Hz or optionally 15Hz to 500Hz

**Input Impedance:** .....4MΩ

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

**Accuracy:** .....±(0.05% of reading plus 2 counts)

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

**Warm Up Time:** .....One minute 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, 50/60/400Hz. 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:** .....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., 14oz. 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 ±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