

**Model : 3Phase 3Wire 2Element**  
**Model : 3Phase 4Wire 3Element**  
**Parameters Measured :**

**QU144x192U(W,VAR,PF,HZ)33**

**QU144x192U(W,VAR,PF,HZ)34**

Active Power (System)  
 Reactive Power (System)  
 Power Factor (System) &  
 Frequency (System)

**QU144x192U(V,A,PF,HZ)33**

**QU144x192U(V,A,PF,HZ)34**

Voltage (System)  
 Current (Average)  
 Power Factor (System) &  
 Frequency (System)

### Introduction

MECO QU144x192U is indigenously designed, tooled and manufactured by the Research and Development Department of MECO and is a very high performance, rugged and reliable meter. This micro-controller based meter measures and simultaneously displays TRMS values of Four electrical parameters with super bright and large LED display enabling reading from a distance

- Active Power (System) - KW/MW
- Power Factor (System) - PF
- Voltage (System) - V
- Apparent Power (System) - KVA / MVA
- Reactive Power (System) - KVAR/MVAR
- Frequency (System) - Hz
- Current (Average) - I
- Maximum Demand (System) - Active Power / Apparent Power

### Advantages

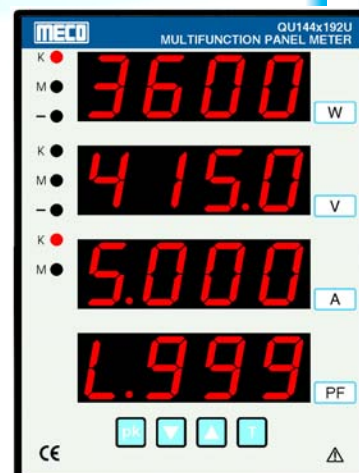
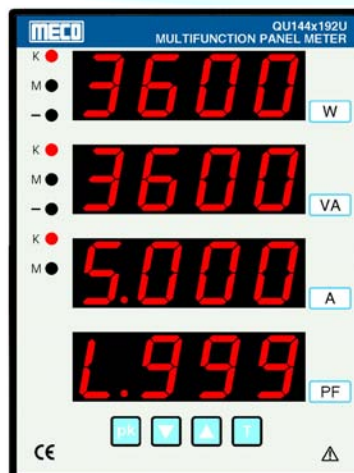
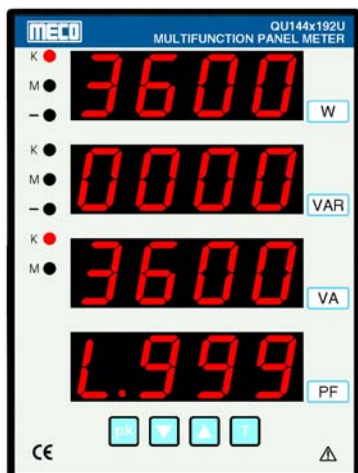
Conventional method uses 4 Transducers plus 4 Digital Panel Meters and several cumbersome wires, occupying lot of space in front of the panel and inside the panel. The use of QU144x192U reduces the burden on Current & Potential Transformers. QU144x192U Four Parameter Meter is designed, keeping the Class 1.0 accuracies and 1.0 inch height display size for Generation, Transmission & Distribution Panels. Cost of ownership comes from a combination of Transducers, Panel meters, Panel Size, Panel Wiring & Space and User Productivity. All these areas have been targeted in the QU144x192U Meter reducing the cost to less than 50%. The accuracies are Software set to 1.0% FSD using state-of-the-art calibrators and comes with a Calibration Certificate Traceable to National Standards. There are no user set potentiometers, hence accuracy cannot be tampered with.

### Application

This highly accurate, rugged, and compact instruments is competitively priced and ideal for use in application for Power Distribution sector, PLC's / SCADA, Power Management, QC Testing, Energy Audit, BMS and Genset.

### Specifications

<b>System</b> (Factory Set)	3Phase 2Element 3Wire 3Phase 3Element 4Wire	<b>Communication</b> (standard)	RS-485 Port (5kV Isolated), MODBUS-RTU Protocol with POWER MASTER Software
<b>Input</b> Voltage / Phase Current / Phase Frequency Power Factor	50 - 300V (Max.) (P - N) 0.2A - 1.2A (max.) or 1A - 6A (max.) (any one only) 45 - 55 Hz 0.300 Lag (L) - 1.000 - 0.300 Lead (C)	<b>Environment</b> Calibration Operating Storage	27°C ± 5°C 0 to 50°C, RH < 70% -10 to 60°C, RH < 70%
<b>Auxiliary Supply</b>	110 / 230V AC ± 20% (any one) 48V DC / 110V DC / 220V DC ± 20% (any one)	<b>Dimensions</b> Front Depth (Behind Bezel) Panel Cut-out	144 x 192 mm 60 mm (approx.) 138 <sup>(+0.8, -0.0)</sup> x 186 <sup>(+0.8, -0.0)</sup>
<b>Terminals</b>	Screw Type		



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Current (Average) &  
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Voltage (System)  
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Power Factor (System)

### Features

- Measures and Displays 4 Electrical Parameters
- TRMS Measurements
- Import-Export (4 Quadrant Operation)
- 3 Phase 3 Wire / 3 Phase 4 Wire (Factory Set)
- MODBUS RTU Protocol (Standard)
- POWER MASTER Software
- IP54 (for meter front)
- CE Compliance with EN61010-1, EN61326-1
- 4 Rows of 4 Digit, Super Bright, 1 inch, Red LED Display
- Programmable CTR, PTR, Instr. Address, Password & MD Period
- RS 485 Port (5kV Isolated) (Standard)
- Password Protection

### Accuracy

Parameters Measured (4 Parameters as per Model selected)	Accuracy $\pm$ (FS + 5Digit)	System
Active Power (System)	$\pm 1\%$ of F.S.	KW / MW (System)
Reactive Power (System)	$\pm 1\%$ of F.S.	KVAR / MVAR (System)
Frequency (System)	$\pm 0.2$ Hz	Hz (System)
Power Factor (System)	$\pm 1^\circ$ Electrical	PF (System)
Apparent Power (System)	$\pm 1\%$ of F.S.	KVA / MVA (System)
Voltage (System)	$\pm 0.5\%$ of F.S.	V (System)
Current (Average)	$\pm 0.5\%$ of F.S.	I (Average)
Maximum Demand (System)	$\pm 1\%$	KW (System), KVA (System)
Other Parameters like Active Energy, Reactive Energy, Apparent Energy	Please inquire sales@mecoinst.com	

**Ordering Information :** Model, Input Voltage, Input Current, Input Frequency, System (3P2E3W or 3P3E4W), CTR / PTR (if any), MD & THD, RS485 MODBUS Communication (Optional) & Auxiliary Supply

### Terminal Connection

