



# M41

(Multifunction Meter/Power Analyser)

(HSN CODE – 9028)

## Features:

- Site Programmable CT & PT Ratio
- LED Display
- True RMS Measurement
- Password Protection
- RS485 Computer Interface
- Monitor Temperature through 3 AI RTD PT100
- Monitor True RMS Earth Fault Current
- MD Monitoring and Controlling
- 3 Digital I/P's for Switchgear status
- 2 Relay O/P's for Controlling/Alarming
- Harmonics Measurement (Individual/Total)
- Auto Ranging
- Universal Aux. Supply
- LED Indicators for I/P Status, Earth Fault, Temp. Fault, Relay, Rx, Tx & 2<sup>nd</sup> Source on.

## Advantages:

- To caution on the extra energy consumption
- To identify inefficiency of machine/man
- Reduce panel space, wiring, installation time
- Aggregate Device (Temp Sensor, ELR, Dual Source)

## Applications:

- Control Panel
- Distribution System
- Generator Sets
- Motor Control
- Test Bench
- Energy Management
- Process Control & SCADA

## Measuring Parameters

- VL-L (individual/average)
- VL-N (individual/average)
- Current (individual/average/neutral current)
- Power factor (individual/average)
- Phase angle frequency power: (active, reactive and apparent)
- Maximum demand: (kW, kVA)
- Peak maximum demand Current: (kW, kVA)
- Peak maximum demand previous: (kW, kVA)
- Energy (active, reactive inductive, reactive capacitive, apparent)
- Run hour (import, export and total)
- Total Harmonic Distortion (21 level, Phase wise):  
Voltage and Current
- Voltage and current disturbance (Sag and Swell)
- Earth Leakage Current
- Bus bar Temperature

## Supply Voltage

Auxiliary Supply	90-270 V AC/DC ( $\pm 15\%$ )
Frequency	50/60 Hz

## Display

Display	LCD Display
Display Scrolling	Automatic/Manual

## Settable Parameters

C.T. Primary	1A to 10000A (Programmable)
C.T. Secondary	1A/5A (Programmable)
P.T. Ratio	Programmable upto 132KV
MD Parameter	kW, kVA, kVA <sub>r</sub> , Amp, Earth Leakage & Temperature

## Input & Output Specification

Communication	RS485
Relay O/P	2 No.
Analog Input	3 AI RTD PT100
Digital Input	3 No.

## Input Specifications

Electrical Connection	3 $\Phi$ -4Wire/3 $\Phi$ -3Wire/1 $\Phi$ -2Wire
Input Voltage Range	0-500 VAC (L-L)/0-300VAC (L-N)
Input Current Range	0.015A-6A AC Direct 60A(opt.)
Frequency	45-65 Hz
Resolution	Energy 0.1 kWh Power Factor: 0.001 Frequency: 0.01 Hz Voltage: Auto ranging Current: Auto ranging Power: Auto ranging
Accuracy	Voltage $\pm 0.5\%$ of F.S. Current $\pm 0.5\%$ of F.S. Power Factor $\pm 0.5\%$ of F.S. Frequency $\pm 0.1\%$ of F.S. Power (active, reactive and apparent): 1% Energy (active, reactive and apparent): Class 0.5
Burden	Voltage: 0.2 VA max. per unit Current : 0.2 VA max. per unit Aux. Supply: 3 VA max

## Environmental Specification

Temperature	Operating: -10°C to 55°C Storage: -20°C to 75°C
Humidity	<95% RH

## Mechanical Specification

Mounting	Flush Mounting with Side Clamps
Weight	350gm (approx.)
Enclosure Material	ABS Thermoplastic

## Dimension

Dimension	138mm x 113mm x 40 mm
Panel cut out	118mm x 92mm