

# ENERGY METER EM9004R

## FEATURES

- True RMS measurement
- 3 or 2 Element measurement
- Confirms IS14697 for Accuracy Class 1
- Programmable PT/CT Primary
- Direct reading without multiplication factor
- Low PT, CT burden. (Less than 0.2 VA)
- Energy storage in EERAM
- Auto scaling from Kilo to Mega
- Reverse indication for proper connection
- Measures 4 quadrant power and records import energy
- Digital Calibration by software
- Quick & easy to install
- Displays kW, kWh and Run hour
- kWh range 9999999.9 kWh (LT), 99999999 kWh (HT)
- Run hour range 9999.59 hours
- With the above features, 3 phase voltage, 3 phase line voltage and 3 phase current are available



## OPTIONAL FEATURES

- Accuracy class 0.5
- Optically isolated RS485 Communication output with MODBUS RTU protocol
- Separate energy register for export energy recording

## APPLICATIONS

- Suitable for low cost applications
- Captive Gen Sets
- Individual machines & Equipments
- Pumps, Motors & Compressors
- Lighting Loads

# TECHNICAL SPECIFICATION

## MEASURED QUANTITIES

Parameter Shown : 1) R, Y, B Voltage  
2) RY, YB, BR Voltage  
3) R, Y, B Current  
4) Total kW  
5) R, Y, B kW  
6) kWh  
7) Run Hour

## RATINGS

Voltage Range : 80V to 520V AC line to line for LT  
25V to 140V AC line to line for HT  
Standard Current : 1A / 5A  
Max. Current : 1.5A / 7.5A  
Frequency Range : 40.00 to 60.00 Hz  
PF Range : 0.00 Lag to 0.00 Lead  
Auxiliary Supply : 240V AC (-20% to +10%)  
Operating Temperature : 55° C (Max.)

## DISPLAY

Type : 2 Row 16 Character LCD with Backlit  
Character Size : 4.35 (H) x 2.95 (W) mm  
LCD Power Save Mode : Provided. When no key is pressed for 3 minutes, the LCD Backlit is switched OFF to save power and enhance the life of LCD. The LCD is switched ON when any key is pressed

## MEASUREMENT

Method : 3 Phase 4 wire for LT  
3 Phase 3 wire for HT  
Accuracy : Class 0.5, 1

## COMMUNICATION

Type : RS485  
Protocol : MODBUS - RTU  
Isolation : Provided  
Traffic Status : Indicated through TXD, RXD LED

## OUTPUT

Calibration Output: 3200 Imp/kWh

## KEY FUNCTIONS

Key Pad : 4 Keys namely Index, Shift, Increment and Enter used for Program mode setting and Run mode selection  
Program mode Parameters : PT Primary Voltage, CT Primary Current, Device address, Energy and Run hour Reset  
Unauthorized Person Entry Protection : Provided through Password Facility  
Program Setting, Energy and Run hour Storage : EERAM

## CASE AND DIMENSIONS

Enclosure : ABS Plastic  
Dimension : 96(H) x 96(W) x 120(D) mm  
Cutout : 88(H) x 88(W) mm  
Mounting : Flush / Panel

## APPROVALS

Type test Approved as per IS14697 Standards for Class 1, Class 0.5  
Confirms EMI, EMC Regulations as per IS14697 standards

## PLEASE PROVIDE THE FOLLOWING DETAILS WHILE PLACING YOUR ORDER / ENQUIRY

1. Voltage Input 2. Current Input 3. HT / LT Application 4. CT Primary 5. PT Primary 6. Self Powered / External Supply.

## OUR RANGE OF PRODUCTS

Volt Meter, Ammeter, VAF Meter, Energy Meter, Dual Source Meter, Load Manager, Power Multimeter, Trivector Meter, Maximum Demand Controller, Harmonic Indicator, Power Factor Controller, Smart PF Controller, Power Factor Correction Panel, AC Voltage Controller, AC Current Controller, Motor Protection System, Voltage/Current/Power/Frequency Transducer, Power Transmitter, Energy Management and Billing Systems etc...



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Note: Specifications are subject to change without prior notice due to continuous improvement in product development.