



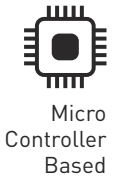
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**EM-08(5A)  
EM-08(1A)**



**EM-08D(5A)  
EM-08D(1A)**



**Features**

- 10 Parameters on 10 Display Pages
- Measures V, A, PF, Hz, KW, KVA, KVAR, KWh, KVAh & KVArh
- Auto / Manual Scroll Display (User Selectable)
- Reduces Panel Space and Wiring Time
- State of The Art Microcontroller Design
- TRMS Measurement
- Ideal for Testing of Electrical Appliances
- User Programmable CT Ratio (1.00 - 99.99)
- LCD Display with Backlight (20mm Digit Height)

**Application**

- Appliance Testing ● Energy Audit ● QC ● Studying Energy Efficiency of Electrical Equipment ● Building Management Systems ● Power Management ● Generator / Motor Characteristics ● Plant Maintenance

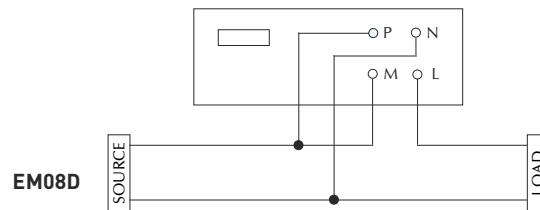
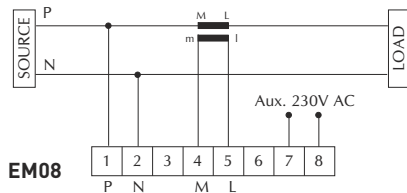
**Specification**

Functions	EM-08/EM-08D(5A)	EM-08/EM-08D(1A)	Accuracy
<b>RMS Voltage</b>	<b>50.0 ~ 300 Vrms</b>		±(0.5% FS +1 dgt.)
<b>RMS Current</b> (any one range only)	(0.25 ~ 6.0 Arms)	(0.05 ~ 1.2 Arms)	±(0.5% FS +1 dgt.)
<b>Active Power</b>	0.012 ~ 1.800 KW	0.002 ~ 0.360 KW	±(0.5% FS +1 dgt.) [Cosφ=0.3 to 1.000]
<b>Apparent Power</b>	0.012 ~ 1.800 KVA	0.002 ~ 0.360 KVA	±(0.5% FS +1 dgt.)
<b>Reactive Power</b>	0.012 ~ 1.800 KVAR	0.002 ~ 0.360 KVAR	±(1.0% FS +1 dgt.) [Sinφ=0.3 to 1.000]
<b>Power Factor</b>	0.3 Lag ~ 1.0 ~ 0.3 Lead		±(0.01 PF +1 dgt.)
<b>Line Frequency</b>	45.00 ~ 65.00 Hz		±0.1 Hz
<b>Active Energy (KWh)</b>	0000 ~ 9999 KWh		Class 1
<b>Apparent Energy (KVAh)</b>	0000 ~ 9999 KVAh		
<b>Reactive Energy (KVArh)</b>	0000 ~ 9999 KVArh		

Model		EM08	EM08D
<b>Case / Housing Material</b>		DIN Black ABS, Dimension as per DIN 43700	Portable Type, Desk Top Case with Tilt Stand
<b>Mounting Clamps</b>		Sturdy, Moulded Derlin with suitable Hardware	Desk Top Type
<b>Terminals / Connectors</b>		Terminal Block : Thermoplastic (UL94V-0) with Tin Plated Brass Terminal	For Input connections 10Amps Binding Post Terminals on the Front panel.
<b>Auxiliary Power Supply</b>		230VAC ±20%, 50Hz	230VAC ±20% 50Hz, Switch & Fuse for Aux. Supply at the Back, Supplied with 1-Phase Power Cord
<b>Dimension (mm)</b>	<b>Front</b>	96 x 96	
	<b>Depth ( Behind Bezel Panel )</b>	90	
	<b>Cut-Out</b>	92 (+0.8, -0.0) x 92 (+0.8, -0.0)	

**Ordering Information:** Model, Input Voltage, Input Current (1A or 5A - any one only), CTR & Auxillary Supply

**Connection Diagram**





Micro Controller Based



**EM-08S (5A)**  
**EM-08S (1A)**

### Features

- 10 Parameters on 10 Display Pages
- Measures V, A, PF, Hz, KW, KVA, KVAh, KWh, KVAh & KVAh
- Auto / Manual Scroll Display (User selectable)
- SMPS Power Supply (85 - 265VAC/DC)
- Ideal for Testing of Electrical Appliances
- User Programmable CT Ratio (1.00 - 99.99)
- TRMS Measurement
- 4 Digit LCD Display with Backlight (20mm Digit Height)
- LED Indicator for Parameter Indication
- RS 485 Port (5KV Isolated) (Optional)
- MODBUS RTU Protocol (Optional)
- POWER MASTER Software (Optional)

### Application

- Home Appliance Testing
- Energy Audit
- QC
- Studying Energy Efficiency of Electrical Equipement
- Building Management - Systems
- Power Management
- Generator/ Motor Characteristics
- Plant - Maintenance

### Specification

Functions	EM-08S (5A)	EM-08S (1A)	Accuracy
<b>RMS Voltage</b>	50.0 ~ 300Vrms		±(0.5% FS +1 dgt.)
<b>RMS Current (Any One Range Only)</b>	(0.125A ~ 6.0Arms)	(0.025A ~ 1.2Arms)	
<b>Active Power</b>	0.030 ~ 1.800 KW	0.006 ~ 0.360 KW	±(0.5% FS +1 dgt.) [Cosφ=0.3 to 1.000]
<b>Apparent Power</b>	0.030 ~ 1.800 KVA	0.006 ~ 0.360 KVA	±(0.5% FS +1 dgt.)
<b>Reactive Power</b>	0.030 ~ 1.800 KVAh	0.006 ~ 0.360 KVAh	±(1.0% FS +1 dgt.) [Sinφ=0.3 to 1.000]
<b>Power Factor</b>	0.3 Lag ~ 1.0 ~ 0.3 Lead		±(0.01 PF +1 dgt.)
<b>Line Frequency</b>	45.00 ~ 55.00 Hz		±0.1Hz
<b>Active Energy (KWh)</b>	0000 ~ 9999 KWh		Class 1
<b>Apparent Energy (KVAh)</b>	0000 ~ 9999 KVAh		
<b>Reactive Energy (KVAh)</b>	0000 ~ 9999 KVAh		

**Note :** KW / KVA / KVAh Measurements require Vrms x Irms x Cosφ/Sinφ ≥ 0.006 (for 1A Meter), ≥ 0.030 (for 5A Meter)

<b>Case / Housing Material</b>	DIN Black ABS, Dimension as per DIN 43700	
<b>Mounting Clamps</b>	Sturdy, Moulded Derlin with suitable Hardware	
<b>Terminals / Connectors</b>	Terminal Block : Thermoplastic (UL94V-0) with Tin Plated Brass Terminal	
<b>Auxiliary Power Supply</b>	SMPS (85 - 265 VAC/DC)	
<b>Dimension (mm)</b>	<b>Front</b>	96 x 96
	<b>Depth ( Behind Bezel Panel )</b>	43 [For EM-08S(1A/5A)]
	<b>Cut-Out</b>	92 (+0.8, -0.0) x 92 (+0.8, -0.0)

**Ordering Information :** Model, Input Voltage, Input Current (1A or 5A any one only) & RS485 Port (Optional)

### Connection Diagram

