

## LoRaWAN Three Phase Energy Meter with Relay



### Specification:

S.No	Particulars	Offered by firm
1	Model	LEM03-R
2	Feature	LoRaWAN Three Phase Energy Meter with Relay
3	Standard applicable	IS-13779 latest
4	Rated voltage	3x240v +20% to -40%
5	Rated current	Maximum Up to 100 amps
6	Frequency	50Hz $\pm$ 5%
7	Power factor	0.5 lag- unity-0.866 lead
8	Completely type tested to is 13779	Yes
9	Minimum starting current in % of base current	0.4% of $i_b$
10	Maximum continuous current	600% of $i_b$
11	Power loss per phase (i) Voltage circuit (ii) Current circuit	As per is 13779:1999 with latest amendments
12	Accuracy class	Class 1.0
13	Change in error due to a. Variation in voltage, frequency b. Variation in temperature	As per is 13779:1999 with latest amendments
14	Limit of accuracy	As per is 13779:1999 with latest amendments
15	Insulation level	As per is 13779:1999 with latest amendments
16	Test output for calibration & testing	Red color led with high intensity
17	Type of register 1) No. Of digits 2) Backlit	5+1 digits (1decimal) Provided

18	Auto scroll parameter	Cumulative forwarded kwh (DG) Cumulative forwarded kwh (EB)
19	Push button mode	<ul style="list-style-type: none"> <li>a. Meter id</li> <li>b. KWH (EB)</li> <li>c. Cumulative forwarded KVAh (EB)</li> <li>d. Cumulative forwarded KVArh (EB)</li> <li>e. KWH (DG)</li> <li>f. Cumulative forwarded KVAh (DG)</li> <li>g. Cumulative forwarded KVArh (DG)</li> <li>h. Instant voltage R phase</li> <li>i. Instant voltage Y phase</li> <li>j. Instant voltage B phase</li> <li>k. Instant current R phase</li> <li>l. Instant current Y phase</li> <li>m. Instant current B phase</li> <li>n. Instant load KW R phase</li> <li>o. Instant load KW Y phase</li> <li>p. Instant load KW B phase</li> <li>q. Instant load KW total</li> <li>r. Instant power factor R phase</li> <li>s. Instant power factor Y phase</li> <li>t. Instant power factor B phase</li> <li>u. Instant power factor total</li> <li>v. Instant load frequency</li> <li>w. Real date in dd/mm/yy</li> <li>x. Real time in hh/mm/ss</li> <li>y. Balance</li> <li>z. DG Tariff set value</li> <li>aa. EB Tariff set value</li> <li>bb. EB set load</li> <li>cc. DG set load</li> <li>dd. Daily deduction amount</li> <li>ee. Set over count</li> <li>ff. Time between two over load attempts</li> <li>gg. Set amount of monthly deduction Parameter automatically transfers to auto scroll after 10 sec when push button not pressed continuously.</li> </ul>
20	Parameters to be write with LoRaWAN	<ul style="list-style-type: none"> <li>1. Force Relay off</li> <li>2. Force Relay on</li> <li>3. Data Sampling Interval</li> <li>4. On Demand Uplink</li> </ul>
21	Parameters to be read with LoRaWAN (Periodic & On Demand Uplink)	<ul style="list-style-type: none"> <li>1. Meter ID</li> <li>2. KWH</li> <li>3. Relay status</li> <li>4. Frequency</li> <li>5. Power Factor</li> <li>6. Voltage R</li> <li>7. Voltage Y</li> <li>8. Voltage B</li> </ul>

		9. Current R 10. Current Y 11. Current B
22	Compliance to EMC & EMI	As per is 13779:1999 with latest amendments
23	Communication Details	<ul style="list-style-type: none"> <li>• LoRaWAN Communication</li> <li>• Band: IN865</li> <li>• Frequency: 865MHz to 867MHz</li> <li>• Activation Method: OTAA</li> <li>• Support Class: Class C</li> </ul>
24	Degree of protection against dust & water	IP 51
25	Marking on name plate as per is13779	Provided
26	Calibration	Calibration at manufacturing site only