

EMPOWER PLUS DIGITAL MULTIFUNCTION METER



Class 1.0s accuracy as per IS13779

Microcontroller Based

Seven Segment LED Based Display

Measures all important Electrical Parameters

Compact 96 X 96 DIN enclosure

RS485 port for connection to SCADA/EMS

The EM9400 from Trinity is an easy-to-use, cost effective electrical power meter that offers all the basic measurement capabilities required to monitor an electrical installation. In addition to measuring the instantaneous parameters, it also measures all three energies, thus helping to measure energy costs.

Over the basic metering, it provides RS485 port supporting MODBUS RTU protocol, THD measurements, Phase angle, Unbalance % for Voltage and Current, On Hour & Run Hour, Power Interruption recording. These parameters are available over RS485 only.

The CT Primary, Secondary and PT ratios are site selectable.

Technical Specifications

Parameters				
Type	Name	Statistics		
INPUT	Supply	Three Phases and Neutral of a 3P4W system		
	Voltage	Direct Voltage Input : 25 to 500V L-L, 25 to 300V L-N PT Ratio : Site Selectable Burden : 0.5VA		
	Current	Secondary Current Input : 5A or 1A (Site Selectable) CT Ratio : Site Selectable Range of Reading : 5 - 5000A Burden : < 1.0VA Overload : 5A CT → 6A RMS Continuous 1A CT → 1.2A RMS Continuous		
	* Power Supply	Auxiliary Supply (AC) : 40 - 480 VAC/DC, 50-60 Hz. Auxiliary Supply(DC) : 8 - 32 VDC		
MEASUREMENT	True RMS Basic Parameters	Voltage (Volts L-N & L-L)	VL-N - Accuracy : 0.5% of Reading VL-L - Accuracy : 1.0% of Reading	
		Current (Amps IR, IY, IB)	Accuracy : 0.25% of Reading	
		Line Frequency	45 to 65 Hz, Accuracy : 0.3% of Reading	
	Power	Active Power (P)	Accuracy (For IPFI>0.5) : 1% of Reading	
		Reactive Power (Q)	Accuracy : 1.5% of Reading (Between 0.5 Lag to 0.8 Lead)	
		Apparent Power (S)	Accuracy : 1% of Reading	
		Power Factor	For Individual phases and System Accuracy : 1.0% of Reading (IPFI≥0.5) Range of Reading : 0.05 to 1.00 Lag/Lead	
	Energy	Total Active Energy (KWh)	Range of Reading : 0 to 9999999.9 Accuracy : Class 1.0s as per IS13779	
		Total Apparent Energy (KVAh)	Range of Reading : 0 to 9999999.9 Accuracy : 1.0% of Reading	
		Total Apparent Energy (KVARh)	Range of Reading : 0 to 9999999.9 Accuracy : 1.5% of Reading	
	Power Quality	THD for each phase current THD for each phase voltage		
	MISCELLANEOUS	Dimensions	Bezel	96 X 96 mm
			Panel Cutout	92 X 92 mm
Depth of installation			55 mm	
Display			4x3 7-Segment	
Operating temp			10°C to 50°C	
Weight			0.29 Kgs (Approx.)	
Min. Operating Current			0.4% to 120% of CT primary	
Comm.	RS485	Modbus-RTU protocol		

* Note: To be specified at the time of ordering

TRINITY ENERGY SYSTEMS PVT. LTD.

386, Savli G.I.D.C Estate, Marjisar-391775,
Dist.-Vadodara, Gujarat, India. Tele: +91-9228004452/53/54
E-Mail: info@trinityenergy.co.in

web : www.trinityenergy.co.in

TRINITY
Making Energy Matter



*Specifications are subject to change without notice due to continuous improvement.