

POWERPRO

ELECTRICAL POWER METER



Multiparameter Monitoring

Measures all important Electrical Parameters

All parameters with default accuracy class 1.0S

Compact 96 X 96 DIN enclosure

Optional RS-485 port for connection to SCADA/EMS

Optional Alarm/Trip Outputs (Two) programmable for any parameter including Demand

Dual source measurement (EB & DG) option available

The POWERPRO 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 accurately all three energies, and also demand, thus helping to measure and control energy costs.

Over the basic metering, it optionally provides two relay outputs, RS485 port supporting MODBUS RTU protocol, dual source metering and THD measurements.

The relays are site programmable for parameter of action, and the value on which to operate.

The CT primary and secondary, PT ratio and installation type are site selectable, thus making it possible to use the meter in all types of three phase installations.

Technical Specifications

		Parameter	
Type	Name	Statistics	
INPUT	Supply	Three Phases and Neutral of a 3P4W system / Three Phases of a 3P3W system	
	Voltage	Direct Voltage Input : Up to 500V L-L, Up 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 : 0 – 5000A Burden : < 1.0VA Overload : 5A CT = 6A RMS Continuous 1A CT = 1.2A RMS Continuous	
	Power Supply	Auxiliary Supply: 90 - 480 VAC, 50-60 Hz.	
OUTPUT	Relay	Two. Individually Field Programmable. Switching Voltage : Max. 250 VAC Switching Power : Max. 1000W Expected Mechanical Life: >10 x 10 ⁶ switching operations. Expected Electrical Life : >4 x 10 ⁶ switching operations. @(Load = 200VA, Cosφ = 0.5)	
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 55 Hz, Accuracy: 0.3% of Reading
	Power	Active Power (P)	Accuracy: 1% of Reading (For IPFI>0.5)
		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 99999999.9 KWh Accuracy: 1.0S as per IS13779
		Total Apparent Energy (KVAh)	Range of Reading: 0 to 99999999.9 KWh Accuracy: 1.0% of Reading
		Total Apparent Energy (KVARh)	Range of Reading: 0 to 99999999.9 KWh Accuracy: 1.5% of Reading
	Power Quality	THD for each Voltage (Optional)	
		THD for each Current (Optional)	
	Demand	KVA/ KW Demand	Site Selectable. Demand Interval 15/30 Min. Also site selectable
		Max. Demand	Max. Value reached only. No time & date stamp
MISCELLANEOUS	Dimensions	Bezel	96 X 96 mm
		Panel Cutout	92 X 92 mm
		Depth of installation	76 mm
	Display	16 X 1 or 16 X 4 (To be specified at the time of Ordering)	
	Operating temp	10°C to 50°C	
	Weight	0.35 Kgs (Approx.)	
	Min. Operating Current	0.4% to 120% of CT primary	
	Comm.	RS485	Modbus-RTU protocol

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