



TRINITY

MAKING ENERGY MATTER

XPERT-LITE ELECTRICAL POWER METER

The XPERT-LITE 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 cost. It also provides RS485 port supporting MODBUS RTU protocol, two relay outputs for Alarm/Trip with led and display indication, THD measurements for each Volts and Amps, KWh led output for 1000 impulses/KWh.










Over the basic metering, it optionally provides, dual source metering and Import/Export functionality

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.



FEATURES

-  **Multiparameter Monitoring**
-  **Measures all Important Electrical Parameters**
-  **All parameters with default accuracy class 1.0s**
-  **Compact 96 X 96 DIN enclosure**
-  **RS-485 port for connection to SCADA/EMS with RX/TX dual color led indication**
-  **Two Alarm/Trip Outputs programmable for any parameter Including Demand**
-  **128 X 64 backlit graphical LC display**
-  **Dual source measurement (EB & DG) option available**
-  **Import-Export Option available**

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TECHNICAL SPECIFICATION

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 : 5 – 5000A Burden : < 1.0VA Overload : 5A CT = 6A RMS Continuous 1A CT = 1.2A RMS Continuous
		Power Supply	Auxiliary Supply: 80 - 270 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 65 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 9999999.9 Accuracy: 1.0S as per IS13779
		Total Apparent Energy (KVAh)	Range of Reading: 0 to 9999999.9 Accuracy: 1.0% of Reading
		Total Reactive Energy (KVARh)	Range of Reading: 0 to 9999999.9 Accuracy: 1.5% of Reading
	Power Quality	THD for each Voltage	
		THD for each Current	
	Demand	KVA/ KWA 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	65mm
		Display	128 X 64 graphical backlit LCD
		Operating temp	10°C to 50°C
		Weight	0.35 Kgs (Approx.)
		Operating Current Range	0.4% to 120% of CT primary
		Calibration LED	Red Colour. 1000 impulses/KWh
	Comm.	RS485	Modbus -RTU protocol