

PROVA-6830+6801 Power and Harmonics Analyzer (100A)
PROVA-6830+6802 Power and Harmonics Analyzer (1000A)
PROVA-6830+3007 Power and Harmonics Analyzer (3000A)

FEATURES:

- Analysis for 3P4W, 3P3W, 1P2W, 1P3W
- True RMS Value(V 123 and L 123)
- Active Power(W, KW, MW, GW)
- Apparent and Reactive Power (KVA, KVAR)
- Power Factor (PF), Phase Angle (Φ)
- Energy (WH, KWH, KVARH, PFH)
- Current Measurement from 0.1mA to 3000A, Capable of Analyzing IT Standby Power Consumption to the Maximum Demand of a Factory
- Display of 35 Parameters in One Screen(3P4W)
- Programmable CT (1 to 600) and PT (1 to 3000) Ratios
- Display of Overlapped Voltage and Current Waveform
- 2.4M Memory with Programmable Interval (1 to 6000 seconds, 17000 Records for 3P4W System)
- Output of Waveform, Power Parameters and Harmonics at Command
- Large Dot Matrix LCD Display with Backlight
- Average Demand (AD in W, KW, MW)
- Maximum Demand (MD in W, KW, MW) with Programmable Period
- Harmonic Analysis to the 99th Order
- Display of 50 Harmonics in One Screen with Waveform
- Display of Waveform with Peak Values (1024 Samples/Period)
- Analysis of Total Harmonic Distortion (%THD-F)
- Graphic Phasor Diagram with 3 Phase System Parameters
- Capture 28 Transient Events (Time+Cycles) with Programmable Threshold(%)
- 3 Phase Voltage Unbalance Ratio (VUR)
- 3 Phase Voltage Unbalance Factor (d0%, d2%)
- Calculated Unbalance Current through Neutral Line (In)
- Optical isolated USB Interface
- Built-in Timer and Calendar for Data Logging
- Conductor Size: -Model 6801 30mm(approx) -Model 6802 55mm(approx), 64*24mm(bus bar) -Model 3007 170mm(approx)



PROVA-6830+3007

SPECIFICATION:

* Please refer to users manual for more detailed and up-to-date description of specification

AC Watt (50 or 60 Hz, PF 0.5 to 1, CT=1)

Range	Resolution	Accuracy of Readings		
		6800+6801	6800+6802	6800+3007
5.0 – 999.9W	0.1W	$\pm 1\% \pm 8 \text{ dgts}$	$\pm 1\% \pm 8 \text{ dgts}$	$\pm 1\%$ of VA Range $\pm 8 \text{ dgts}$
1.000 – 9.999 KW	0.001 KW	$\pm 1\% \pm 8 \text{ dgts}$	$\pm 1\% \pm 8 \text{ dgts}$	$\pm 1\%$ of VA Range $\pm 8 \text{ dgts}$
10.00 – 99.99 KW	0.01 KW	$\pm 1\% \pm 8 \text{ dgts}$	$\pm 1\% \pm 8 \text{ dgts}$	$\pm 1\%$ of VA Range $\pm 8 \text{ dgts}$

100.0 – 999.9 KW	0.1 KW	±1% ± 8dgt	±1% ± 8dgt	±1% of VA Range ±8dgt
1000 – 9999 KW	1 KW	±1% ± 8dgt	±1% ± 8dgt	±1% of VA Range ±8dgt
0.000 – 9.999MW	0.001MW	–	±1% ± 8 dgt	±1% of VA Range ±8dgt

AC Current(50 or 60Hz, Auto Range , True RMS , Crest Factor<4 , CT=1)

	Range	Resolution	Accuracy of Readings
6800+6801 (Overload Protection AC200A)	0.050 – 9.999A	0.001A	±0.5% ± 5dgt
	10.00 – 60.00A	0.01A	±0.5% ± 5dgt
	60.00 – 99.99A	0.01A	±1.0% ± 5dgt
6800+6802 (Overload Protection AC2000A)	0.04 – 10.00A	0.01A	–
	0.4A – 100.0A	0.1A	±0.5% ± 5dgt
	4.0 – 1000.0A	1A	±0.5% ± 5dgt
6800+ 3007 (Overload Protection AC3500A)	4 – 300A	0.1A	±1% of Range ±5dgt
	300.0 – 999.9A	0.1A	±1% of Range ±5dgt
	1000 – 3000A	1A	±1% of Range ±5dgt

AC Voltage (50 or 60 Hz, Auto Range, True RMS, Crest Factor<4)

Range	Resolution	Accuracy of Readings	Range	Resolution	Accuracy of Readings
4.0V – 500.0 (Phase to Neutral)	0.1V	± 0.5% ± 5dgt	4.0V –600.0V (Phase to phase)	0.1V	± 0.5% ± 5dgt

Harmonics of AC Voltage in % and in Magnitude (1 to 99th order, minimum voltage at the 50 or 60 Hz>AC 80V)

Range	In Percentage		In Magnitude	
	Resolution	Accuracy of readings	Resolution	Accuracy of readings
1 – 20 th	0.1%	±2%	0.1 V	±2% ±0.5V
21 – 49 th		4% of reading ±2.0%		4% of reading ±0.5A
50 – 99 th		6% of reading ±2.0%		6% of reading ±0.5A

Harmonics of AC Current in % and in Magnitude

Model 6800+6801(100A)(1 to 99th order, minimum current at 50 or 60 Hz is greater than 10% of the range)

Range	In Percentage		In magnitude	
	Resolution	Accuracy of reading	Resolution	Accuracy of reading
1 – 10 th	0.1%	±0.2 of reading ±1%	0.1mA / 0.1A	±0.2% of reading ±7dgt

Model 6800+6802(1000A);6800+3007(3000A)(1 to 99th order, minimum current at the 50 or 60 Hz>20A)

Total Harmonic Distortion

Peak Value of Ac Voltage or AC Current , $V_T=1$

Crest Factor (C.F.) of ACV or ACA ,VT=1

Frequency in AUTO mode

Power Factor (PF)Phase Angle (Φ)

Conductor Size (6801)	30mm (approx)
Conductor Size (6802)	55mm(approx.), 64 X 24mm(Bus Bar)
Conductor Size (3007)	170mm(approx)

Battery Type	1.5V SUM-3 x 8
Display	Dot Matrix LCD with backlight
Power Consumption	140mA (approx.)
External DC Input	DC 12V adaptor (for safety purpose, the adaptor must be certified with 600V isolation protection)
LCD update rate	1 times / sec
No. Of Samples/Period	1024
Operating Humidity	< 85% relative
Operating Temperature	-10°C to 50°C
Storage Humidity	< 75% relative
Storage Temperature	- 20°C to 60°C
Weight(6830)	1160g
Weight(6801)	200g
Weight(6802)	600g
Dimension(6830)	257 (L) x 155 (W) x 57 (H) mm , 10.1" (L) x 6.1" (W) x 2.3" (H)
Dimension(6801)	210 (L) x 62 (W) x 36 (H) mm , 8.3 " (L) x 2.5" (W) x 1.4" (H)
Dimension(6802)	244 (L) x 97 (W) x 46 (H) mm , 9.6 " (L) x 3.8" (W) x 1.8" (H)
Accessories	test leads x 4 , alligator clips x 4 , Carrying bag x 1 , Users manual x 1 , Batteries 1.5V x 8