



PROVA 6830 + AFLEX 3007

# Flexible Power and Harmonics Analyzer (3000A)

**Electrical Specifications: (23°C±5°C)** 

### AC Watt

Range	Resolution	Accuracy of Readings		
(0 to 3000A)		> 20 V & > 30A	< 20V or < 30A	
10.0 – 999.9 W	0.1W	±1% of range	±2% of range	
1.000 – 9.999 KW	0.001 KW	±1% of range	±2% of range	
10.00 – 99.99 KW	0.01 KW	±1% of range	±2% of range	
100.0 – 999.9 KW	0.1 KW	±1% of range	±2% of range	
1000 – 9999 KW	1 KW	±1% of range	±2% of range	

AC Current (Overload Protection AC 3000A)

Range	Resolution	Accuracy of Readings
0 – 300.0A	0.1A	±1% of range
300.0 – 3000A	0.1A / 1A	±1% of range

AC Voltage (Overload Protection AC 800V)

Range	Resolution	Accuracy of Readings
20.0 V – 500.0 V (Phase to Neutral)	0.1 V	±0.5% ± 5dgts
20.0 V – 600.0 V (Phase to Phase)		±0.5% ± 5dgts

#### Harmonics of AC Voltage in Percentage

Range	Resolution	Accuracy
1 – 20 <sup>th</sup>		±2%
21 – 49 <sup>th</sup>	0.1%	±4% of reading ± 2.0%
50 – 99 <sup>th</sup>		±6% of reading ± 2.0%

#### Harmonics of AC Voltage in Magnitude

Range	Resolution	Accuracy
1 – 20 <sup>th</sup>	0.41/	±2% ± 0.5V
21 – 49 <sup>th</sup>	0.1V	±4% of reading ± 0.5V
50 – 99 <sup>th</sup>		$\pm 6\%$ of reading $\pm 0.5V$

#### Harmonics of AC Current in Percentage

Range	Resolution	Accuracy
1 – 20 <sup>th</sup>	0.1%	±2%
21 <sup>st</sup> - 50 <sup>th</sup>	0.1%	±6%
51 <sup>st</sup> - 99 <sup>th</sup>	0.1%	±10%

# Harmonics of AC Current in Magnitude

(1 to 99<sup>th</sup> order, min. current at the 50 or 60 Hz, True RMS < 300A)

Range (0 – 300A) Resoluti		utior	ו	Accuracy		
1 – 20 <sup>th</sup>		0.1%		$\pm 2\%$ of reading $\pm 4A$		
$21^{st} - 50^{th}$		0.1%		±4% of reading ± 4A		
51 <sup>st</sup> – 99 <sup>th</sup>		0.1%		$\pm 6\%$ of reading $\pm 4A$		
(1 to 99 <sup>th</sup> order, min.	curren	it at the 50 c	or 60	) Hz, 300	00A > Tr	ue RMS > 300A)
Range (300–3000A)		Resolu	utior	า	Accuracy	
1 – 20 <sup>th</sup>		0.19	%		$\pm 2\%$ of reading $\pm 40A$	
$21^{st} - 50^{th}$		0.19	%		±4	% of reading ± 40A
51 <sup>st</sup> – 99 <sup>th</sup>		0.19	%		±6	% of reading ± 40A
Power Factor (PF)						
Range	Re	solution			Ac	curacy
				> 20V & 3	> 30A	< 20V or < 30A
0.000 - 1.000		0.001		± 0.0	4	±0.1
Phase Angle (Φ, V	> 20V,	A > 30A)				
Range		Resolu	utior	า	Accuracy	
-180° to 180°		0.1°		± 2°		
0° to 360°		0.1° ± 2°		± 2°		
Peak Value of ACV	(peak	value > 20V	) <b>or</b>	• <b>ACA</b> (p	eak valu	e > 30A), <b>VT=1</b>
Range		Sampling	g Tiı	me	Accuracy of Reading	
50 Hz		19µs			± 5% ± 30 digits	
60 Hz		16µs		± 5% ± 30 digits		
Crest Factor (C.F.)	of AC\	/ (peak valu	e >2	20V) <b>or</b> /	ACA (pe	ak value > 30A), <b>VT=1</b>
Range Resolu		utior	า	Accuracy of Readings		
1.00 – 99.99 0.01		1	± 5% ± 30 digits			
Frequency of ACV	(RMS \	-			MS value	e > 30A)
Range		Resolution		Accuracy		
45 – 65 Hz		0.1	Ηz			± 0.2Hz
Total Harmonic Dis	stortion	۱				
Range Resolutio			ו	Accuracy		
0.0 – 20% 0.1%				± 2%		
	20 – 100% 0.1%				± 6% of reading ± 5%	
100 – 999.9 %		0.1%			± 10	0% of reading ± 10%
General Specifications: PROVA 6830 Analyzer						
Battery Type:	Battery Type:			1.5V SUM-3 x 8		
External DC Input:			Use only power supply adapter Model			
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External DC Input:	Use only power supply adapter Model	
	PHAPSA	
Display:	Dot Matrix LCD (240x128) with backlight	
LCD Update Rate:	1 time / second	
Power Consumption:	140mA (approx.)	
No. Of Samples:	1024 samples / period	

Data Logging Files:	85
Max. File Capacity:	17474 records (3P4W, 3P3W)
	26210 records (1P3W)
	52420 records (1P2W)
	4096 records (50 Harmonics / record)
Sampling Time:	2 to 3000 seconds for data logging
Low battery Indication:	B
Overload Indication:	OL
Operating Temperature:	-10°C to 50°C
Operating Humidity:	less than 85% relative
Storage Temperature:	-20°C to 60°C
Storage Humidity:	less than 75% relative
Dimension:	257(L) x 155(W) x 57(H) mm
	10.1"(L) x 6.1"(W) x 2.3"(H)
Weight:	1160g (Batteries included)
Accessories:	Test leads (3 meter long) x 4
	Probes 3007 x 3
	Alligator clips x 4
	Carrying bag x 1
	Users manual x 1
	Batteries 1.5V x 8
	Software CD x 1
	Software users manual x 1
	USB to RS232 cable x 1

#### AFLEX 3007 Flexible Current Probes

Probe Length: 3007-24	24 in / 610 mm	
Minimum Bending Diameter:	35mm	
Connector Diameter:	23mm	
Cable Diameter:	14mm	
Cable Length from Probe to Box:	1700mm	
Cable Length from Box to Output:	1700mm	
Battery:	powered by power analyzer	
Dimension (Box):	130mm(L) x 80mm(W)x 43mm(H) 5.1"(L) x 3.1"(W) x 1.7"(H)	
Weight:	410g	



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