

PQA-8000



The perfect power quality analyser for engineers looking for high-quality versatile instruments.

The PQA-8000 offers a huge range of functions, including enabling the detection of harmonics, phasors and waveform anomalies in both single and three phase installations by simply connecting the device. Designed for recording as well as troubleshooting power quality problems, the 4 voltage / current channels providing TRMS measurement at min, max and average.

The PQA-8000 offers a complete range of functions, ranging from Power Factor, Power and Energy measurements, THD and harmonics analysis and frequency measurements. With colour-coded input terminals and terminal labels to suit your application region, it also boasts user-friendly navigation and an intuitive menu system for ease of use on its large graphical colour display. Suitable for use in most environments, the PQA-8000 is enclosed in a sturdy rubber case for added protection and has an overvoltage category of CAT IV 600V and CATIII 1000V, ensuring your safety as well as the instruments. The PQA-8000 comes packaged with a complete kit with the current clamps as an optional accessory (please add if required when adding ordering). The standard kit set includes crocodile clips & probes and measurement leads, so you can get started right away.

Key Features

- Test Function: real-time waveform display (4 channels voltage / 4 channels current); voltage and current true RMS; voltage DC component; current and voltage peak; current and voltage maximum/minimum value (within a certain time)
- Capture and Monitoring Functions: capture and detect instantaneous change
- Start-up Current Monitoring: monitor the inrush current of the circuit and the starting current of the electrical equipment
- Record and Storage Function: total of 123 parameters for recording, and generate the trend diagram, record data for a long time as required
- Alarm Function: the limit value of the selected parameters can set according to generate an alarm log
- Screen Capture Function: save up to 60 screenshots simultaneously
- Communication Function: via USB connection to computer, the monitoring software can display the waveform of power quality analysis and test in real time
- User Defined Settings: set the time and date, the display contrast and brightness, and the corresponding colour of each phase line in the instrument; the connection mode and much more...

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Technical Specifications

PQA-8000 Power Quality Analyser					
Current Test	Current Clamp: 8000-008B; 8000-040B; 8000-068B; 8000-Flex				
Current Test	(purchased separately)				
Voltage Test	Line voltage: 1.0V ~ 2000V; Phase voltage: 1.0V ~ 1000V				
Electricity Energy	W. VA. var. PF. DPF. cosφ, tanφ; Wh. Varh, Vah				
Parameter	νν, νΑ, ναι, εε, σεε, σοσφ, ταπφ, ννιι, ναπι, ναπ				
Number of Channels	4 voltages, 4 currents	Voltage Flicker	Yes		
Frequency	40Hz ∼70Hz	Three-Phase Unbalance	Yes		
Harmonic Wave	Yes, 0 – 50 times	Start Current Mode	Yes, 100 seconds		
Total Harmonic Distortion	Yes, 0 – 50 times, each phase	Peak Value	Yes		
Expert Mode	Yes	Phasor Diagram Display	automatic		
Transient Record Groups	150 groups	Screenshot Capacity	60 screens		
Record	300 days (record 20 parameters simultaneously, every 5 seconds record 1 point)				
Min/Max Recorded Value	Yes, the max min value can be measured for a certain time				
Alarm	40 different types of parameter selection, 12800 group alarm logs				
	In the alarm/trend graph recording/transient capture mode (waiting or in progress), the				
Automatic Shut Down	instrument does not automatically shut down.				
Automatic Shat Down	In other test modes, there is no button operation within 15 minutes, prompting to automatically				
	shut down after 1 minute.				
Display Mode	LCD colour screen, 640dots x 480dots, 5.6 inches, display field 116mm x 88mm				
2.5,1.5	With backlight function				
Standard Accessories	Instrument Bag: 1pcs; Test Cable: 5PCS (yellow, green, red, blue, black); Alligator Clip: 5PCS; Probe:				
	5PCS; Charger 1PCS; Software CD: 1COPY; 2G Memory Card: 1PCS. Current Clamp: (optional)				

Power Supply

Rechargeable lithium battery 9.6V, 4500mAH, external charger; working current about 490mA, battery can continuously work for 8 hours

Input Resistance

Test voltage input impedance: 1M

Safety Standard IEC 61010 1000V Cat III / 600V CAT IV, IEC61010-031, IEC61326, Pollution Degree 2

Current Sensor Model	Current Clamp	Current True RMS	Current True RMS Max Error	Phase Angle φ Max Error
8000-008B		10mA~99mA	±(1 % + 3dgt)	±(1.5°),Arms≥20mA
(CT : Ф8mm)		100mA~10.0A	±(1 % + 3dgt)	±(1°)
8000-040B		0.10A~0.99A	±(1 % + 3dgt)	±(1.5°)
(CT : Ф40mm)		1.00A~100A	±(1 % + 3dgt)	±(1°)
8000-068B		1.0A~9.9A	±(2 % + 3dgt)	±(3°)
(CT : Ф68mm)		10.0A~1000A	±(2 % + 3dgt)	±(2°)
8000- Flex (CT : Ф300mm)		10A~99A	±(1 % + 3dgt)	±(3°)
		100A~6000A	±(1 % + 3dgt)	±(2°)

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Instrument Accuracy

Measurement	Range	Display Resolution	Max Error
Frequency	40Hz∼70Hz	0.01Hz	±(0.03)Hz
Phase Voltage True RMS	1.0V~1000V	Min resolution0.1V	±(0.5%rdg+5dgt)
Line Voltage True RMS	1.0V~2000V	Min resolution0.1V	±(0.5%rdg+5dgt)
DC Voltage	1.0V~1000V	Min resolution0.1V	±(1.0%rdg+5dgt)
Current True RMS	10mA~3000A	Min resolution0.1mA	±(0.5%rdg+2dgt)
Phase Voltage Peak	1.0V~1414V	Min resolution0.1V	±(1.0%rdg+5dgt)
Line Voltage Peak	1.0V~2828V	Min resolution0.1V	±(1.0%rdg+5dgt)
Current Peak	10mA~4200A	Min resolution0.1mA	±(1.0%rdg+5dgt)
Dark Fastar	1.00~3.99	0.01	±(1%rdg+2dgt)
Peak Factor	4.00~9.99	0.01	±(5%rdg+2dgt)
Active Power	0.000W~9999.9kW	Min resolution 0.001W	±(1%rdg+3dgt);Cosφ≥0.8
		Mili lesolution 0.001VV	±(1.5%rdg+10dgt);0.2≤Cosφ<0.8
Reactive power	0.000VAR~9999.9kVAR	Min resolution 0.001VAR	±(1%rdg+3dgt);Sinφ≥0.5
Inductive & Capacitive			±(1.5%rdg+10dgt);0.2≤Sinφ<0.5
Apparent Power	0.000VA~9999.9kVA	Min resolution 0.001VA	± (1%rdg+3dgt %)
Power Factor	-1.000~1.000	0.001	±(1.5%rdg+3dgt);Cosφ≥0.5
			±(1.5%rdg+10dgt);0.2≤Cosφ<0.5
Active Energy	0.000Wh~9999.9MWh	Min resolution 0.001Wh	±(1%rdg+3dgt);Cosφ≥0.8
			±(1.5%rdg+10dgt);0.2≤Cosφ<0.8
Reactive Energy Inductive & Capacitive	0.000VARh~9999.9MVARh	Min resolution 0.001VARh	±(1%rdg+3dgt);Sinφ≥0.5 ±(1.5%rdg+10dgt);0.2≤Sinφ<0.5
Apparent Energy	0.000VAh~9999.9MVAh	Min resolution 0.001VAh	±(1%+3dgt)
Phase Angle	-179°~180°	1°	±(2°)
Tanφ(VA≥50VA)	-32.768~32.768	Min resolution 0.001	±(1%+5dgt)
Displacement Power Factor	-32.700 - 32.700	Mili lesolution 0.001	±(1 %+Jugi)
(DPF)	-1.000~1.000	0.001	±(1%+5dgt)
Harmonic Ratio(Vrms>50V)	0.0 %~99.9 %	0.1 %	±(1%+5dgt)
Harmonic Angle (Vrms	-179°∼180°	1°	±(3°)harmonic1~25
>50V)			±(10°)harmonic26~50
Total Harmonic Rate	0.0 %~99.9 %	0.1 %	±(1%+5dgt)
Distortion Factor	0.0 %~99.9 %	0.1 %	±(1%+10dgt)
Transformer K Factor	1.00~99.99	0.01	±(5 %)
Three-phase Unbalance	0.0%~100%	0.1 %	±(1 %)

Dimensions

240mm x 170mm x 68 mm approx.

Weight

10.5Kg total package

Services

1-year warranty (subject to product registration with GPS Ltd)

Please contact for more information

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