

Single-Phase Power Quality Analyzer PowerPad® Jr. Model 8230

Features

- Measures up to 660Vrms or VDC
- Measures up to 6500AAC or 1400ADC (probe dependent)
- Displays Min, Max and Average Volts and Amps, Crest Factor, Peak value and K-Factor
- Calculates and displays Watts, VARs and VA, Power Factor and Displacement Power Factor for single-phase and balanced three-phase
- Measures and records power systems (kW, VA, kVAR)
- Energy metering (kAh, VARh, kWh)
- Displays total harmonic distortion (THD-F and THD-R) for voltage and current
- Displays individual harmonic values and % for Volts and Amps through the 50th harmonic
- Captures, displays and stores inrush current waveforms and statistics
- Stores up to eight screen captures
- Stores up to 1MB of trend recorded data
- Configurable from DataView® software or front panel
- Download stored data to DataView® software via optical USB port (included)
- Captures up to 4096 alarm events from up to 10 different thresholds
- Displays and records up to 17 different power quality parameters
- Includes DataView® software free for data storage, real-time waveform display, analysis and report generation
- The Max and Min RMS measurements are calculated every half-period



All models include current probe with 10 ft lead and black connector (MN93 example shown), black and red 10 ft voltage leads and alligator clips, optical USB cable, NiMH battery, 120V US wall charger, DataView® software, carrying bag and user manual.



SPECIFICATIONS	
MODEL	8230
ELECTRICAL	
Voltage (TRMS)	Phase-to-Phase: 660V Phase-to-Neutral: 600V
Current (TRMS)	MN Clamp: 5mA to 6A/120A or 2 to 240A MR Clamp: 10 to 1000Aac, 10 to 1400Aac SR Clamp: 3 to 1200A MiniFlex®: 10 to 1000A AmpFlex®: 10 to 6500A ⁽¹⁾
Frequency (Hz)	40 to 70Hz
Other Measurements	kW, kVAR, PF, DPF, kWh, kVARh, kVAh, K-Factor, Flicker, Harmonic Phase Shift, Phase Rotation
Harmonics	THD-R, THD-F, V, A, VA 1 st to 50 th , Direction, Sequence
Sampling Frequency	256 samples/cycle
Data Storage	1.5MB partitioned for waveforms, alarms and trend recording
Power Source	NiMH rechargeable battery pack (included) AC Supply: 120/230VAc (50/60Hz)
Battery Life	≥8 hrs with display on ≥40 hrs with display off (recording mode)
MECHANICAL	
Communication Port	Optically isolated USB
Display	¼ VGA (320 x 240) color LCD display with adjustable brightness & contrast
Dimensions	8.3 x 4.3 x 2.4" (211 x 108 x 60mm)
Weight	1.9 lbs (0.88kg)
Safety Rating	EN 61010, 600V CAT III, Pollution Degree 2

⁽¹⁾Crest factor at 6500 = 1

Power Quality Meter Model 8220



SPECIFICATIONS

MODEL	8220
ELECTRICAL	
Voltage (TRMS)	Phase-to-Phase: 660V; Phase-to-Neutral: 600V
Current (TRMS)	MN Clamp: 5mA to 6A/120A or 2 to 240A MR Clamp: 10 to 1000Aac, 10 to 1400Adc SR Clamp: 3 to 1200A MiniFlex®: 10 to 1000A AmpFlex®: 10 to 6500A ⁽¹⁾
Frequency (Hz)	40 to 70Hz
Other Measurements	kW, kVAR, PF, DPF, VA, kWh, kVARh, VAh, Phase Rotation Temperature, RPM, Resistance, Continuity, Diode Test
Harmonics	1 st to 50 th
Sampling Frequency	256 samples / cycle
Data Storage	Stores nine sets of readings for volts, amps, power and harmonics
Power Source	Six 1.5V AA Alkaline batteries (included)
Battery Life	≥8 hrs with display on ≥40 hrs with display off (recording mode)
MECHANICAL	
Communication Port	Optically isolated USB
Display	Three-line backlit color LCD digital display with custom icons and adjustable brightness & contrast
Dimensions	8.3 x 4.3 x 2.4" (211 x 108 x 60mm)
Weight	1.9 lbs (0.88kg)
Safety Rating	EN 61010, 600V CAT III, IP 54, Pollution Degree 2

⁽¹⁾Crest factor at 6500 = 1

Features

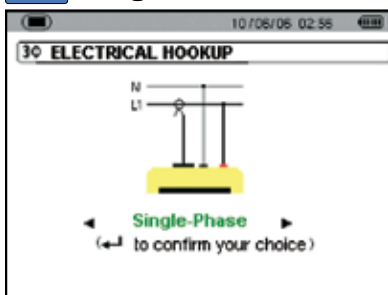
- Measures up to 660Vrms or Vdc
- Measures up to 6500Aac or 1400Adc (probe dependent)
- Displays Min, Max and Average Volts and Amps, Crest Factor, Peak value and K-Factor
- Calculates and displays Watts, VARs and VA, Power Factor and Displacement Power Factor for single-phase and balanced three-phase
- Measures and records power systems (kW, VA, kVAR)
- Energy metering (kAh, VARh, kWh)
- Displays total harmonic distortion (THD-F and THD-R) for voltage and current
- Displays individual harmonic values and % for Volts and Amps through the 50th harmonic
- Captures and displays inrush current
- Calculates and displays phase rotation and RPM
- Displays temperature in both °F and °C
- Displays resistance up to 2000Ω
- Conducts continuity and diode tests
- Stores up to nine complete sets of readings for all volt, amp, power and harmonic measurements
- Configurable from DataView® software or front panel
- Download stored data to DataView® software via optical USB port (included)
- Operates off batteries or optional power adapter
- Includes DataView® software free for data storage, real-time waveform display, analysis and report generation
- The Max and Min RMS measurements are calculated every half-period



All models include current probe with 10 ft lead and black connector (MN93 example shown), black and red 10 ft voltage leads and alligator clips, optical USB cable, six 1.5V batteries, two safety test probes, DataView® software, carrying bag and user manual.
An optional AC Power adapter is available.
(See page 20 for optional accessories available for Model 8220.)

Large Color Display!

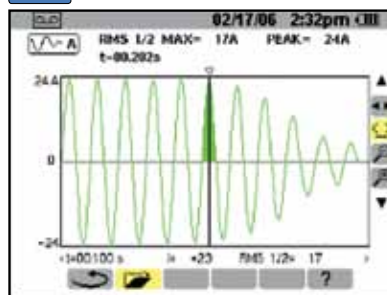
Configuration



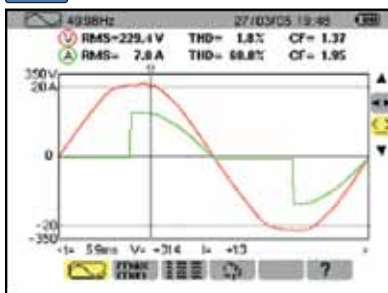
Recording Setup



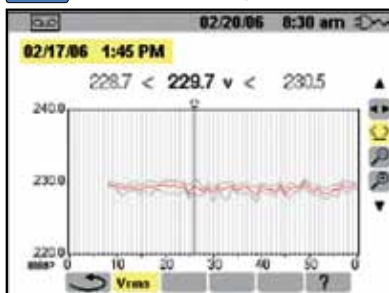
Inrush Mode



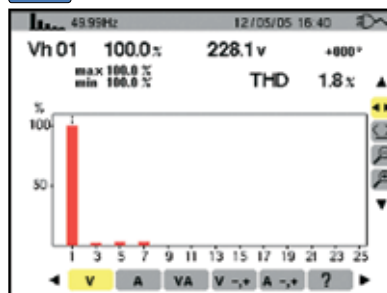
Waveform Mode



Trend Recording



Harmonics Mode



The screens above are a sample of the many available on Models 8220 & 8230

Choose from a variety of current probe options for Models 3945-B, 8335, 8220 & 8230



MR93-BK (1000A_{AC}/1400A_{DC}) current probe



SR193-BK (1200A) current probe



AmpFlex® 193-BK (6500A) flexible current probe (available in 24" or 36" lengths)



MN93-BK (240A) current probe or MN193-BK (6A/120A) current probe



MiniFlex® MA193 (1000A) 10" sensor

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2130.90	Power Quality Meter Model 8220 (no probes)	\$ 979.00	\$98.00
2130.91	Power Quality Meter Model 8220 w/MN93-BK (240A)	\$1,109.00	\$98.00
2130.92	Power Quality Meter Model 8220 w/SR193-BK (1200A)	\$1,219.00	\$98.00
2130.93	Power Quality Meter Model 8220 w/24" AmpFlex® 193-24-BK (6500A)	\$1,229.00	\$98.00
2130.96	Power Quality Meter Model 8220 w/MN193-BK (6A/120A)	\$1,169.00	\$98.00
2130.97	Power Quality Meter Model 8220 w/MA193-10-BK (1000A)	\$1,179.00	\$98.00
2130.81	PowerPad® Jr. Model 8230 (no probes)	\$1,749.00	\$98.00
2130.82	PowerPad® Jr. Model 8230 w/MN93-BK (240A)	\$1,895.00	\$98.00
2130.83	PowerPad® Jr. Model 8230 w/SR193-BK (1200A)	\$1,995.00	\$98.00
2130.84	PowerPad® Jr. Model 8230 w/24" AmpFlex® 193-24-BK (6500A)	\$1,995.00	\$98.00
2130.87	PowerPad® Jr. Model 8230 w/MN193-BK (6A/120A _{AC})	\$1,949.00	\$98.00
2130.88	PowerPad® Jr. Model 8230 w/MA193-10-BK (1000A)	\$1,959.00	\$98.00
Accessories (Optional for Models 8230 & 8220)			
2140.37	Adapter - US 110V Power Adapter (eliminates need for batteries) <i>Model 8220</i>	\$ 129.00	-
2140.28	AC Current Probe Model MR193-BK (1000A _{AC} /1400A _{DC}) with 10 ft leads	\$ 369.00	-
2140.32	AC Current Probe Model MN93-BK (240A) with 10 ft leads	\$ 189.00	-
2140.33	AC Current Probe Model SR193-BK (1200A) with 10 ft leads	\$ 299.00	-
2140.34	AmpFlex® sensor 24" Model 193-24-BK (6500A) with 10 ft leads	\$ 289.00	-
2140.35	AmpFlex® Sensor 36" Model 193-36-BK (6500A)	\$ 339.00	-
2140.36	AC Current Probe Model MN193-BK (6A/120A) with 10 ft leads	\$ 249.00	-
2140.48	MiniFlex® Sensor 10" Model MA193-10-BK (1000A)	\$ 259.00	-