

PowerPad® III Model 8336

2GB of memory for trend data storage and additional memory for: up to 50 snapshots, 210 captured transients/inrush and 10,000 alarm events

Captures & records transients, events & waveforms simultaneously!



Five voltage and four current input terminals

► SPECIFICATIONS

MODEL	8336
Input Terminals	5 voltage / 4 current
Inputs	4 voltage / 4 current
Voltage (TRMS AC+DC)	Phase-to-Phase: 0 to 2000 Phase-to-Neutral : 0 to 1000V
Voltage Ratio	up to 500kV
Current (TRMS AC+DC)	MN93: 500mA to 200A _{AC} ; MN193: 0.005 to 100A _{AC} SR193 Clamp: 1A to 1000A _{AC} AmpFlex® or MiniFlex® Clamps: 100mA to 10000A _{AC} MR193 Clamp: 1A to 1300A _{AC/DC} SL261 Clamp: 50mA to 100A _{AC/DC} Current Ratio: up to 60kV J93: 50 to 3500A _{AC} , 50 to 5000A _{DC}
Frequency (Hz)	40 to 70Hz
Distribution Systems	1P 2W, 1P 3W, 2P 2W, 2P 3W, 2P 4W, 3P 3W, 3P 4W, 3P 5W, Split-Phase 2W & 3W, 2 ½ Element & Aron meters
Power Values	W, VA, var, VAD, PF, DPF, cos φ, tan φ
Energy Values	Wh, varh, VAh, VADh
Harmonics	1 st to 50 th , Direction, Sequence; THD: 0 to 50, Phase
Transients	up to 210
Trend Mode	Records up to 41 variables as fast as once per second for one month depending on selected storage rate
Flicker	Pst & Plt
Inrush Mode	Yes, >10 min
Unbalance	Yes
Record Mode	Yes
Alarm Mode	40 types; 10,000 recorded
Waveform Mode	Calculated: AN (RMS, DC, CF, PK+/-) and FK
Peak	Yes
Phasor Display	Automatic
Data Storage	2GB card for trend + 4MB partitioned for snapshot, transients and alarms
Other Measurements	256 samples/cycle for trend recording
Display	Color ¼ VGA TFT screen (320 x 240) diagonal 148mm
Snapshots	50
Sampling Frequency	256 samples/cycle for trend recording
Electrical Safety	IEC 61010, 1000V CAT III / 600V CAT IV
Protection	IP53 - Non Operating
Languages	more than 26
Communication Interface	USB
Battery Life	10 hrs in non - Record Mode with display on; 25 hrs in Record Mode with display off
Power Supply	9.6V NiMH rechargeable battery pack (included) External AC supply: 110/230V _{AC} ±10% (50/60Hz)
Dimensions / Weight	9.8 x 7.8 x 2.6" (240 x 180 x 55mm) / 4.3 lbs (1.95kg)

* Registration must take place within 30 days of purchase



► PRODUCT INCLUDES

8336

Five black 10 ft voltage leads, five black alligator clips, twelve color-coded input ID markers, USB cable, NiMH battery, 110/240V power adapter with US power cord, large classic tool bag, soft carrying pouch, quick start user guide, and USB stick supplied with product user manual and DataView® software.



► OPTIONAL KITS

AmpFlex® 193 Flexible Current Probe (6500A)
Color-coded, 24", rated 600V CAT IV



MN193 Current Probe (5A/100A)
Color-coded, rated 600V CAT III



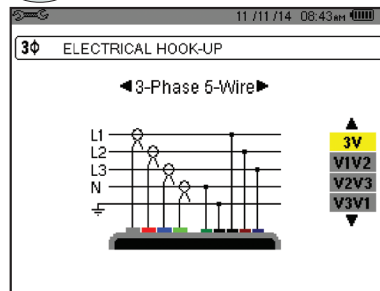
PowerPad® III Model 8336

Large Color Functional Displays

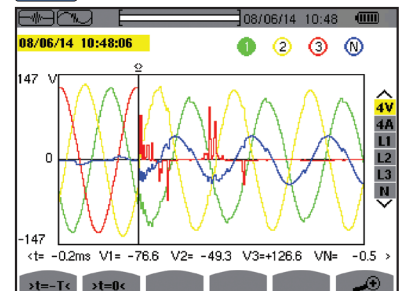
FEATURES

- Measurement of TRMS voltages up to 1000Vrms AC/DC for two-, three-, four- or five-wire systems
- Measurement of TRMS currents up to 10,000Arms (sensor dependent)
- Direct measurement of neutral current & voltage
- Frequency measurement (40 to 70Hz systems)
- Record and display trend data as fast as once per second for one month for up to 41 variables
- Up to 210 transient detection on all V and I inputs down to 65/sec
- Selectable PT and CT ratios
- Inrush current measurement
- Calculation of Crest Factors for V and A
- Calculation of the Factor K for transformers
- Calculation of short-term and long-term flicker
- Calculation of the Three-Phase voltage unbalance
- Harmonic measurements (referenced to the fundamental or RMS value) for voltage, current or power, up to 50th harmonic
- Displays of harmonic sequencing and direction and calculation of overall harmonics
- Real-time display of Phasor diagrams including values and phase angles
- Monitors the average value of any parameter, calculated for a period from 1 sec to 2 hrs
- Measurement of active, reactive and apparent power per phase and their respective sum total
- Calculation of power factor, displacement power factor and tangent factor
- Recording, time stamping and characterization of disturbance (swells, sags and interruptions, exceedence of power and harmonic thresholds)
- 2GB internal, simultaneous Trend Recording memory; Alarm, Photo and Transient Inrush memories are separate
- Measurement of energy VAh, varh, Wh & VADh
- The Max and Min RMS measurements are calculated every half-period
- Includes FREE DataView® software for configuring data storage, real-time display, analysis and report generation
- 65µs/sample trend recording

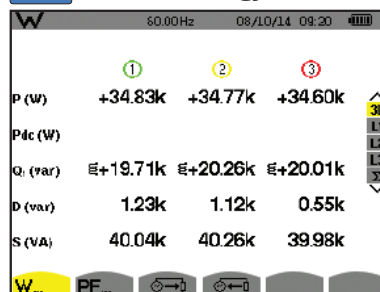
Configuration



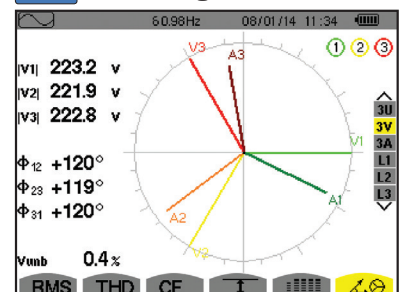
Transient Mode



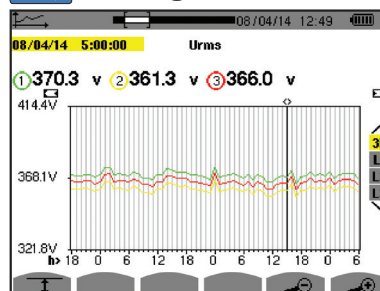
Power and Energy Mode



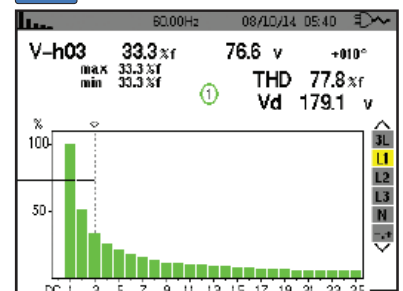
Phasor Diagram



Recording Mode






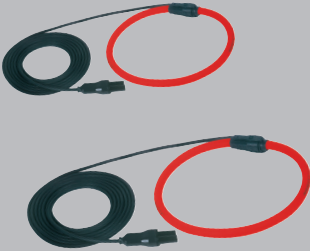


Harmonics Mode





CATALOG NO.	DESCRIPTION
2136.30	PowerPad® III Model 8336 (no probes)
2136.31	PowerPad® III Model 8336 w/4 193-24-BK Sensors
2136.32	PowerPad® III Model 8336 w/4 MN193-BK Probes
Accessories (Optional)	
2133.73	Extra Large Classic Tool Bag
2140.15	Replacement – Soft Carrying Pouch
2140.17	5A Adapter Box (<i>special order only</i>)
2140.19	Replacement – Battery 9.6V NiMH
2140.28	AC Current Probe Model MR193-BK
2140.32	AC Current Probe Model MN93-BK
2140.33	AC Current Probe Model SR193-BK
2140.34	AmpFlex® Sensor 24" Model 193-24-BK
2140.35	AmpFlex® Sensor 36" Model 193-36-BK
2140.36	AC Current Probe Model MN193-BK
2140.43	Replacement – Set of 5, 10 ft (3m) black leads w/5 black alligator clips
2140.44	Lead, 1 10 ft (3m) black lead w/black alligator clip
2140.45	Replacement – Set of 12, Color-coded Input ID Markers
2140.46	Replacement – 5 ft USB Cable
2140.48	MiniFlex® Sensor 10" Model MA193-10-BK
2140.49	AC/DC Current Probe Model J93-BK

POWER QUALITY ANALYZERS, METERS & LOGGERS

Optional Accessories

SENSOR TYPE	CURRENT RANGE		ACCURACY (TYPICAL)	TYPICAL ERROR ON ϕ AT 50/60HZ	MAX CONDUCTOR SIZE	USED WITH MODEL	LIMITED RANGE IF USED WITH MODEL
 <p>MiniFlex® MA193 *</p>	100mA to 3000A _{AC}		±1%	0°	2.75" (70mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
 <p>MR193</p> <p>Battery operated</p>	1 to 1000A _{AC} 1 to 1300A _{DC}		±2.5%	-0.80°	1.6" (41mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
 <p>SR193</p>	1 to 1200A _{AC}		±0.3%	+0.2°	2.05" (52mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
 <p>AmpFlex® 193 *</p> <p>24" or 36" sensor</p>	100mA to 12,000A _{AC}		±1%	0°	7.64" (190mm) or 11.46" (290mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
 <p>MN93</p>	0.5 to 240A _{AC}		±1%	+0.8°	0.78" (20mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
 <p>MN193</p>	100A	200mA to 120A _{AC}	±1%	+0.75°	0.78" (20mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
	5A	5mA to 6A _{AC}	±1%	+1.7°			

SENSOR TYPE	CURRENT RANGE		ACCURACY (TYPICAL)	TYPICAL ERROR ON Φ AT 50/60HZ	MAX CONDUCTOR SIZE	USED WITH MODEL	LIMITED RANGE IF USED WITH MODEL
SL261 **  Battery operated	100A	5 to 100A _{AC/DC}	±4%	±0.5°	0.46" (11.8mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
	10A	50mA to 10A _{AC/DC}	±3%	±1°			
J93  Battery operated	50 to 3500A _{AC} 50 to 5000A _{DC}		±1%	±1°	2.83" (72mm) Busbar: 5 x 1.69" (127 x 43mm)	PEL 102 PEL 103 8333 8336 8435	N/A

* Maximum current reduced by a factor of 2 for 400Hz fundamental frequency.

Note: Refer to the power meter's product user manual for complete specifications.

** AC/DC Current Probe BNC Adapter
for Model SL261 only
Catalog #2140.40



CATALOG NO.	DESCRIPTION
1201.51	AC/DC Current Probe Model SL261 (BNC)
2140.28	AC Current Probe Model MR193-BK
2140.32	AC Current Probe Model MN93-BK
2140.33	AC Current Probe Model SR193-BK
2140.34	AmpFlex® Sensor 24" Model 193-24-BK
2140.35	AmpFlex® Sensor 36" Model 193-36-BK
2140.36	AC Current Probe Model MN193-BK
2140.48	MiniFlex® Sensor 10" Model MA193-10-BK
2140.49	AC/DC Current Probe Model J93-BK

DataView®

Data Analysis and Reporting Software for Power Quality Meters

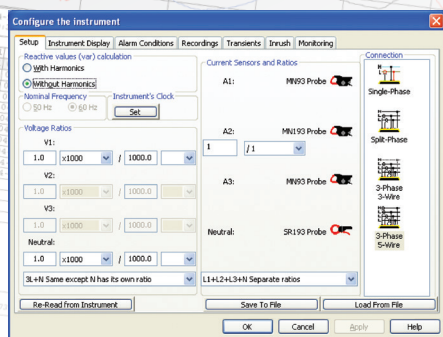


Configure all functions of the Power Quality Meters

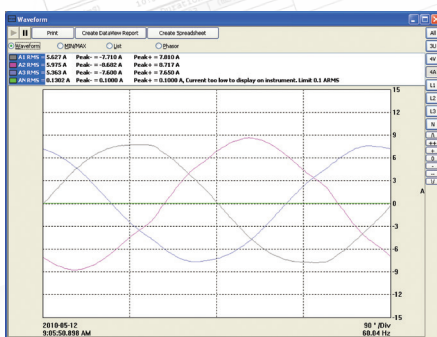


- Display and analyze real-time data on your PC
- Configure functions and parameters from your PC
- Customize views, templates and reports to your exact needs
- Create and store a complete library of configurations that can be uploaded as needed
- Zoom in and out and pan through sections of the graph to analyze the data
- Download, display and analyze recorded data
- Display waveforms, trend graphs, harmonic spectrums, text summaries, transients, event logs and stored alarms
- Print reports using standard or custom templates you design
- Free updates are available on our website www.aemc.com

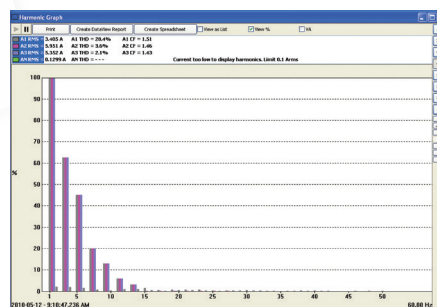
Typical DataView® Functional, Digital & Graphical Displays



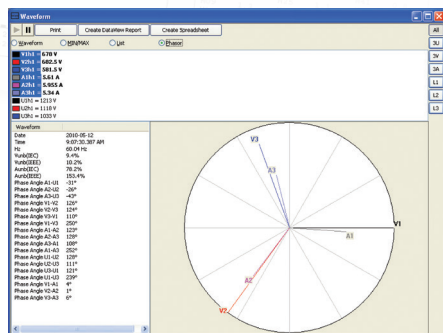
Clear and easy setup of all functions from one tabbed dialog box.



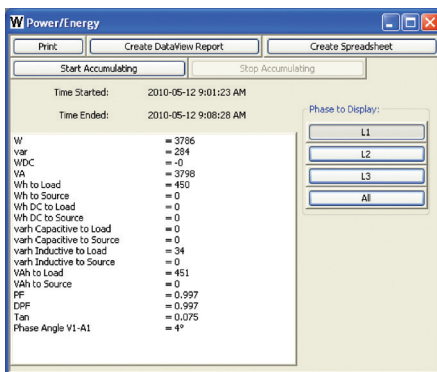
Display real-time waveforms by phase, parameter or total.



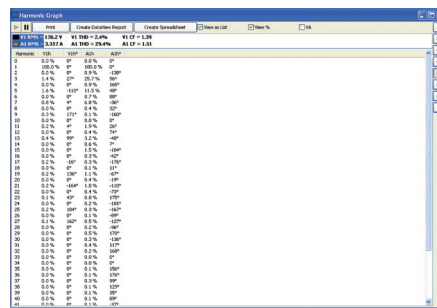
Display all harmonics from 1st to 50th in bargraph form for voltage, current and power.



Display real-time Phasor diagrams. Includes unbalance for both voltage and current.



Display power and energy parameters – both instantaneous and total.



Display harmonics in a text table from harmonic 0 (DC) through the 50th.