

PowerPad® III Model 8333

SD card for trend recordings, and up to 12 snapshot, 51 captured transients and 4000 alarm events



Four voltage and three current input terminals

► SPECIFICATIONS

MODEL	8333
Input Terminals	4 voltage / 3 current
Inputs	3 voltage / 3 current
Voltage (TRMS AC+DC)	2 to 1000V
Voltage Ratio	up to 500kV
Current (TRMS AC+DC)	MN93: 500mA to 200Aac; MN193: 0.005 to 100Aac SR193 Clamp: 1A to 1000Aac AmpFlex® or MA193 Clamps: 100mA to 10000Aac MR193 Clamp: 1A to 1300Aac/dc SL261 Clamp: 50mA to 100Aac/dc J93: 50 to 3500Aac/dc Current Ratio: up to 60kA
Frequency (Hz)	40 to 69Hz
Distribution Systems	1P 2W, 1P 3W, 2P 2W, 2P 3W, 2P 4W, 3P 3W, 3P 4W, Split-Phase 2W & 3W & 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 51
Flicker (Pst)	Yes
Unbalance	Yes
Recording	Yes
Alarm Mode	10 types; 4000 recorded
Peak	Yes
Phasor Display	Automatic
Display	Color ¼ VGA TFT screen (320 x 240) diagonal 148mm
Snapshots	12
Electrical Safety	IEC 61010, 1000V CAT III / 600V CAT IV
Protection	IP53
Languages	more than 27
Communication Interface	USB
Battery Life	>13 hrs, 25 hrs in Record Mode
Power Supply	9.6V NiMH rechargeable battery pack (included) External AC supply: 110/230VAC ±10% (50/60Hz)
Dimensions / Weight	9.8 x 7.8 x 2.6" (240 x 180 x 55mm) / 4.3 lbs (1.95kg)



► PRODUCT INCLUDES

8333 Kit

Three current probes, four black 10 ft voltage leads, four black alligator clips, twelve color-coded input ID markers, NiMH battery, 110/240V power adapter with US power cord, carrying bag, soft carrying pouch, and USB stick supplied with product user manual and DataView® software.



► OPTIONAL ACCESSORIES

AmpFlex® 193 flexible current probe (6500A)
Color-coded, 24" or 36", rated 600V CAT IV



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



* Registration must take place within 30 days of purchase

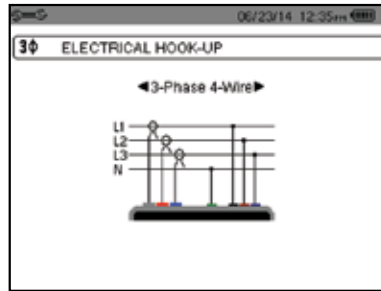
PowerPad® III Model 8333

Large Color Functional Displays

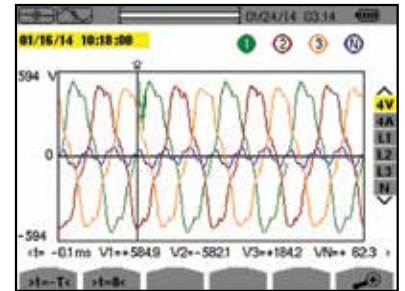
FEATURES

- True RMS single-, two- and three-phase measurements at 256 samples/cycle, plus DC
- Real-time color waveforms
- Easy-to-use on-screen setup
- Automatic current probe recognition and scaling
- True RMS voltage and current measurement
- Measures DC volts, amps and power
- Displays and captures voltage, current and power harmonics to 50th order, including direction, in real-time
- Captures transients down to 1/256th of a cycle
- Stores comprehensive data base of logged data
- Phasor diagram display
- VA, var and W per phase and total
- kVAh, varh and kWh per phase and total
- Neutral current calculated and displayed for three-phase
- Transformer K-Factor display
- Power Factor, displacement PF display
- Captures up to 51 transients
- Short term flicker display
- Phase unbalance (current and voltage)
- Harmonic Distortion (total and individual) from 1st to 50th
- Alarms, surges and sags
- Screen snapshot function captures waveforms or other information on the display
- Includes FREE DataView® software for configuring data storage, real-time display, analysis and report generation

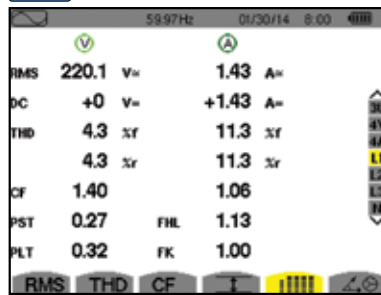
Configuration



Transient Mode



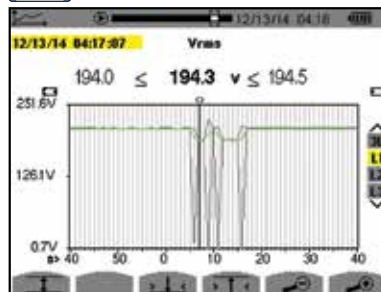
Power and Energy Mode



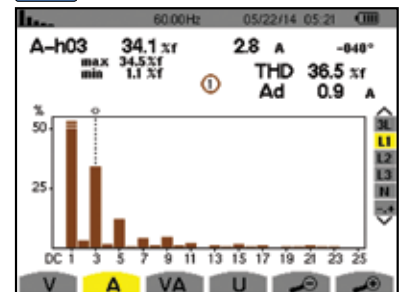
Phasor Diagram



Recording Mode



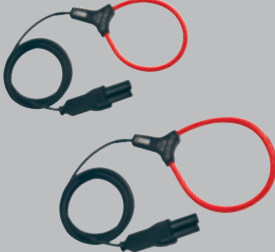


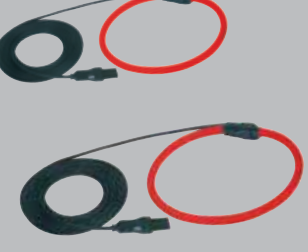

Harmonics Mode







CATALOG NO.	DESCRIPTION
2136.10	PowerPad® III Model 8333 (no probes)
2136.11	PowerPad® III Model 8333 w/3 193-24-BK AmpFlex® Sensors
2136.12	PowerPad® III Model 8333 w/3 MN193-BK Probes
Accessories (Optional)	
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
2140.50	MiniFlex® Sensor 14" Model MA193-14-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	CATALOG NUMBER
MiniFlex® MA193-BK *  10" or 14" sensor	100mA to 3000A _{AC}	±1%	0°	2.75" (70mm)	PEL 102 PEL 103 PEL 105 8333 8336	8220 8230 8435	2140.48 (10" sensor)
							2140.50 (14" sensor)
MR193-BK  Battery operated	1 to 1000A _{AC} 1 to 1300A _{DC}	±2.5%	-0.80°	1.6" (41mm)	8220 8230 PEL 102 PEL 103 PEL 105 8333 8336 8435	N/A	2140.28
SR193-BK 	1 to 1200A _{AC}	±0.3%	0.2°	2.05" (52mm)	8220 8230 PEL 102 PEL 103 PEL 105 8333 8336 8435	N/A	2140.33
AmpFlex® 193-BK *  24" or 36" sensor	100mA to 12,000A _{AC}	±1%	0°	7.64" (190mm) or 11.46" (290mm)	PEL 102 PEL 103 PEL 105 8333 8336	8220 8230 8435	2140.34 (24" sensor)
							2140.35 (36" sensor)
AmpFlex® A196  24" sensor IP67	10 to 10,000A _{AC}	±2%	0°	5.73" (145mm)	PEL 105 8435	N/A	2140.75 (24" sensor)

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

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	CATALOG NUMBER
MN93-BK 	0.5 to 240Aac		±1%	0.8°	0.78" (20mm)	PEL 102 PEL 103 PEL 105 8333 8336 8435	8220 8230	2140.32
MN193-BK 	100A	200mA to 120Aac	±1%	0.75°	0.78" (20mm)	8220 8230 PEL 102 PEL 103 PEL 105 8333 8336 8435	N/A	2140.36
	5A	5mA to 6Aac	±1%	1.7°				
SL261 **  Battery operated	100A	5 to 100Aac/dc	±4%	±0.5°	0.46" (11.8mm)	8220 8230 PEL 102 PEL 103 PEL 105 8333 8336 8435	N/A	1201.51
	10A	50mA to 10Aac/dc	±3%	±1°				
J93  Battery operated	50 to 3500Aac 50 to 5000Adc		±1%	±1°	2.83" (72mm) Busbar: 5 x 1.69" (127 x 43mm)	PEL 102 PEL 103 PEL 105 8333 8336 8435	N/A	2140.49

Note: Refer to the Power Meter's product user manual for complete specifications.

All current sensors can be used with the Models 8435 and PEL 105. However, only the A196 flexible sensors are waterproof.

** 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)
2140.37	Adapter – US 110V Power Adapter (eliminates need for batteries) 8220 & 8230 only
2140.28	AC/DC 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
2140.50	MiniFlex® Sensor 14" Model MA193-14-BK
2140.75	AmpFlex® Sensor 24" (waterproof - IP67) Model A196-24-BK

DataView®

Data Analysis and Reporting Software



Configure all functions of the Power & Energy Loggers

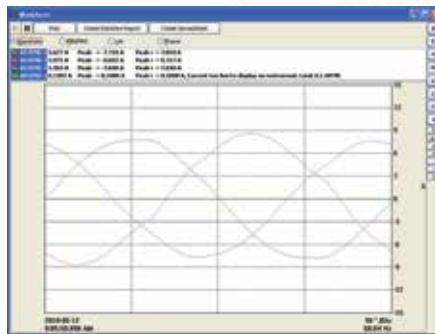


- Display and analyze real-time data on your PC
- Configure functions and parameters from your PC
- Customize views, templates and reports to your exact needs
- Create and store a complete library of configurations that can be uploaded as needed
- Zoom in and out and pan through sections of the graph 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



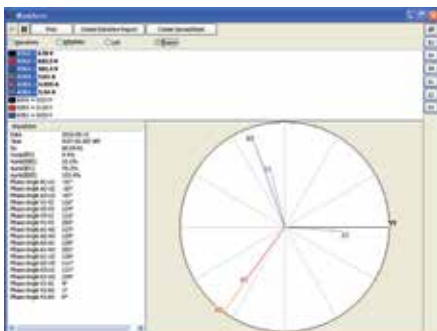
Clear and easy setup of all functions from one tabbed dialog box.



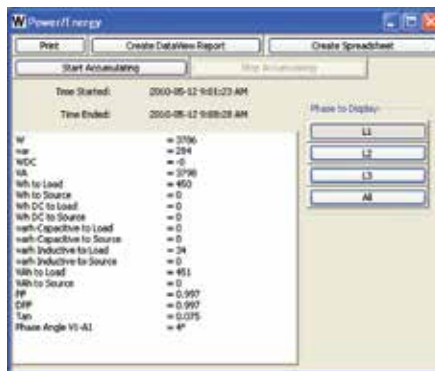
Display real-time waveforms by phase, parameter or total.



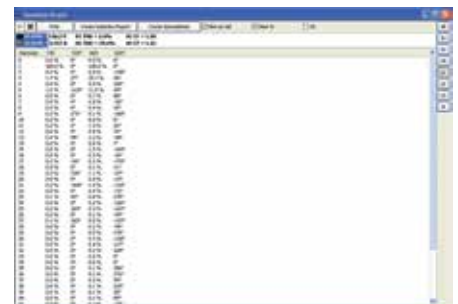
Display all harmonics from 1st to 50th in bargraph form for voltage, current and power.



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.