

PowerPad® III Model 8333

Memory partitioned 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 200A _{AC} ; MN193: 0.005 to 100A _{AC} SR193 Clamp: 1A to 1000A _{AC} AmpFlex® or MA193 Clamps: 100mA to 10000A _{AC} MR193 Clamp: 1A to 1300A _{AC/DC} SL261 Clamp: 50mA to 100A _{AC/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, 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 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: 110/230V _{AC} ±10% (50/60Hz)
Dimensions / Weight	9.8 x 7.8 x 2.6" (240 x 180 x 55mm) / 4.3 lbs (1.95kg)



PRODUCT INCLUDES

8333 Kit

Three current probes (AmpFlex® example shown), 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 (See pages 24 and 25 for optional current probes).



OPTIONAL ACCESSORIES

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



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



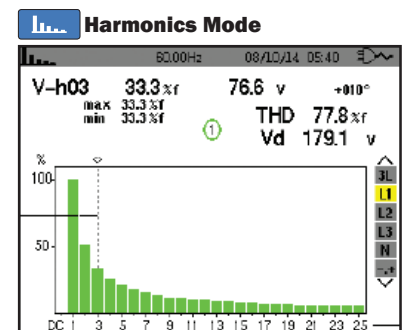
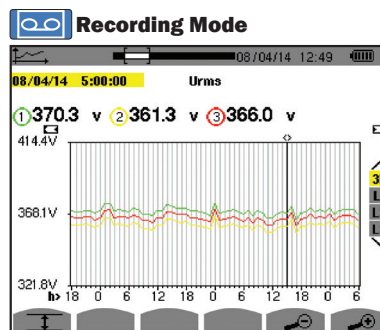
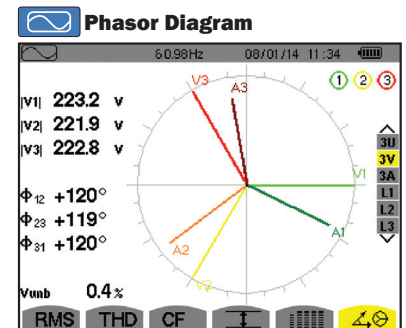
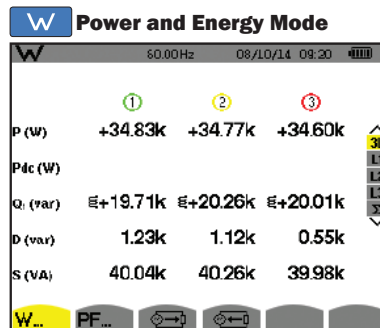
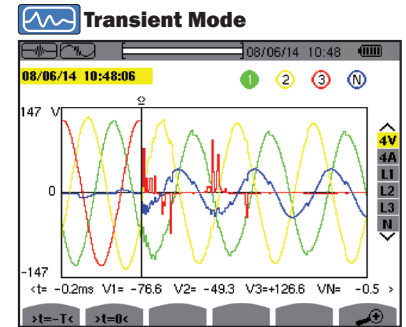
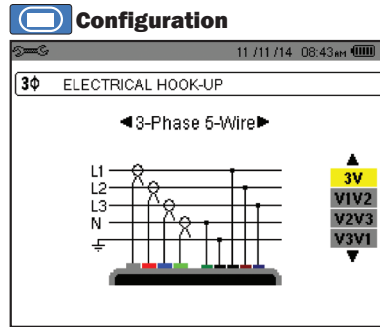
* Registration must take place within 30 days of purchase

PowerPad® III Model 8333

Large Color Functional Displays

► FEATURES




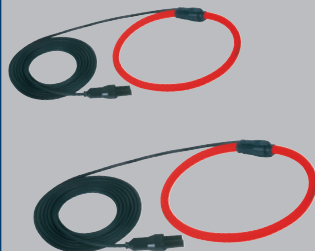


- True RMS single-, two- and three-phase measurements at 256 samples/cycle, plus DC
- Real-time color waveforms
- Easy-to-use on-screen setup
- Predetermined or user selectable scaling (probe dependent)
- True RMS voltage and current measurement
- Measures DC volts, amps and power
- Displays and captures voltage, current and power harmonics to 50th order, including direction, in real-time
- Captures transients down to 1/256th of a cycle (65/sec)
- Stores comprehensive database of logged data
- Phasor diagram display
- Peak voltage and current
- Nominal frequency from 40 to 70Hz
- VA, VAR and W per phase and total
- kVAh, varh and kWh per phase and total
- Neutral current display for three-phase
- Crest factors for current and voltage
- Calculation of the Factor K for transformers
- 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
- Records date and characteristics of disturbances
- Screen snapshot function captures waveforms or other information on the display
- Optically isolated USB communication port
- Includes FREE DataView® software for configuring data storage, real-time display, analysis and report generation





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)	
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
MiniFlex® MA193 * 	100mA to 3000A _{AC}		±1%	0°	2.75" (70mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
MR193  Battery operated	1 to 1000A _{AC} 1 to 1300A _{DC}		±2.5%	-0.80°	1.6" (41mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
SR193 	1 to 1200A _{AC}		±0.3%	+0.2°	2.05" (52mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
AmpFlex® 193 *  24" or 36" sensor	100mA to 12,000A _{AC}		±1%	0°	7.64" (190mm) or 11.46" (290mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
MN93 	0.5 to 240A _{AC}		±1%	+0.8°	0.78" (20mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
MN193 	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



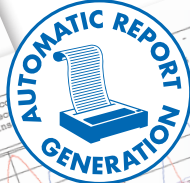
CATALOG NO.	DESCRIPTION
1201.51	AC/DC Current Probe Model SL261 (BNC)
2140.28	AC Current Probe Model MR193-BK
2140.32	AC Current Probe Model MN93-BK
2140.33	AC Current Probe Model SR193-BK
2140.34	AmpFlex® Sensor 24" Model 193-24-BK
2140.35	AmpFlex® Sensor 36" Model 193-36-BK
2140.36	AC Current Probe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

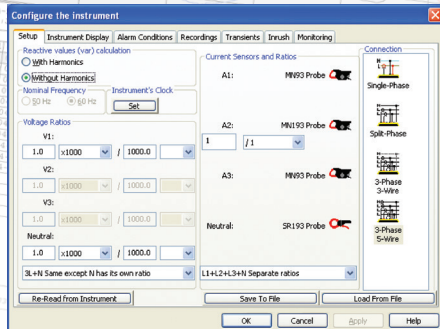


Configure all functions of the Power Quality Meters

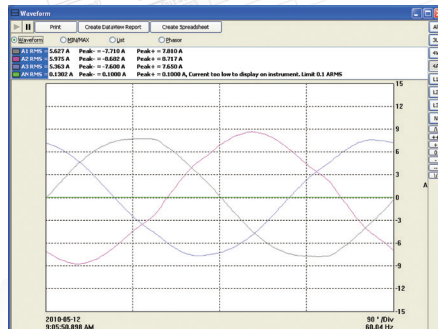


- Display and analyze real-time data on your PC
- Configure functions and parameters from your PC
- Customize views, templates and reports to your exact needs
- Create and store a complete library of configurations that can be uploaded as needed
- Zoom in and out and pan through sections of the graph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

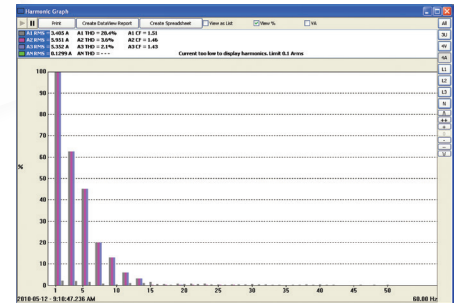
Typical DataView® Functional, Digital & Graphical Displays



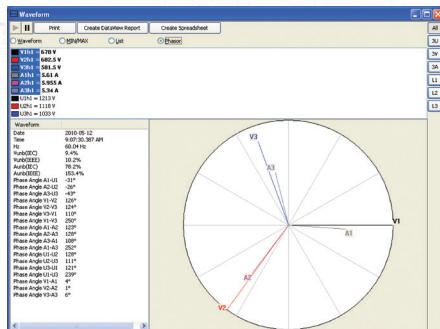
Clear and easy setup of all functions from one tabbed dialog box.



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.

W	= 3706
var	= 284
WDC	= -0
VA	= 3798
Wh to Load	= 450
Wh to Source	= 0
Wh DC to Source	= 0
varh Capacitive to Load	= 0
varh Inductive to Source	= 34
varh Inductive to Load	= 451
VAh to Load	= 0
VAh to Source	= 0.997
PF	= 0.997
DPF	= 0.997
Tan	= 0.075
Phase Angle V1-A1	= 4°

Display power and energy parameters – both instantaneous and total.

Harmonic	V1 (%)	I1 (%)	P1 (%)
1	100.0%	100.0%	100.0%
2	0.0%	0.0%	0.0%
3	0.0%	0.0%	0.0%
4	0.0%	0.0%	0.0%
5	0.0%	0.0%	0.0%
6	0.0%	0.0%	0.0%
7	0.0%	0.0%	0.0%
8	0.0%	0.0%	0.0%
9	0.0%	0.0%	0.0%
10	0.0%	0.0%	0.0%
11	0.0%	0.0%	0.0%
12	0.0%	0.0%	0.0%
13	0.0%	0.0%	0.0%
14	0.0%	0.0%	0.0%
15	0.0%	0.0%	0.0%
16	0.0%	0.0%	0.0%
17	0.0%	0.0%	0.0%
18	0.0%	0.0%	0.0%
19	0.0%	0.0%	0.0%
20	0.0%	0.0%	0.0%
21	0.0%	0.0%	0.0%
22	0.0%	0.0%	0.0%
23	0.0%	0.0%	0.0%
24	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%
26	0.0%	0.0%	0.0%
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28	0.0%	0.0%	0.0%
29	0.0%	0.0%	0.0%
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31	0.0%	0.0%	0.0%
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39	0.0%	0.0%	0.0%
40	0.0%	0.0%	0.0%
41	0.0%	0.0%	0.0%
42	0.0%	0.0%	0.0%
43	0.0%	0.0%	0.0%
44	0.0%	0.0%	0.0%
45	0.0%	0.0%	0.0%
46	0.0%	0.0%	0.0%
47	0.0%	0.0%	0.0%
48	0.0%	0.0%	0.0%
49	0.0%	0.0%	0.0%
50	0.0%	0.0%	0.0%

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

