

### 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 <sub>AC</sub> ; MN193: 0.005 to 100A <sub>AC</sub> SR193 Clamp: 1A to 1000A <sub>AC</sub> AmpFlex® or MA193 Clamps: 100mA to 10000A <sub>AC</sub> MR193 Clamp: 1A to 1300A <sub>AC/DC</sub> SL261 Clamp: 50mA to 100A <sub>AC/DC</sub> 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 <sup>st</sup> to 50 <sup>th</sup> , 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 <sub>AC</sub> ±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



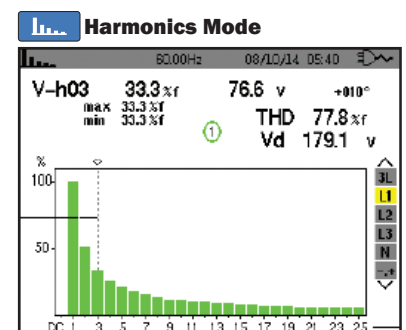
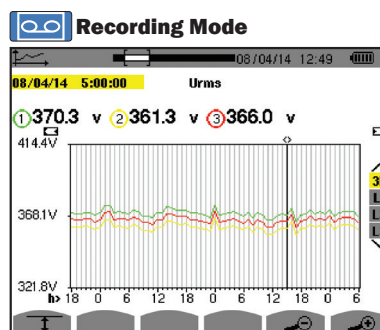
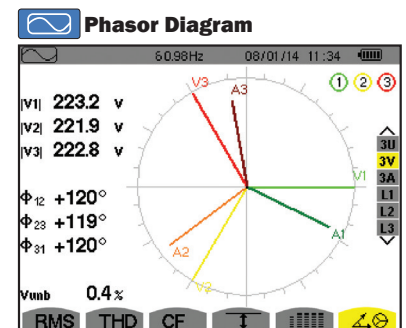
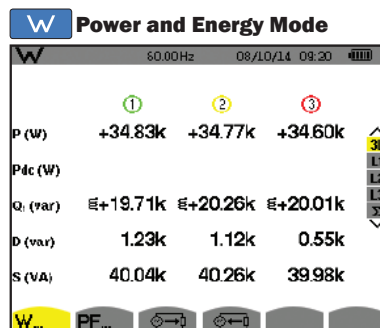
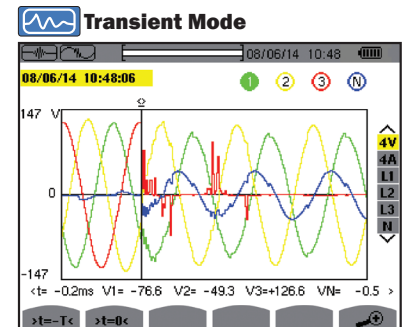
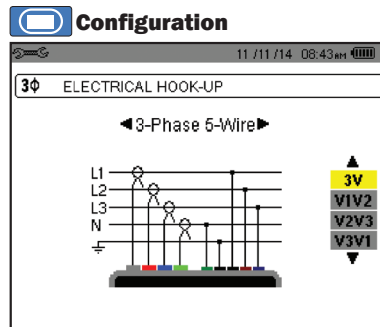
\* Registration must take place within 30 days of purchase

### PowerPad® III Model 8333

#### Large Color Functional Displays

##### ► FEATURES




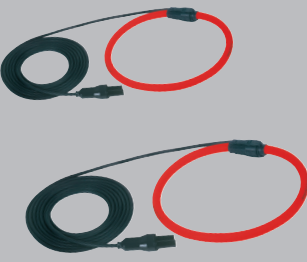


- True RMS single-, two- and three-phase measurements at 256 samples/cycle, plus DC
- Real-time color waveforms
- Easy-to-use on-screen setup
- Predetermined or user selectable scaling (probe dependent)
- True RMS voltage and current measurement
- Measures DC volts, amps and power
- Displays and captures voltage, current and power harmonics to 50<sup>th</sup> order, including direction, in real-time
- Captures transients down to 1/256<sup>th</sup> 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 1<sup>st</sup> to 50<sup>th</sup>
- 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
<b>Accessories (Optional)</b>	
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 $\phi$ AT 50/60HZ	MAX CONDUCTOR SIZE	USED WITH MODEL	LIMITED RANGE IF USED WITH MODEL
<b>MiniFlex® MA193 *</b> 	100mA to 3000A <sub>AC</sub>		±1%	0°	2.75" (70mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
<b>MR193</b>  Battery operated	1 to 1000A <sub>AC</sub> 1 to 1300A <sub>DC</sub>		±2.5%	-0.80°	1.6" (41mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
<b>SR193</b> 	1 to 1200A <sub>AC</sub>		±0.3%	+0.2°	2.05" (52mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
<b>AmpFlex® 193 *</b>  24" or 36" sensor	100mA to 12,000A <sub>AC</sub>		±1%	0°	7.64" (190mm) or 11.46" (290mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
<b>MN93</b> 	0.5 to 240A <sub>AC</sub>		±1%	+0.8°	0.78" (20mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
<b>MN193</b> 	<b>100A</b>	200mA to 120A <sub>AC</sub>	±1%	+0.75°	0.78" (20mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
	<b>5A</b>	5mA to 6A <sub>AC</sub>	±1%	+1.7°			

SENSOR TYPE	CURRENT RANGE		ACCURACY (TYPICAL)	TYPICAL ERROR ON $\Phi$ AT 50/60HZ	MAX CONDUCTOR SIZE	USED WITH MODEL	LIMITED RANGE IF USED WITH MODEL
<b>SL261 **</b>  Battery operated	<b>100A</b>	5 to 100A <sub>AC/DC</sub>	±4%	±0.5°	0.46" (11.8mm)	PEL 102 PEL 103 8333 8336	8220 8230 8435
	<b>10A</b>	50mA to 10A <sub>AC/DC</sub>	±3%	±1°			
<b>J93</b>  Battery operated	50 to 3500A <sub>AC</sub> 50 to 5000A <sub>DC</sub>		±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



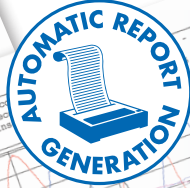
CATALOG NO.	DESCRIPTION
1201.51	AC/DC Current Probe Model SL261 (BNC)
2140.28	AC Current Probe Model MR193-BK
2140.32	AC Current Probe Model MN93-BK
2140.33	AC Current Probe Model SR193-BK
2140.34	AmpFlex® Sensor 24" Model 193-24-BK
2140.35	AmpFlex® Sensor 36" Model 193-36-BK
2140.36	AC Current Probe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

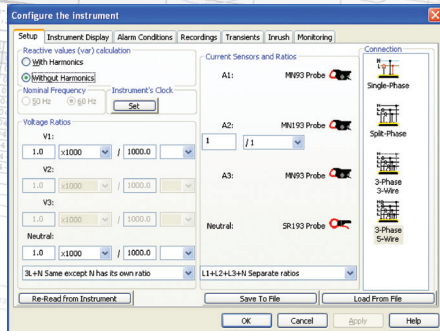


### Configure all functions of the Power Quality Meters

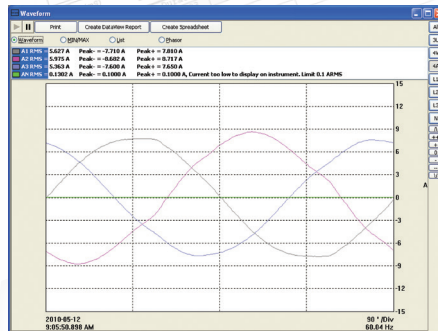


- Display and analyze real-time data on your PC
- Configure functions and parameters from your PC
- Customize views, templates and reports to your exact needs
- Create and store a complete library of configurations that can be uploaded as needed
- Zoom in and out and pan through sections of the graph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

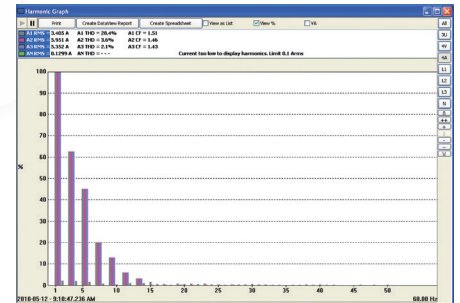
### Typical DataView® Functional, Digital & Graphical Displays



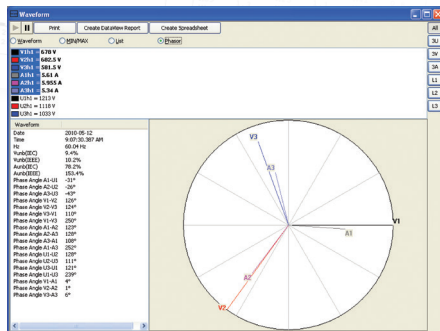
Clear and easy setup of all functions from one tabbed dialog box.



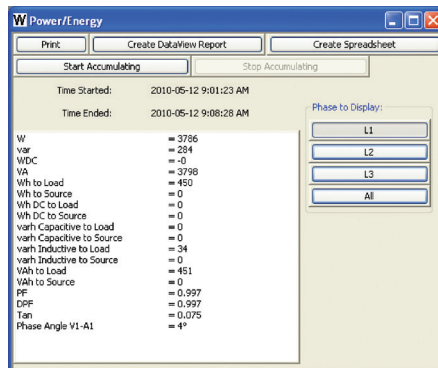
Display real-time waveforms by phase, parameter or total.



Display all harmonics from 1<sup>st</sup> to 50<sup>th</sup> 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.

Harmonic	V1 (%)	V2 (%)	V3 (%)	I1 (%)	I2 (%)	I3 (%)	P (%)
1	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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