

# POWER QUALITY ANALYZERS, METERS & LOGGERS

## THREE-PHASE POWER QUALITY ANALYZER

### POWERPAD<sup>®</sup> III MODEL 8436

Supplied with an 8GB SD card for storing up to 4 2GB trend recordings



\* Registration must take place within 30 days of purchase



Four current and four voltage input terminals

### SPECIFICATIONS

MODEL	8436
<b>ELECTRICAL</b>	
Sampling Frequency	256 samples/cycle
Data Storage	SD card for trend recording; Additional separate 12.5MB partitioned memory for snapshots, transient/inrush & alarms
Voltage (TRMS)	Phase-to-Phase: 2000V Phase-to-Neutral: 1000V Voltage Ratio: up to 500kV
Current (TRMS)	MN Clamp: 0 to 6A/120A or 0 to 240A SR Clamp: 0 to 1200A MR Clamp: 0 to 1000Aac, 0 to 1400Adc MiniFlex <sup>®</sup> : 10 to 3000A AmpFlex <sup>®</sup> : 10 to 10kA(1) SL261 Clamp: 50mA to 100Aac/dc J93: 50 to 3500Aac/dc Current Ratio: 10mA to 50kA
Frequency (Hz)	40 to 69Hz
Other Measurements	kW, kvar, kVA, PF, DPF, kWh, kvarh, kVAh, K-Factor, Flicker
Harmonics	1st to 50th, Direction, Sequence
Power Source	9.6V NiMH rechargeable battery pack (included) 110V to 1000V DC to 400Hz
Battery Life	≥8 hours with display on; ≤35 hours with display off (record mode)
<b>MECHANICAL</b>	
Communication Port	Optically isolated USB
Display	¼ VGA (320 x 240) color LCD display with adjustable brightness & contrast
Dimensions	10.6 x 9.8 x 7.1" (270 x 250 x 180mm)
Weight	8.2lbs (3.7kg) with batteries
Safety Rating	EN 61010, 600V CAT IV(2), 1000V CAT III, Pollution Degree 2

<sup>(2)</sup> When used with SR193 or AmpFlex<sup>®</sup> probes.  
600V CAT III with MN193 or MR193 probes.

### KIT OPTION INCLUDES

#### 8436 KIT Cat. #2136.44

Extra large tool bag, accessory pouch, 5ft USB cable, five 10ft black voltage leads with alligator clips, 110V US power cord, line power adapter 110 1000V DC to 400Hz, four water-tight AmpFlex<sup>®</sup> 196A-24-BK, NiMH battery, SD card, twelve color-coded input ID markers, quick start guide, and a USB drive containing DataView<sup>®</sup> software and user manual.



### 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)
- 65µs sample rate
- Direct measurement of neutral current & voltage
- Record and display trend data as fast as once per second for one month for up to 25 variables
- Transient detection on all V and I inputs (up to 210)
- Selectable PT and CT ratios
- Inrush current measurement
- Calculation of Crest Factors for V and A
- Calculation of the K-Factor for transformers
- Calculation of short and long term flicker and three-phase voltage unbalance
- Measures harmonics (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
- 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 Trend Recording memory; Alarm, Snapshot and Transient/Inrush memories are separate
- Measurement of energy kVAh, kvarh & kWh
- The Max and Min RMS measurements are calculated every half-period
- Includes DataView<sup>®</sup> software for configuring, real-time display, analysis and report generation



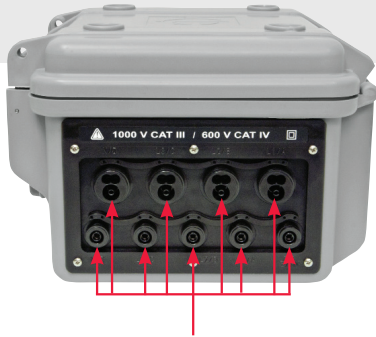
Technical Assistance (800) 343-1391

www.aemc.com

# Large Color Functional Displays

## INSTALLATION OF THE LEADS AND CURRENT SENSORS

Color-coded ID markers are supplied with the PowerPad® III to identify the leads and input terminals.



The voltage and current inputs, as well as the power cord connection are constructed with screw on, watertight connectors rated to IP67.



Cat. #2140.73  
Lead & Alligator Clip



Cat. #5000.63  
Power Cord



Cat. #2140.75  
(For Cat. #2136.44 only)  
AmpFlex® Sensor

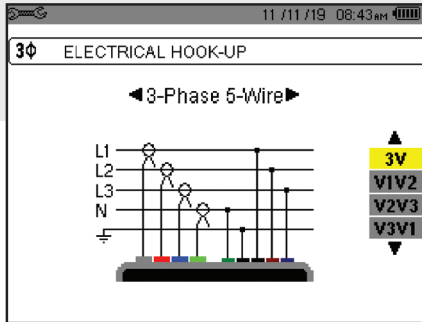


Cat. #5000.89  
Line Power  
Adapter

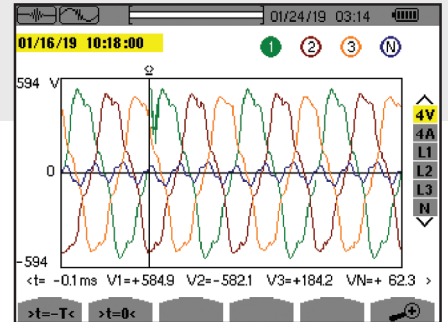


Cat. #2137.82 (Optional)  
Pole Mounting Kit

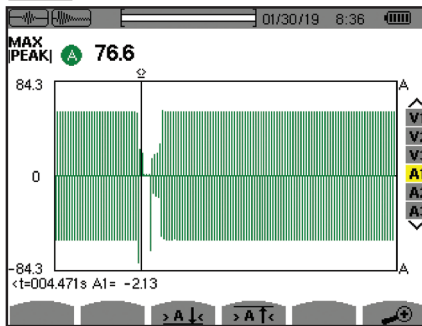
## Configuration



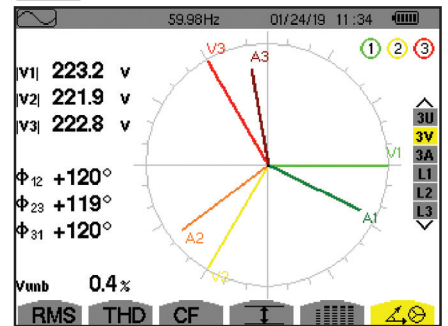
## Transient Mode



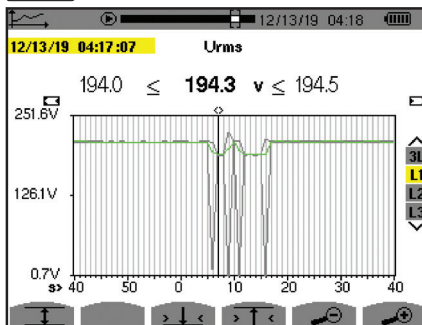
## Inrush Peak



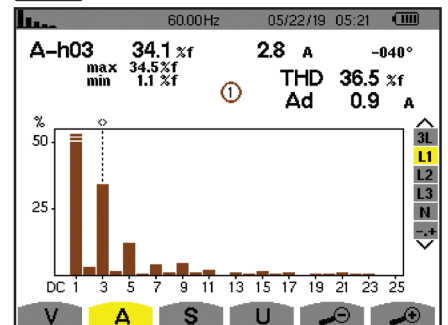
## Phasor Diagram



## Trend Analysis



## Harmonics Mode



CATALOG NO.	DESCRIPTION
2136.43	PowerPad® III Model 8436 (No Sensors - Waterproof IP67)
2136.44	PowerPad® III Model 8436 w/4 196A-24-BK (AmpFlex® - Waterproof IP67)
<b>Accessories and Replacement Parts (Optional)</b>	
2133.73	Extra Large Classic Tool Bag
2137.82	Pole Mounting Kit
2140.19	Replacement – Battery 9.6V NiMH
2140.45	Replacement – Set of 12, Color-coded Input ID Markers
2140.73	Lead – One 10ft (3M) Black Lead (Waterproof cap) [Rated 1000V CATIV] & one Black Alligator Clip (Rated 1000V CAT IV, 15A,UL)
2140.75	AmpFlex® Sensor 24" (waterproof - IP67) Model 196A-24-BK
5000.43	Probe - Set of 2, Color-coded (Red/Black) Magnetized Voltage Probes [Rated 600V CATIV, 1000V CATIII]
5000.63	Power Cord 110V for use only with Models 8435 & 8436
5000.77	Cable Reeling Box
5000.89	Line Power Adapter 110-1000V DC to 400Hz