

# Energy Platform EP1

## Measured Parameters

Volts, Amps, Watts, Volt-Amperes, Volt-Amperes Reactive, TruePower Factor, Displacement Power Factor Demand, Energy, Forward Energy, Reverse Energy Harmonics & Interharmonics Per IEC 61000-4-7 THD/Harmonic Spectrum, TID/Interharmonic Spectrum (V, I, W) to 63rd Crest Factor, K Factor, Transformer Derating Factor, Telephone Interference Factor

## Measurement Specifications

(4) Voltage Channels, 1-600 Vrms, AC/DC, 0.1% rdg + 0.05% FS, 256 s/c, 16 bit ADC  
CH A, B, C Single Reference, Ch D Differential.  
(4) Current Channels, 1-6000 Arms, CT Dependent, AC/DC, 256 s/c, 0.1% rdg + CTs, 16 bit ADC  
W, VA, VAR: 0.2% rdg, +/- 0.1% FS. Per phase + CT's  
Frequency Range: 45-65 Hz, PLL, 10 mHz resolution  
Vthd, Ithd: 1% rdg, +/- 0.05% FS. Per channel + CT's

## General Specifications

Display: 1/4 VGA Color touch interface  
AC Power Supply/Charger: 90-264VAC, 47-63Hz; 20W max  
2 hour rechargeable battery.  
Size: (HxWxD): 12" x 2.5" x 8" (30cm x 6.4cm x 20.3cm)  
Weight: 3.8 lbs (1.8kg)  
Operating temperature: 0 to 50 degrees C  
Storage temperature: -20 to 55 degrees C  
Humidity: to 98% non-condensing  
Memory options: 4 gigabyte removable Compact Flash Card

## Languages

English, Spanish, German, Swedish, French, Italian, Finnish, Polish, Chinese (Simplified and Traditional), Japanese, Korean, Thai

## Optional Accessories

Energy Platform packages include everything you need to get started and include a CF memory card, EPRW software, voltage cables, clamp or Flex CT's. Other accessories available separately include:

### Dran-View Software

Dran-View PRO  
Dran-View Enterprise

### Clamp-On Probes

Model TR2501B - 100ma - 1.2A  
Model TR-2510B - 0.1A - 10A  
Model TR2550B - 1A - 100A  
Model TR2500B - 10A - 500A

### Flexible Current Probes - Available in 24", 36", and 48"

DranFlex 3000XLB 1 Phase 30/300/3000A  
DranFlex 6000XLB-1 Phase 60/600/6000A  
DranFlex 30003XLB-3 Phase 30/300/3000A  
DranFlex 60003XLB-3 Phase 60/600/6000A

### Flexible Current Probes - Available in 6", 8", 12"

DranFlex 300 MH-1 Phase 3/30/300A

### DC/AC Hall Effect CT's

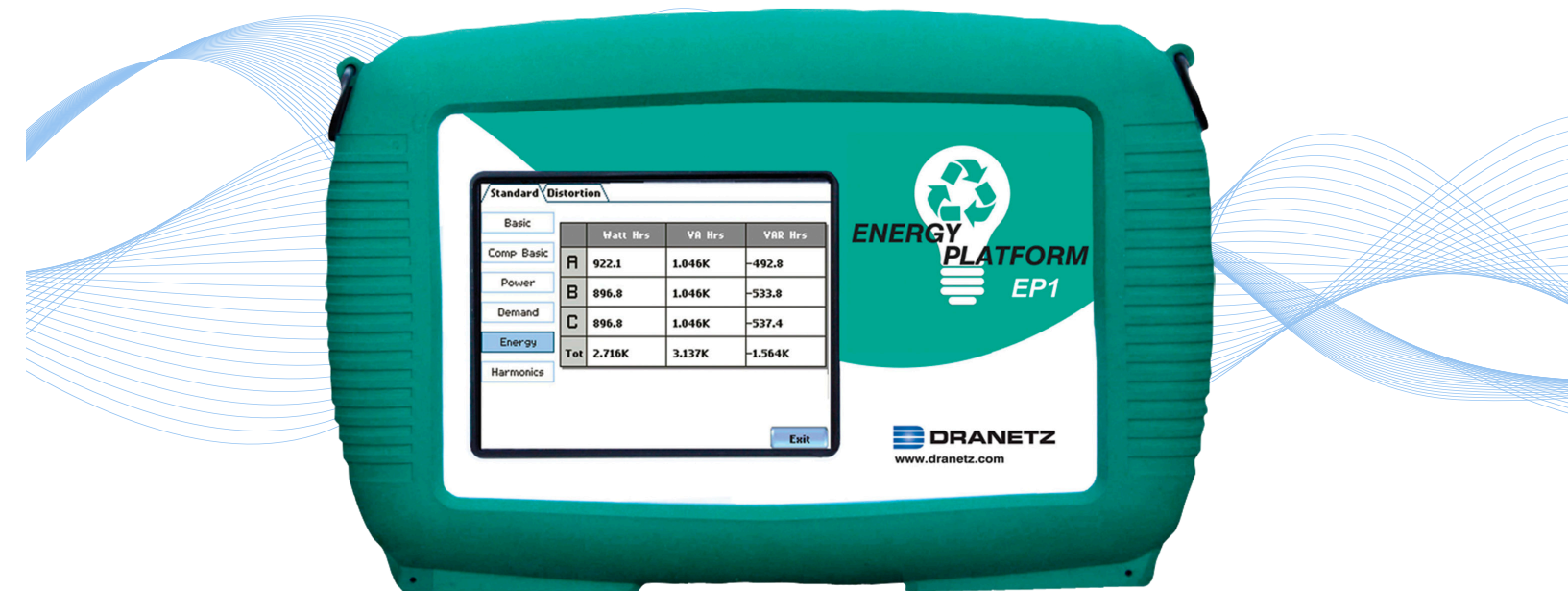
PR150/SP1/SP2-150A AC/DC, AC or 9V battery power  
PR1500/SP7/SP8-1500A AC/DC, AC or 9V battery power

### Power supplies sold separately

BP-PX5 - Field Replacement Battery Pack  
SCC-4300 - Soft Carrying Case  
RSC-PX5 - Rugged Shipping Container  
ENCL-HH - Weather Resistant Enclosure  
Flash Reader-USB - US CF Memory Card Reader

# Energy Platform EP1

*Handheld Electrical Energy and Power Demand Analyzer*



Advanced Demand, Energy, Harmonics, and Power Analysis

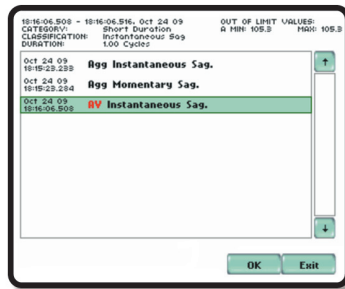
Energy Platform EP1 Packages			
3 CT's with Dran-View Pro for EP1		4 CT's without Dran-View	
10A Clamp	DBEP10-3DV	10A Clamp	EP10-4
100A Clamp	DBEP550-3DV	100A Clamp	EP550-4
500A Clamp	DBEP500-3DV	500A Clamp	EP500-4
3000A Flex	DBEPFLEX3K-3DV	3000A Flex	EPFLEX3K-4
6000A Flex	DBEPFLEX6K-3DV	6000A Flex	EPFLEX6K-4

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## Power Surveys

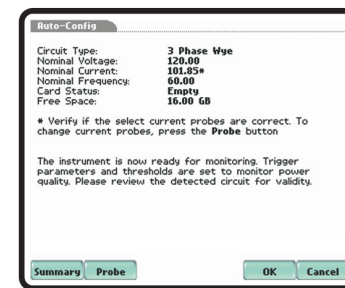
The Energy Platform EP1 measures more than 50 electrical parameters, including the traditional power parameters (V, I, W, PF, etc.), Demand/Energy, harmonics (Thd, TID, individual harmonics) and advanced parameters such as Forward and Reverse Energy. Most parameters can be metered in real time, trended and triggered in order to know when your limits have been exceeded, giving you a chronological summary of triggers that occurred while monitoring.

Advanced demand and energy consumption, and reporting are key capabilities, but the Energy Platform doesn't stop there. The EP1 also has power quality features and can detect cycle-by-cycle changes in RMS Voltage using industry standard settings. The EP1 measures every voltage cycle and can record when any one cycle exceeds limits. Triggers are chronologically displayed in an easy-to-read textual format that shows the time stamp, Sag or Swell characterization, duration, and min/max while out of limits. Voltage and current waveform snapshots are also available and can be recorded on a periodic basis. Snapshots can be used to visually assess the quality of supply or used with Dran-View software. For more advanced power quality applications that require recording of waveshapes, transients, and other important power quality parameters, consider the PowerXplorer, PowerGuide, or PowerVisa from Dranetz.

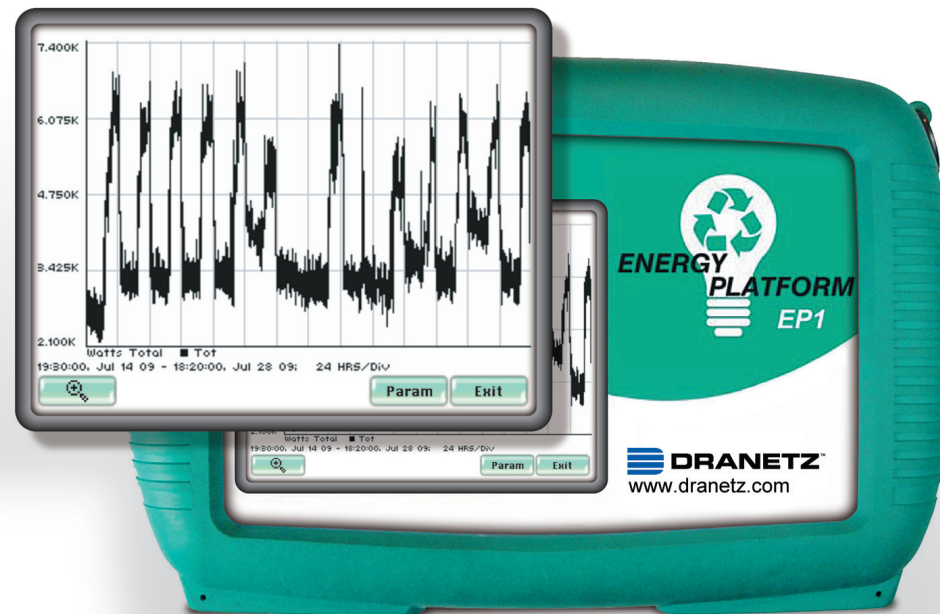


## No Learning Curve - Automatic Setups

Getting the job done and getting it done right are of utmost importance in any application. Proper instrument setup is essential to make sure your data is correct, especially in common EP1 applications, such as energy benchmarking/reduction and alternative energy where the results are critical in determining next steps. The Energy Platform's Automatic Setup makes for a productive tool right out of the box, there is no learning curve. Simply connect the EP1 to your load, energize your circuit, and select Automatic Setup to have the EP1 do the work for you. It identifies the circuit type, nominal voltage, and current in one step. Detected circuit details are displayed on screen for you to review, then simply click OK to start metering and monitoring.

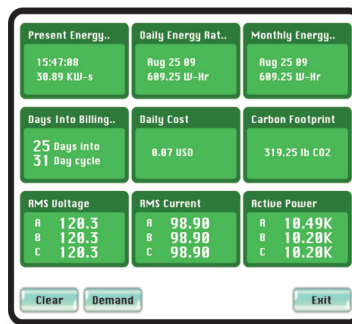


For those who wish to create their own triggers, recording intervals, or any other settings to better meet their application, an interactive Wizard setup is available to customize the EP1 to meet virtually any application. Users can create custom setup templates for any variety of applications they will encounter, store them to Compact Flash memory, and recall them in the field for fast and convenient setup of the EP1 to meet that specific application.



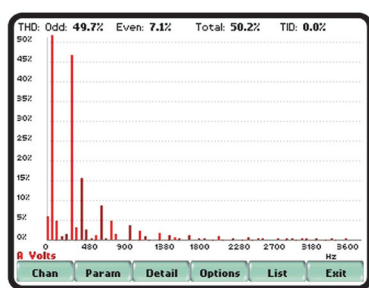
## Colorful, Easy-To-Read Demand & Energy Reporting

Ease of use is important to every application. Even the best of instruments fall short if the user can't easily and efficiently view important results. The Energy Platform's user interface displays Demand and Energy reports in an easy-to-understand, color-coded format. All pertinent information, such as V, A, W, Demand & Energy, and more is on one screen, with each square showing real time readings and computations. Results are color coded to easily identify if a parameter has exceeded any triggered conditions. A green square means the parameter is within limits. Blinking red or yellow means the parameter has exceeded your monitoring limits. It's that simple!



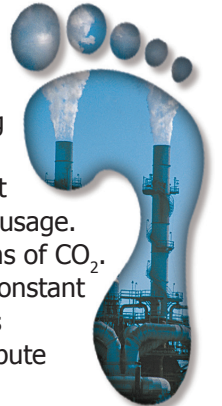
## Harmonics

As the sensitivity of power electronics increases, equipment ranging from HVAC systems, personal computers to computerized process equipment and manufacturing systems are susceptible to harmonic pollution. In fact, harmonics can cause small, almost imperceptible variations in performance that aggregate to affect significant long-term damage. Current harmonics generated by a source can pollute the entire power system without being affected itself. The Energy Platform captures detailed harmonics, interharmonics, and subharmonics in accordance with IEC 61000-4-7 and IEEE 519 to effectively troubleshoot the complex problems caused by these events.



## Carbon Footprint

Being environmentally friendly is not just a catch phrase, but in many cases, it is a corporate obligation. In regards to energy consumption, a carbon footprint is the total amount of greenhouse gas emissions produced generating the electricity consumed. The Energy Platform's Carbon Footprint report computes the (electrical) Carbon Footprint for measured loads based upon your real monthly energy usage. Results are displayed in your choice of pounds or Kilograms of CO<sub>2</sub>. Many utilities publish CO<sub>2</sub> emission details and provide a constant multiplier representing an average based upon the various generation methods used. This is used by the EP1 to compute actual values based upon your energy usage.



## EPRW & Dran-View® Software

Energy Platform Report Writer software (EPRW) is included for free with every EP1. EPRW software summarizes your survey, producing easy-to-read, user-selectable reports. Voltage, Current, Watts, VA, VAR, PF, harmonics, demand, energy, and many other parameters can be trended to create your own custom report. You can also use the automatic report writing feature, and let EPRW quickly generate your report without any setups. The Energy Audit feature summarizes your energy survey, including your basic billing parameters, such as time of use (peak, partial-peak, off-peak times), peak demand, energy cost, and Carbon Footprint calculations. Reports are created in a RTF format so you can easily edit your report in any text editor. A data export feature is available to bring your data to other software applications. Your data can be exported to a .csv file format for use in Microsoft Excel or other compatible software packages.

For more advanced applications, the EP1 is fully compatible with our award winning Dran-View (optional) software that adds advanced analysis in an easy-to-use software package. Dran-View is a powerful tool that makes data analysis easy. DranView has many advanced features, such as bookmarks, zooming, rubber banding, balloon annotations, math functions, and it can even include your company's logo! The built-in Rescue Kit can help undue monitoring mistakes, such as reversed CT's, wrong scale factors, wrong instrument time, and more. Dran-View's report writer has a variety of report functions available to meet any application and now includes the Energy Audit report (also available in EPRW). Dran-View is used worldwide by thousands of power professionals to analyze data generated by Dranetz products.

