

1 kVA Programmable Bench-Top AC and DC Power Source / Analyzer

0–135 V

5–10 A

- **750 VA - 1000 VA**
Single phase output
- **Bench-top Portability**
Compact and light (weighs 20 lbs)
- **Large LCD Display**
Large 5.7" LCD display makes it easy to view settings and measurement values
- **Measurement Capabilities**
Measure output voltage, current, power, frequency, power factor, crest factor, and harmonic current
- **Measurement and Analysis Features**
Measures current harmonics and includes data log measurement and the ability to create and edit arbitrary waveforms
- **Programmable Output**
Variable output voltage, frequency and current limits
- **Quick Connect**
USB interface and universal receptacle makes remote connections fast and simple
- **Sequencing**
Easily program and run a series of transient events



Measurements

Built-in power measurement and analysis capabilities eliminate the need to purchase additional test equipment. All power output settings and measurements are simultaneously displayed on the large 5.7" LCD display.



Portable Flexibility

The EC1000S is much more than an AC/DC power source; it not only supplies AC and DC power, it also can be used to perform dips, drops, surges, sags, variations and other abnormal power line conditions. In addition, the EC1000S will measure and store standard power measurements and perform current harmonic analysis. With its small footprint and weighing just 20 lbs, the EC1000S is suited for both benchtop and field applications.

Test Applications

The EC1000S is ideal for testing power supplies, modules, components, and other non-linear loads.

Instrument Control Software

The EC1000S includes powerful and easy-to-use Instrument Control Software that makes generating test sequences, and measurement power output parameters, fast and easy. The software can be used to quickly create user defined output waveforms.



EC1000S : Specifications

| Output | |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Output | AC: 750 VA (115V Input), 1,000 VA (208V/230V Input) DC: 750 W (115V Input), 1,000 W (208V/230V Input) |
| Modes (8) | AC-INT, AC-EXT, AC-ADD, AC-SYNC, AC+DC-INT, AC+DC-EXT, AC+DC-ADD, AC+DC-SYNC |
| Voltages | AC: 100V Range: 0.0V-135.0V; 200V Range: 0.0V-270.0V DC: 100V Range: ±190.0V; 200V Range: ±380.0V |
| Maximum Current | AC/DC: 100V Range: 10A; 200V Range: 5A Maximum Peak: 100V Range: 40 Apk; 200V Range: 20 Apk |
| Frequency Setting Range | 1.0 Hz-550.0 Hz (resolution 0.1 Hz); Accuracy: ± 100ppm |
| Phase (Output on) | Setting Range: 0.0° to 359.9° (Resolution: 0.1°) |
| Voltage Waveform | Sine-wave, Square-wave, Arbitrary-wave (up to 16 types can be saved) |
| Voltage Distortion | 0.5% maximum (50Hz/60Hz) |
| Load Regulation | 0.5% maximum (at output terminal under no load and rated resistance load) |
| Line Regulation | 0.2% maximum (power input voltage: 100V/120V/230V, no load, rated output) |
| Measurements | |
| Output Voltage/Current/Power | V: DC Average value, effective value, peak value; C: RMS + peak value hold, P: Active power, apparent power, & reactive power |
| Load Power Factor/Crest Factor | Power Factor Range: 0.00-1.00; Crest Factor Range: 0.00-50.00 |
| Output - Harmonic Current | Range: Up to 40th-order (AC internal oscillation mode, fundamental wave: 50/60Hz) |
| External Sync Frequency | Range: 40-500 Hz (external synchronization mode) |
| Input | |
| Voltage Range | AC 115V - AC 230V ± 10% (253V max.) 50Hz/60Hz ± 2Hz (single phase) |
| Power Consumption/Factor | 1.4 kVA max./0.95min (AC 115V), 0.9min (AC 230V) |
| Remote Control | |
| Interface | USB |
| Capabilities | The EC1000S can be controlled remotely from an external computer via a USB interface. The accompanying software supports use of the following functions: <ul style="list-style-type: none"> • Data analysis through remote interface • Sequence editing and execution • Arbitrary waveform editing and transfer • Data logger (by capturing measured values) • Worldwide power supply input is supported |
| Applications | |
| Description | The EC1000S is used to test electrical devices below 1kVA. This powerful, yet portable instrument can be used for almost any application requiring less than 1 kVA of power with a current below 10A/40Apk. |
| Common Applications | Some examples of common applications are: medical equipment (medical imaging/medical monitors/EKG systems), communication devices (telephones/cell phones/mobile computers), computer devices (scanners/monitors/printers/computer systems), automobile (motors/electrical system/hybrid technology), avionics testing (control panels), appliances (microwaves/ovens/washers/dryers), home electronics (televisions/CD/DVD players/stereos), portable electronics (MP3 players/palm computers/satellite radios). |
| Mechanical Specifications | |
| Dimensions | H: 7" (176mm) W: 10" (258mm) D: 17" (440mm) |
| Weight | 20 lbs (9.5kg) |
| Operating Temperature | 0-40°C, 5-85% RH (absolute humidity must be within 1-25g/m3, no condensation) |



Note: Specifications are subject to change without notice. Specifications are warranted over an ambient temperature range of 25°± 5° C. Unless otherwise noted, specifications are per phase for a sinewave with a resistive load and apply after a 30 minute warm-up period. Notebook Computer is shown as an example for application purposes only and is not included with the EC1000S. DELL is a registered trademark of DELL Computer Corp.