



## EC1000S Power Systems 1 kVA Programmable Bench-Top AC and DC Power Source / Analyzer



### 750 VA - 1 KVA

115 V / 230 V input

### Bench-top Portability

Compact, light, and portable

### Large LCD Screen

Large 5.7 LCD makes it easy to view settings and measurement values on a single screen

### Measurement Capabilities

Measures voltage, current, electrical power, frequency, power factor, CF, and harmonic current

### Powerful Measurement Features

Measurement value logging, sequence editing, and creation of arbitrary waveform using the control software

### Current Limiter

Up to 4X peak output current, voltage, frequency limiter setting

### Quick Connect

USB interface makes connections simple

### Sequencing

Program output patterns for powerful flexibility

### Portable Flexibility

The EC1000S not only supplies AC and DC power, it also allows free programming of outputs such as instantaneous interruption, voltage sweep, and voltage variation patterns. The EC1000S has essential functions for power tests, including a variety of output measurements and measurements related to the load power supply input. In addition, while the EC1000S can output as much as 1kVA @ 200V, its desktop size makes it an extremely convenient, yet powerful choice for AC and DC applications.

### Measurements

Powerful features for measuring frequencies, load power factors, crest factors (CF) and even harmonic currents, in addition to the voltage and current. Settings and measurements are simultaneously displayed on the large 5.7 LCD.



### Test Applications

Program output variation patterns used to test the power supplies of devices and parts. Simultaneous sweeping of frequency and voltage and arbitrary waveforms are supported.

### Instrument Control Software

Sophisticated software tools with a logging function for importing/saving measurement value data, facilitating creation of reports, data analysis, and other operations. Includes a sequence function to edit, execute, save and operate a series of output variation patterns. Includes an arbitrary waveform creation function to easily create robust waveforms.



## Specifications

**Model** EC1000S

### 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: $\pm 190.0V$ ; 200V Range: $\pm 380.0V$ |
| 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: $\pm 100ppm$                  |   |
| 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

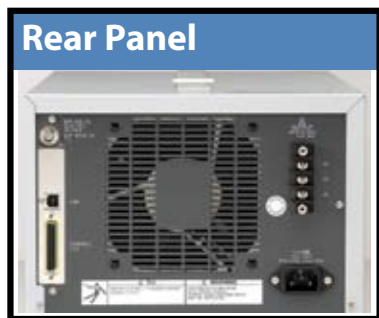
|                                 |   |  |
|---------------------------------|---|--|
| Output Voltage/Current/Power:   | V: DC Average value, effective value, peak value; C: RMS + peak value hold, P: Active power, apparent power, & reactive power |  |
| Load Power Factor/Crest Factor: | Power Factor 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

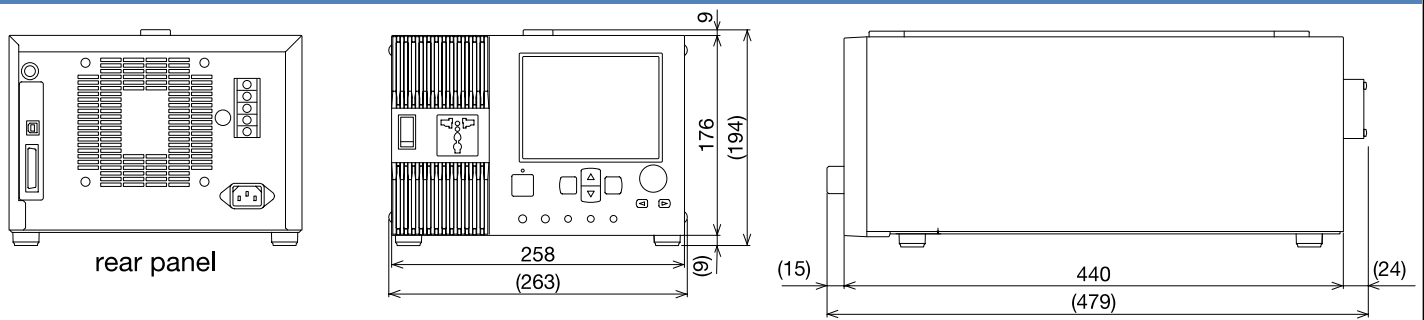
|                           |  |
|---------------------------|--|
| Voltage Range:            | AC 115V - AC 230V $\pm 10%$ (253V max.) 50Hz/60Hz $\pm 2Hz$ (single phase) |
| Power Consumption/Factor: | 1.4 kVA max./0.95min (AC 115V), 0.9min (AC 230V)                           |

### Mechanical Specifications

|                        |  |
|------------------------|--|
| Dimensions             | H: 19" (176mm) W: 5.25" (258mm) D: 23" (44mm)  |
| Weight:                | 20 lbs (9.5kg)   |
| Operating Temperature: | 0-40°C, 5-85% RH (absolute humidity must be within 1-25g/m <sup>3</sup> , no condensation) |



## External Drawings



Note: Specifications are subject to change without notice. Specifications are warranted over an ambient temperature range of 25 $\pm$ 5°C. Unless otherwise noted, specifications are per phase for a sine wave 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.