M California Instruments

2007 Power Instruments New Product Summary

Compact i/iX



Combination AC and DC Power Source and Power Analyzer Replace multiple instruments with a single multifunction unit

Single & Three Phase Operation

Maximum output of 750VA per phase (1500 VA on 1501iX)

750 VA to 2250 VA of Output Power Cost effective power source

Arbitrary Waveform Generation

User defined voltage waveform and distortion programming (C-iX Series)

Built-in Digital Power Analyzer

Analyze frequency and time domain of both voltage and current (C-iX Series)

Rackmountable

Space-saving rackmount chassis

Scope Capture Capability Built in voltage and current waveform acquisition capability (C-iX Series)

Powerful Programing Software Powerful instrument control software included (Avionics test software also available)

Constant Power Mode

Provides increased current at reduced voltage to maximize efficiency Compact i/iX - Powerful Spacesaver

The Compact *i*X Series represents a new generation AC and DC power source that addresses increasing demands on test equipment to perform additional functions at a lower cost. By combining a flexible AC/DC power source with a high performance power analyzer, the Compact *i*X Series is capable of handling complex applications that have traditionally required multiple systems.

The sleek integrated approach of the Compact *i*X Series avoids cable clutter that is commonly found in test systems. The need for digital multimeters, power harmonics analyzers, and current shunts or clamps is eliminated.

Since many components in the Compact *i*X Series are shared between the AC/DC source and the power analyzer, the total cost of the integrated system is less than the typical cost of a multiple unit system.

For less demanding applications, the Compact *i* Series provides similar output and transient capabilities as the Compact *i*X Series, as well as basic power measurements. For more information about the Compact *i*/iX and all or our power source products, visit California Instruments' website at www.californiainstruments.com.



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

Programmable Instrument Control Software

Measurement value logging, sequence editing, and creation of arbitrary waveform using the Instrument Control Software

User Limits

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

Quick Connect

USB interface makes connections simple

Sequencing

Program output patterns for powerful flexibility

EC1000S - 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 making this a complete portable power source.

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 @ AC 230V (750 VA @ AC 115V), it's desktop size makes it an extremely convenient, yet powerful choice for AC and DC applications.

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.

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. For more information about the EC1000S and all or our power source products, visit California Instruments' website at www.californiainstruments.com.

www.california-instruments.com

Programmable AC & DC Power Systems

Instrument Control Software: Windows* Instrument Control Software is included with the Compact iX and i Series. This software provides easy access to the power source's capabilities without the need to develop any custom code. The following functions are available: • Steady state output control (all parameters) · Create, run, save, reload & print transient programs Generate & save harmonic waveforms Generate & save arbitrary waveforms ٠ 5.01 4.491 0.0 0.019 0.023 0.85 16.048 3.57 6.02 4.490 240.0 0.015 0.023 0.85 16.453 • Measure & log standard measurements · Capture & display output voltage & current waveforms · Measure, display, print & log harmonic voltage & current measurements Display IEEE-488 or RS232 bus traffic to and from the AC Source to help you in developing your own test programs. ÷n Phase rel. (%) Fund 3 5 7 9 11 13 15 17 2 4 6 10 12 14 18 18 27.24 0.63 1.95 15.31 37.03 1.98 21.79 -1.05 1.30 -0.43 2.31 -0.68 0.46 0.74 1.62 1.597 4.121 4.166 4.009 2.294 1.940 1.031 2.168 1.39 3.58 3.62 3.49 1.99 1.69 0.90 1.37 1.05 1.45 -2.22 1.34 -1.01 -1.10 2.43 1 323 0.725 2 243 7 612 2 588 2 277 5 064 THD Volt Close Cancel Help Save As.

* Requires PC running Windows Vista[™], Windows XP[™] or Windows 2000[™]

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Eunction Library

Editor

Waveform <u>R</u>egister: >EMPTY<

Instruments Control Software & Transient Generation System:

Our controllers are equipped with powerful AC & DC transient generation system that allows complex sequences of voltage, frequency & waveshapes to be generated. This further enhances the power source's capability to simulate AC line conditions or DC disturbances. When combined with the multi phase arbitrary waveform capabilities, the AC & DC output possibilities are truly exceptional. In three phase system configurations, transient generation is controlled independently yet time synchronized on all three phases. Accurate phase angle control & synchronized transient list execution provide unparalleled accuracy in positioning AC output events.

	Equipment Software Chart		Revision	iX Series II	Compact iX	MX Series	Lx/Ls Series
Terment Mail Out Terment Out 1 Non Non Non 2 Non Non Non Non 3 Non Non Non Non Non 3 Non Non Non Non Non Non 4 Non Non Non Non Non Non Non 4 Non <td< td=""><td>MIL-STD704</td><td>AC Mode</td><td>А</td><td>-704 (ClGuiSll)</td><td>-704 (iXCGui)</td><td>-704 (MXGui)</td><td>-704F</td></td<>	MIL-STD704	AC Mode	А	-704 (ClGuiSll)	-704 (iXCGui)	-704 (MXGui)	-704F
			В	-704 (ClGuiSll)	-704 (iXCGui)	-704 (MXGui)	-704F
			С	-704 (ClGuiSll)	-704 (iXCGui)	-704 (MXGui)	-704F
			D	-704	-704	-704	-704 or -704F
			E	-704	-704	-704	-704 or -704F
			F	-704 (ClGuiSll)	-704 (iXCGui)	-704 (MXGui)	-704F
		DC Mode	А	-704 (ClGuiSll)	-704 (iXCGui)	-704 (MXGui)	
			В	-704 (ClGuiSll)	-704 (iXCGui)	-704 (MXGui)	
			С	-704 (ClGuiSll)	-704 (iXCGui)	-704 (MXGui)	
			D	-704	-704	-704	
Transient List Data Entry in ICS.			E	-704	-704	-704	
			F	-704 (ClGuiSll)	-704 (iXCGui)	-704 (MXGui)	
	RTCA-DO160	AC Mode	С	N/A	N/A	N/A	-160
			D	-160	-160	-160	-160
			Euro/14D	-160	-160	-160	-160
			Chng 2	N/A	N/A	N/A	-160
			E	-160 (ClGuiSll)	-160 (iXCGui)	-160 (MXGui)	-160 (LxGui)
		DC Mode	С	N/A	N/A	N/A	
			D	-160	-160	-160	
			Euro/14D	-160	-160	-160	
			Chng 2	N/A	N/A	N/A	
			E	-160 (ClGuiSll)	-160 (iXCGui)	-160 (MXGui)	
	787B3-0147	AC Mode	A, B, C	-787 (CIGuiSII)	-787 (iXCGui)	-787 (MXGui)	-787 (LxGui)
		DC Mode	A, B, C	-787 (CIGuiSII)	-787 (iXCGui)	-787 (MXGui)	
	ABD0100.1.8	AC Mode	Table A	-ABD (CIGuiSII)	-ABD (iXCGui)	-ABD (MXGui)	-ABD (LxGui)
			Table B	-ABD (ClGuiSll)	-ABD (iXCGui)	-ABD (MXGui)	-ABD (LxGui)
			Table C	-ABD (ClGuiSll)	-ABD (iXCGui)	-ABD (MXGui)	-ABD (LxGui)
d three phase voltage waveforms display on PC.		DC Mode	Table D	-ABD (ClGuiSll)	-ABD (iXCGui)	-ABD (MXGui)	
			Table E	-ABD (CIGuiSII)	-ABD (iXCGui)	-ABD (MXGui)	

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