

- **Meets IEC 1000-4-11 Source Requirements**

Provides full compliance voltage dips and interruptions testing.

- **Single phase and Three phase versions**

Compatible with California Instruments i Series and iX Series AC power sources and CTS compliance test systems.

- **Automated Operation**

All -EOS functions are operated through the AC source controller.

- **High Current Capability**

Full 40 Arms current at 40 % voltage drop level.

- **Controlled Voltage Dip Rise and Fall Times**

Solid state switching ensures source compliance with IEC 1000-4-11 standard.

Option -EOS-1 and -EOS-3 Electronic Output Switch for IEC 1000-4-11 Testing



IEC 1000-4-11 Compliance Testing

The -EOS-1 and -EOS-3 Electronic Output Switches provide full AC source compliance for IEC 1000-4-11 Voltage Dips and Interruption testing when used with the California Instruments iX Series or i Series AC power source.

Implementation

The -EOS uses a multi tap power transformer and electronic output switch architecture to provide the required voltage levels for voltage dip testing. Nominal source voltage is provided by the AC power source for either single phase or three phase applications. The AC source voltage is routed through the power transformer and the desired output voltage is selected from the appropriate tap

electronically. The electronic switches ensure proper rise and fall times for all voltage drops. The AC source controller is used to program the desired phase angle with 0.1° resolution from 0.0° to 360.0°.

Bypass Mode

When no IEC 1000-4-11 testing is in progress, the EOS unit is automatically bypassed. In bypass mode, the EOS circuitry is electrically removed from the output circuitry of the AC source. This allows other test such as IEC 1000-3-2 Harmonics or IEC 1000-3-3 Flicker to be performed with the same test system without the need to rewire the output.

Fully Automated

The presence of the -EOS option is automatically detected by the AC power source controller at

power up. The -411 test software required to run IEC 1000-4-11 is included with the -EOS option if ordered with the AC source. If the -EOS option is added to an existing i Series or iX Series AC source, the -411 software option must be installed for proper operation.

All user interaction with the IEC 1000-4-11 is performed from the AC source front panel or the Windows™ Graphical User Interface program. No user controls are provided on the -EOS unit front panel.

Three Phase Systems

A three phase version of the electronic output switch is available for use with three phase i Series and iX Series power systems.

Ordering Information

The -EOS option is available for the following i Series and iX Series AC power source models.

Option	Supported by
<i>i Series</i>	
-EOS-1	3001i 5001i 5001i-400
-EOS-3	9003i 15003i 15003i-400
<i>iX Series</i>	
-EOS-1	3001iX 5001iX 5001iX-400
-EOS-3	9003iX 15003iX 15003iX-400

Note: The -EOS option is factory installed and must be ordered at the same time as the AC power source. Contact factory for upgrade information on existing systems.

Options

-RMS Rack mount Slides. The use of rack mount slides or a rack shelf is required when installing the -EOS in a 19" rack.

Line Cord Options:

-PC1 Continental Europe
-PC3 United Kingdom

Supplied with:

- North American line cord
- Rack mount handles
- Instruction Manual

Customer Support

For technical support and service, or to discuss your AC power application needs, contact California Instruments Corp. or your local representative.

Specifications¹

Input		
Line Voltage	115 V _{AC} ±10% / 230 V _{AC} ±10%	
Line Current (typ.)	400 mA @ 115 V _{AC} / 60 Hz 200 mA @ 230 V _{AC} / 50 Hz	
Line Frequency	47-63 Hz	
Fuse Rating	0.5 A slow acting @ 115 V _{AC} 0.25 A slow acting @ 230 V _{AC}	
Output		
	-EOS-1	-EOS-3
Phases	1	3
IEC 1000-4-11 Test Mode (Engaged):		
Voltage		
Range	100 - 270 V _{RMS}	
Regulation	< 5 %	
Over / Undershoot	< 5 % into a 100 Ohm resistive load	
Rise / Fall Times	> 1 μsec, < 5 μsec at 10 and 90 % into a 100 Ohm resistive load	
Programmable Output Levels:		
	100 %, 70 %, 40 % and 0 % of U _{NOM}	
Frequency		
Range	50 Hz / 60 Hz	
Accuracy	± 0.02 %	
Phase		
Range	0.0 - 360.0°	
Accuracy	± 1.0°	
Maximum RMS Current:		
at 100 % U _{NOM}	18.5 A _{RMS}	18.5 A _{RMS} / phase
at 70 % U _{NOM}	26.4 A _{RMS}	26.4 A _{RMS} / phase
at 40 % U _{NOM}	46.2 A _{RMS}	46.2 A _{RMS} / phase
at 0 % U _{NOM}	n/a	n/a
Bypass Mode:		
Maximum RMS Current:		
	37 A _{RMS}	37 A _{RMS} / phase
Mechanical		
Dimensions	7" x 19" x 22"	7" x 19" x 22"
(H x W x D)	178 x 480 x 560 mm	178 x 480 x 560 mm
Weight	50 lbs 23 kg	150 lbs 69 kg
Connectors		
Input AC	IEC 320	
Load Input and Output	Compression terminals	
Controls and Indicators		
	Power On/Off toggle switch with power on LED	
	ACTIVE mode LED	
	FAULT mode LED	

Note 1: EOS Specifications are valid when used with 5001i/iX or 15003i/iX AC power source only.

Contact California Instruments:

858 677-9040

FAX: 858 677-0940

Email: sales@calinst.com

Web page: http://www.calinst.com



9689 Towne Centre Drive., San Diego CA, 92121

(858) 677-9040

FAX : (858) 677-0940

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