TAHOE SERIES

PRECISION PROGRAMMABLE AC AND DC SOURCES

California Instruments™

THE MOST ADVANCED PLATFORM OF POWERFUL AC SOLUTIONS

The California Instruments Tahoe Series combines intelligence and flexibility with high power to create an advanced platform of AC solutions. Using a state-of-the-art SiC power switching architecture and Digital Signal Processing, the Tahoe Series combines a robust, high-power AC/DC source with an advanced power analyzer in a single floor standing chassis.

This easy-to-configure power product covers a wide spectrum of single and multi-phase AC or single channel and multi-channel DC power applications at an affordable cost. With add-on test application routines for military and commercial avionics testing, the Tahoe Series can fulfill your power test requirement.

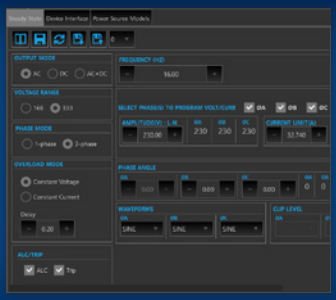
LXI | CE

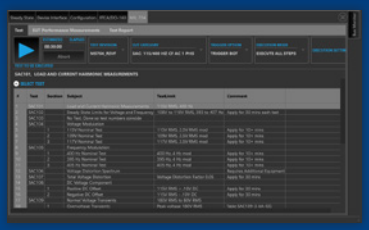
FEATURES AND CAPABILITIES

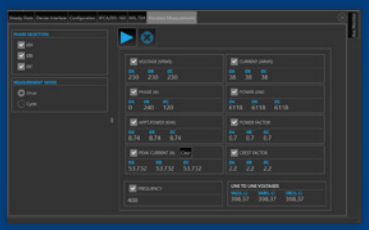
- High Power AC and DC Power Source
- Auto paralleling for higher power system expansion
- Single and three phase modes
- Arbitrary & Harmonic Waveform Generation
- Standard LXI LAN, USB, and RS-232, Optional GPIB
- 500uS time resolution for Transients
- Complete avionics test suites
- 15kVA to 1MVA Power Levels
- Intuitive 5" color display for ease of navigation
- Internationally accepted test routines for EMI/EMC, Safety compliance
- Dual Voltage ranges that support over voltage testing on 480V based systems

Virtual Panels

(Graphical User Interface)
Virtual Panels allow remote control of the Tahoe Series as well as programming communication and monitoring without front panel display.







AMETEK®
PROGRAMMABLE POWER

www.programmablepower.com

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MODEL	AC Output Specifications				DC Output Specifications			
	Power	RMS Voltage Ranges	RMS Current per phaseat FSV	RMS Current per phase (max)	Power	DC Voltage	DC Current per phase at FSV	DC Current per phase (max)
TA0015A1	15kVA 1Φ	0-166V/ 0-333V	(1Φ mode) 90.3A/45.04	(1Φ mode) 125A/67.5A	15kW	0-220V/ 0-440V	(1Φ mode) 68.1A/34.05A	(1Φ mode) 93.7A/46.8A
TA0022A1	22.5kVA 1Φ/3Φ	0-166V/ 0-333V	(1Φ mode) 135.5A/67.5A (3Φ mode) 45.18A/22.5A	(1Φ mode) 187.5A/93.75A (3Φ mode) 62.5A/31.25A	22.5kW	0-220V/ 0-440V	(1Φ mode) 102.3/51.15A (3Φ mode) 34.1A/17.05A	(1Φ mode) 140.6/70.3A (3Φ mode) 46.8A/23.4A
TA0030A1	30kVA 1Φ/3Φ	0-166V/ 0-333V	(1Φ mode) 180.7A/90.09A (3Φ mode) 60.24A/30.03A	(1Φ mode) 250A/125A (3Φ mode) 83.3A/41.6A	30kW	0-220V/ 0-440V	(1Φ mode) 136.4A/68.2A (3Φ mode) 45.45A/22.7A	(1Φ mode) 187.5A/93.75A (3Φ mode) 62.5A/31.25A
TA0045A1	45kVA 1Φ/3Φ	0-166V/ 0-333V	(1Φ mode) 271/135A (3Φ mode) 90A/45A	(1Φ mode) 375A/187.5A (3Φ mode) 125A/67.5A	45kW	0-220V/ 0-440V	(1Φ mode) 204.5A/102.25A (3Φ mode) 68.1A/34.0A	(1Φ mode) 281.25A/140.6A (3Φ mode) 93.75A/46.8A
TA0090A1	90kVA 3Φ	0-166V/ 0-333V	(3Φ mode) 180.7A/90.09A	(3Φ mode) 250A/125A	90kW	0-220V/ 0-440V	(3Φ mode) 136.4A/68.2A	(3Φ mode) 187.5A/93.75A

COMMON SPECIFICATIONS	
Output Frequency	16 - 550Hz, 16 - 905Hz with -HF option
Input Voltage	208 V_{LL} ±10%, 230 V_{LL} ±10%, 380 V_{LL} ±10%[1], 400 V_{LL} ±10%, 480 V_{LL} ±10%, 600V L-L ±10%
Input Frequency	47 - 63Hz
Operational Modes	AC, AC+DC, DC
Control Interfaces	RS-232C, USB, LAN, Analog EXTD

NOTE[1]: Not available on Sequoia-15

OPERATIONAL CHARACTERISTICS	
Parallel Operation	Requires no user setup, except to connect the parallel interface and wire the inputs and outputs. 270kVA max with Tahoe-45 configurations and 1.08MVA with Tahoe-90's.
MODE	Switches between 1 and 3 phase outputs. This feature is available TA22.5, TA30 and TA45 models only.
Emergency Stop	A mushroom style switch installed on the front panel of each chassis. When activated, the output is disabled. Note that the controller (and front panel display) will still be powered up.
Current Limit Modes	Two selectable modes of operation: Constant Voltage (CV) & Constant Current (CC). In CC mode, the voltage folds back with automatic recovery during an over-current event. In CV mode, the output is programmed to 0V and the output relays open with an over current event.
ALC	Automatic Level Control. User-selectable operation enables a digitally implemented feedback control loop to precisely regulate the RMS value of the output voltage.
Transient Generator	Output could be controlled to produce list transient events with 500 µs programming resolution. Voltage: drop, step, sag, surge, sweep; Frequency: step, sag, surge, sweep; Voltage and Frequency: step, sweep.

Power Conditioning Equipment Testing

Avionics & Shipboard Electronics Testing

Regulatory Compliance Testing

Manufacturing Line Testers