SPECIFICATIONS

CALIFORNIA INSTRUMENTS MODEL 503T THREE PHASE AC POWER SOURCE

All specifications are tested in accordance with standard California Instruments test procedures and apply with a stable, low distortion input signal as supplied from a California Instruments 800T series oscillator.

POWER OUTPUT:	500 VA three phase at 105 to 135 volts rms line-to-neutral from unity to ± 0.7 power factor. See derating chart for operation at other output voltages and/or power factor.
OUTPUT VOLTAGE RANGES: (Normally wired for a 0 to 135 volt line-to-neutral three phase output but may be wired for any of the following five ranges, if requested at the time of shipment)	0 to 30 volts rms line-to-neutral (0 to 52 volts rms line-to-line with three phase input). 0 to 45 volts rms line-to-neutral (0 to 78 volts rms line-to-line with three phase input). 0 to 75 volts rms line-to-neutral (0 to 130 volts rms line-to-line with three phase input). 0 to 135 volts rms line-to-neutral (0 to 234 volts rms line-to-line with three phase input). 0 to 135 volts rms single phase (500 VA single phase from 105 to 135 volts rms).
TOTAL HARMONIC DISTORTION:	Less than 0.40% distortion from 200 Hz to 1 KHz; less than .75% distortion from 45 Hz to 10 KHz.
AMPLITUDE STABILITY: (after one hour warm-up)	± 0.25% for 24 hours at constant line, load and ambient temperature conditions.
PHASE ACCURACY:	± (1.0 degree plus phase accuracy of plug-in oscillator) between any two phases of a three phase system with a symmetrical load.

LOAD REGULATION: *	± 1% over the range from 45 Hz to 5 KHz and ± 2% over the range from 45 Hz to 10 KHz when tested at unity power factor. In addition, a load regulation adjustment permits the regulation to be adjusted to zero at any given line voltage, signal frequency and load conditions. Control resolution is 0.05%.
LINE REGULATION:	± 0.25% of full output for a ± 10% line change.
FULL POWER FREQUENCY RANGE: **	45 Hz to 5 KHz.
HALF POWER FREQUENCY RANGE:	5 KHz to 10 KHz.
FREQUENCY RESPONSE:	± 0.5 dB from 45 Hz to 5 KHz. ± 1.0 dB from 45 Hz to 10 KHz.
AC NOISE LEVEL:	60 dB below full output when tested at full rated power output; 80 dB below full output with shorted input.
OVERLOAD AND SHORT CIRCUIT PROTECTION:	Complete protection from overloads and short circuits is provided. Instantaneous automatic reset occurs when overload is removed.
AMPLIFIER DRIVE REQUIREMENTS: (Normally obtained from plug-in)	Multiphase 0 to 5 volt rms signal per phase produces full output voltage.
AC INPUT LINE:	105 to 125 volts rms. Unit may be wired for the following single phase voltages on special order: 208 VAC, 220 VAC, 230 VAC and 240 VAC.
AC INPUT FREQUENCY:	48 to 65 Hz. (400 Hz available on special order).
AC INPUT POWER:	2000 watts maximum under worst case line and full rated load conditions.
OPERATING TEMPERATURE RANGE:	0 to 55°C.

* Load regulation specification degrades slightly on the 30 volt and 45 volt ranges for operation above 2 KHz. See section 4.9.9 of the test procedure for load regulation on these ranges.

FRONT PANEL METER:	0 to 240 volt AC voltmeter provides ± 1% of full scale accuracy at 400 Hz and ± 3% of full scale accuracy over the range from 45 Hz to 10 KHz and may be switched to monitor any line-to-neutral or line-to-line voltage.
DIMENSIONS:	8 3/4" high x 19" wide x 21" deep.
NET WEIGHT:	110 lbs.
SHIPPING WEIGHT:	120 lbs.
FRONT PANEL FINISH:	Grey, 26440 per Federal Standard 595 with black silk-screened lettering.

** This power source may be used over the full 20 Hz to 20 KHz frequency range provided the output voltage and the output VA are derated according to Table 2-3 in this instruction manual; otherwise permanent damage to the unit may occur.