

## Advanced Test Equipment Corp. www.atecorp.com 800-404-ATEC (2832)

# 2555A Current Calibrator & AC/DC Transconductance Amplifier

## Rock Solid Reliability & Unmatched Performance

The Model 2555A is the world's leading AC-DC current calibrator, earning its stripes through years of rock-solid reliability and unmatched performance. As a wide-range voltage-to-current converter with 100-amp max output, satisfied customers range from defense industrial manufacturers and branches of the government through the National Institute of Standards and Technology and a variety of other metrology labs. Our proprietary internal shunt design (with low TC 2ppm/°C) allows the unit to provide up to 400 watts (i.e. 7 volts at 55 amps) in constant current output with voltage compliance monitored via an internal voltmeter. For calibration of ammeters, current transformers, and shunts the unit is compatible with our C-1000 10-Turn Coil for simulation up to 1000 amps.

### **General Specifications**

Input Impedance:	100kΩ	Power Requirements:	115VAC/230VAC $\pm 10\%$ at 50 to 60Hz
Compliance Voltage:	7VDC or 7Vac (RMS) to 60A		
	4VDC or 4Vac (RMS) to 100A	Temp. Coefficient:	±0.001% of output ±0.002% of rng/
Input/Output Ratio:	2.00000V input provides full-scale output		double for AC
	(1.0000V input produces 100.00A output)	Operating Temp. Range	e: 0°C to 50°C
Stability:	+0.0005% -15min. (±0.005% for 24Hr)	Storage Temp. Range:	-30°C to 70°C
Load Regulation:	Output current level changes less than ±0.002%	Humidity:	70% RH max @ 40°C
Maximum Input:	3VDC or 2Vac (RMS)		(non-condensing)
Maximum Isolation Voltag	e: ±200VDC or peak AC		
		Length:	27 cm / 10.5 in
Response Time:	1msec to ±0.01% of final value following	Width:	44 cm / 17 in
	input amplitude or frequency change	Height:	59 cm / 23 in
Input CMR: 60dB @ DC	linearity decreasing to 40dB (a) max frequency	Weight:	100 lbs / 45 kg

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		AC Accuracy		
Range	DC Accuracy	100Hz	400Hz	1000Hz
100A	± 0.03% of range ± 0.03% of output	± 0.3% of range ± 0.1% of output	± 0.4% of range ± 0.2% of output	± 0.6% of range ± 0.3% of output
20A	± 0.015% of range ± 0.03% of output	± 0.15% of range ± 0.1% of output	± 0.2% of range ± 0.2% of output	± 0.3% of range ± 0.3% of output
2A	± 0.015% of range ± 0.03% of output	± 0.15% of range ± 0.1% of output	± 0.2% of range ± 0.2% of output	± 0.3% of range ± 0.3% of output
200mA	± 0.015% of range ± 0.03% of output	± 0.15% of range ± 0.1% of output	± 0.2% of range ± 0.2% of output	± 0.3% of range ± 0.3% of output
20mA	± 0.015% of range ± 0.03% of output	± 0.15% of range ± 0.1% of output	± 0.2% of range ± 0.2% of output	± 0.3% of range ± 0.3% of output
2mA	± 0.015% of range ± 0.03% of output	± 0.15% of range ± 0.1% of output	± 0.2% of range ± 0.2% of output	± 0.3% of range ± 0.3% of output



- •
- Programmable AC/DC 100A Current Source
- Maximum Output Current 100A DC or RMS AC
- •
- Ultra-Low Noise
- Ultra-Stable •
- **Excellent Response Time** •
- High CMR
- Load Regulation: Output current  $\Delta < \pm .002\%$
- Dynamic Range: 0 to 100% of range up to maximum rated output (100A max.)

Precision AC/DC Transconductance Amplifier

**Highly Accurate**