

5520A High Performance Multi-Product Calibrators

Technical Specifications	
Voltage DC	Range: 0 to $\pm 1020V$ Best 1 Year Specification: ± 12 ppm of setting
Current DC	Range: 0 to $\pm 20.5A$ Best 1 Year Specification: ± 100 ppm of setting
Resistance	Range: 0 to 1100 M Ω Best 1 Year Specification: ± 28 ppm of setting
Voltage AC	Range: 1 mV to 1020V 10 Hz to 500 kHz, Sine Best 1 Year Specification: ± 120 ppm of setting
Current AC	Range: 29 mA to 20.5A 10 Hz to 30 kHz, Sine Best 1 Year Specification: $\pm 0.06\%$ of setting
Capacitance	Range: 0.19 nF to 110 mF Best 1 Year Specification: $\pm 0.25\%$ of setting
Thermocouple Source and Measure	Range: $-250^{\circ}C$ to $+2316^{\circ}C$ (11 types) Best 1 Year Specification: $\pm 0.14^{\circ}C$ of setting
RTD Source	Range: $-200^{\circ}C$ to $+630^{\circ}C$ (8 types) Best 1 Year Specification: $\pm 0.03^{\circ}C$ of setting
DC Power	Range: 10.9 μW to 20.5 kW Best 1 Year Specification: $\pm 0.023\%$ of setting
AC Power	Range: 10.9 μW to 20.5 kW 45-65 Hz, PF=1 Best 1 Year Specification: $\pm 0.08\%$ of setting
Phase	Range: 0 to $\pm 179.99^{\circ}$ 10 Hz to 30 kHz Best 1 Year Specification: $\pm 0.07^{\circ}$ of setting
Frequency	Range: 0.01 Hz to 2.0 MHz Best 1 Year Specification: ± 25 ppm of setting

General Specifications	
Warm up Time	Twice the time since last warmed up, to a maximum of 30 minutes
Settling Time	Less than 5 seconds for all functions and ranges except as noted
Standard Interfaces	IEEE-488 (GPIB), RS-232
Temperature Performance	Operating: $0^{\circ}C$ to $50^{\circ}C$ Calibration (tcal): $15^{\circ}C$ to $35^{\circ}C$ Storage: $-20^{\circ}C$ to $70^{\circ}C$
Temperature Coefficient	Temperature coefficient for temperatures outside tcal $\pm 5^{\circ}C$ is 10% of the 90-day specification (or 1-year, as applicable) per $^{\circ}C$
Relative Humidity	Operating: $<80\%$ to $30^{\circ}C$, $<70\%$ to $40^{\circ}C$, $<40\%$ to $50^{\circ}C$ Storage: $<95\%$, non-condensing
Altitude	Operating: 3,050m (10,000 ft) maximum Non-operating: 12,200m (40,000 ft) maximum
Safety	12,200m (40,000 ft) maximum
Analog Low Isolation	20V
EMC	Designed to comply with IEC 61326-1/1997
Line Power	Line Voltage (selectable): 100V, 120V, 220V, 240V Line Frequency: 47 to 63 Hz Line Voltage Variation: + 10% about line voltage setting
Power Consumption	600 VA

Dimensions	Height: 17.8 cm (7 in), standard rack increment, plus 1.5 cm (0.6 in) for feet on bottom of unit Width: 43.2 cm (17 in), standard rack width Depth: 47.3 cm (18.6 in) overall
Weight (without options)	22 kg (49 lbs.)
Absolute Uncertainty Definition	5500A and 5520A uncertainty specifications include stability, temperature coefficient, linearity, line and load regulation, and the traceability of the external standards used for calibration. You do not need to add anything to determine the total uncertainty of your calibrator for the temperature range indicated.
Specification Confidence Interval	> 99%