

FLUKE

5500A

The Fluke 5500A is a versatile multi-product calibrator designed to cover a broad spectrum of medium-accuracy electrical measurement devices. It functions as a single, compact standard capable of sourcing direct and alternating voltage and current, resistance, capacitance, and simulated power. With dedicated options for oscilloscope calibration and comprehensive temperature simulation (thermocouples and RTDs), it effectively replaces multiple standalone calibration instruments.

SPECIFICATIONS

General

Interfaces	RS-232; IEEE-488 (GPIB)
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Physical

Power Supply	100 / 120 / 220 / 240 V AC $\pm 10\%$, 47 to 63 Hz
Operating Temperature	0 to +50 °C °C
Dimensions (W×H×D)	432 × 178 × 473 mm mm
Weight	20 kg kg

General Specifications

Frequency Range	0.01 Hz to 2.0 MHz
Output Capabilities	DC/AC voltage, DC/AC current, resistance, capacitance, simulated power (phase control), thermocouples, RTDs
Waveform Generation	Multiple waveforms and harmonics

DC Voltage Specifications

Output Ranges	0 to ± 1020 V
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Temperature Calibration

Supported Types	Thermocouples and RTDs
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Power and Energy (Simulated)

DC/AC Power Capabilities	Dual DC or AC outputs (two voltages, or voltage + current) with phase control
DC Power Range	109 μ W to 11 kW
AC Power Range	109 μ W to 11 kW

Oscilloscope Calibration Options

Leveled Sine Wave Bandwidth	Up to 600 MHz (with Oscilloscope Calibration option)
Supported Signals	Leveled sine wave, fast edge, time mark, amplitude signals

Safety and Compliance

Calibration Traceability	Traceable to nationally recognized standards (certificate included)
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Environmental

Storage Temperature	-20 to +70 °C
Non-Operating Altitude	Up to 12,200 m (40,000 ft)
Shock and Vibration	MIL-T-28800E, Type III, Class 5

Performance

Warm-up Time	30 minutes (to meet full specifications)
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Performance Specifications

DC Voltage Output Range	0 to ±1020 V
AC Voltage Output Range	1 mV to 1020 V
DC Current Output Range	0 to ±11 A
AC Current Output Range	29 µA to 11 A
Resistance Output Range	0 to 329.999 MΩ
Capacitance Output Range	330 pF to 1.0999 mF
Phase Range	0 to ±179.99°
Phase Resolution	0.01°

Options & Upgrades

Oscilloscope Calibration	300 MHz (Option SC300) or 600 MHz (Option SC600)
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Power

Maximum Power Consumption	600 VA
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Compliance

Safety Standards	IEC 1010-1 (1990), ANSI/ISA S82.01-1994, CAN/CSA-C22.2 No. 1010.1-92
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TECHNOLOGY

Multi-Product Calibration

APPLICATIONS

Calibration of handheld and bench multimeters, oscilloscopes, wattmeters, electronic thermometers, data loggers, chart recorders, power harmonics analyzers, process calibrators, and current clamps.

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.