

FLUKE

5700A

The Fluke 5700A is a high-precision multifunction calibrator designed to calibrate digital multimeters, voltage standards, and other precision electrical instruments. Released as a standard-setting instrument in metrology, it features direct and alternating voltage, current, and resistance sourcing, and supports Artifact Calibration which minimizes the number of external standards required to maintain full accuracy.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488), RS-232-C
Sensing Selection	Internal (2-wire) or External (4-wire)

Physical

Power Supply	100 V / 120 V / 220 V / 240 V AC $\pm 10\%$, 47 Hz to 63 Hz, 300 VA
Operating Temperature	0 °C to 50 °C °C
Dimensions (W×H×D)	432 mm × 178 mm × 630 mm mm
Weight	27.2 kg

DC Voltage Specifications

DC Voltage Range Limits	0 to ± 1100 V
DC Voltage Range Steps	220 mV, 2.2 V, 22 V, 220 V, 1100 V

AC Voltage Specifications

AC Voltage Range Limits	220 μ V to 1100 V
AC Voltage Frequency Range	10 Hz to 1 MHz

DC Current Specifications

DC Current Range Limits	0 to ± 2.2 A (11 A with 5725A Amplifier)
DC Current Range Steps	220 μ A, 2.2 mA, 22 mA, 220 mA, 2.2 A

AC Current Specifications

AC Current Range Limits	9 μ A to 2.2 A (11 A with 5725A Amplifier)
AC Current Frequency Range	10 Hz to 10 kHz

Resistance Specifications

Resistance Nominal Values	1 Ω , 1.9 Ω , 10 Ω , 19 Ω , 100 Ω , 190 Ω , 1 k Ω , 1.9 k Ω , 10 k Ω , 19 k Ω , 100 k Ω , 190 k Ω , 1 M Ω , 1.9 M Ω , 10 M Ω , 19 M Ω , 100 M Ω
---------------------------	--

Wideband AC Voltage (Optional)

Wideband AC Voltage Range Limits	300 μV to 3.5 V (with Option 5700A-03)
Wideband AC Voltage Frequency Range	10 Hz to 30 MHz (with Option 5700A-03)
Wideband AC Voltage Output Impedance	50 Ω (with Option 5700A-03)

Reference and Calibration

Artifact Calibration Standards Required	10 V DC reference, 1 Ω resistance standard, 10 kΩ resistance standard
Artifact Calibration Compatibility	Yes

Environmental and Standards Compliance

Storage Temperature Range	-40 °C to 75 °C
Relative Humidity (Non-condensing)	<80% (up to 30 °C), <70% (up to 40 °C), <40% (up to 50 °C)
Operating Altitude	0 to 3050 m (10,000 ft)

Power Requirements

Line Voltage Selection	100 V / 120 V / 220 V / 240 V AC (±10%, user-selectable)
Line Frequency Range	47 Hz to 63 Hz
Maximum Power Consumption	300 VA
Line Voltage Settings	100 V / 120 V / 220 V / 240 V AC (±10%)

Options

Wideband Output Option	Option 5700A-03 (Adds 10 Hz to 30 MHz output)
------------------------	---

Interfaces & Software

Remote Programming Emulation Modes	Fluke 5100B, Fluke 5200A
------------------------------------	--------------------------

TECHNOLOGY

Solid-State Calibration Standard

APPLICATIONS

Calibration of high-precision digital multimeters up to 7.5 digits

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