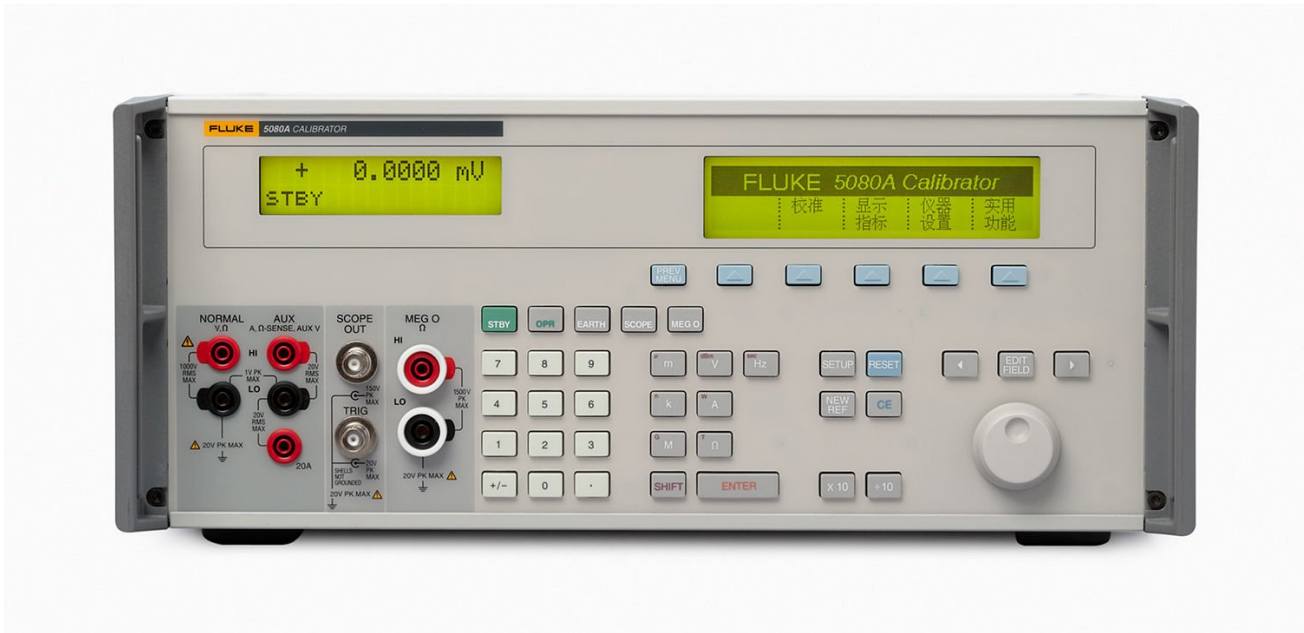


## TECHNICAL DATA

# 5080A High Compliance Multi-Product Calibrator



## Key features

- Calibration solutions for both analog and digital workloads with high compliance and protection circuitry.
- Calibrate analog meters, 3.5 and 4.5 digits DMMs, panel meters, watt meters, clamp meters, oscilloscopes up to 200 MHz, and more.
- Equipped with versatile software applications for paperless results recording.
- Built-in protection circuitry to safeguard against damaging input voltages.

## Product overview: 5080A High Compliance Multi-Product Calibrator

### Accurate, reliable analog meter calibration

The 5080A Multi-Product Calibrator calibrates your analog workload accurately and reliably, thanks to its high voltage and current compliance. With maximum burden up to 800 mA for ac/dc voltage, and voltage up to 50 V for ac/dc current, 5080A calibrators can drive a wide range of analog meters.

Options and accessories expand workload coverage

Options and accessories enable you to use the 5080A Multi-Product Calibrator to calibrate an even broader workload,

including:

- Clamp meters. The 9100-200 10/50 turn coil and 5500A/COIL 50-turn current coil enables the 5080A to calibrate most popular clamp meters at currents up to 1000 A rms amps.
- Oscilloscopes. Oscilloscope calibration to 200 MHz quickly, easily, and cost effectively. Verify dynamic response, bandwidth, timing, multiple triggering functions, and input resistance.
- Megohm meters. This option sources high ohms, high voltage resistors up to 18 G ohms. It also measures high voltage outputs.

### Protective circuits prevent damage

Mains voltage inadvertently applied to a calibrator's output terminals can cause extensive damage, requiring costly repairs. Electrical protection for calibrator outputs is vital for daily operation. The 5080A calibrator's innovative protection circuitry prevents it from being damaged by reversed input voltage, so you can use it with confidence day after day.

### Highest voltage and current compliance

The 5080A has the highest voltage and current compliance of any calibrator in the Fluke Calibration multi-product and multifunction calibrator families, making it an ideal solution for calibrating analog meters and other instruments requiring higher drive capability for proper operation.

#### Maximum burden or compliance voltage

##### Functions

##### Model DC voltage AC voltage DC current AC current\*

<b>5080A</b>	600 mA	800 mA	50 V	44 V
<b>9100</b>	20 mA	20 mA	4 V	4 V
<b>5500A</b>	10 mA	10 mA	4.5 V	3 V
<b>5520A</b>	10 mA	10 mA	7 V	5 V
<b>5700A</b>	50 mA	50 mA	10 V	7 V
<b>5720A</b>	50 mA	50 mA	10 V	7 V

\* With AC LCOMP on

Automate the 5080A Multi-Product Calibrator to increase efficiency and throughput

For the full spectrum of calibration automation and asset management, choose MET/CAL software

The solutions you need, from the leader in calibration

Fluke Calibration is a premium brand, well known around the world for its accurate, dependable, high quality products. Long known as a leader in dc and low frequency ac calibration, Fluke Calibration is also recognized for its offerings in temperature, pressure, power, process, and rf calibration. Fluke Calibration provides the calibrators, standards, software, service, support and training you need for a complete solution in your cal lab.

## Specifications: 5080A High Compliance Multi-Product Calibrator

#### Technical Specifications

<b>Voltage DC</b>	Range: 0 to $\pm 1020V$ Best 1 Year Specification: $\pm 0.025\%$ of seing
<b>Current DC</b>	Range: 0 to $\pm 20.5A$ Best 1 Year Specification: $\pm 0.025\%$ of seing
<b>Resistance</b>	Range: 0 to 190 MO, 19 values in x1 and x1.9 Best 1 Year Specification: $\pm 0.025\%$ of seing
<b>Voltage AC</b>	Range: 1 mV to 1020V 45Hz to 1 kHz, Sine Best 1 Year Specification: $\pm 0.25\%$ of seing
<b>Current AC</b>	Range: 29 mA to 20.5A 45 Hz to 1 kHz, Sine Best 1 Year Specification: $\pm 0.25\%$ of seing
<b>DC Power</b>	Range: 10.9 mW to 20.5 kW Best 1 Year Specification: $\pm 0.125\%$ of seing
<b>AC Power</b>	Range: 10.9 mW to 20.5 kW 45-65 Hz, PF=1 Best 1 Year Specification: $\pm 0.36\%$ of seing
<b>Phase</b>	Range: 0 to $\pm 179.99^\circ$ 45 Hz to 1 kHz Best 1 Year Specification: $\pm 0.25^\circ$ of seing
<b>Frequency</b>	Range: 45 Hz to 1 kHz Best 1 Year Specification: $\pm 50$ ppm of seing
<b>General Specifications</b>	
<b>Warm up Time</b>	Twice the time since last warmed up, to a maximum of 30 minutes
<b>Seling Time</b>	Less than 5 seconds for all functions and ranges except as noted
<b>Standard Interfaces</b>	RS-232 and Etheet
<b>Temperature Performance</b>	Operating: $0^\circ C$ to $50^\circ C$ Calibration (tcal): $15^\circ C$ to $35^\circ C$ Storage: $-20^\circ C$ to $+70^\circ C$
<b>Temperature Coefficient</b>	Temperature coefficient for temperatures outside tcal $\pm 5^\circ C$ is 10 % of the stated specification per $^\circ C$ for temperatures in the range of $0^\circ C$ to $35^\circ C$ . Above $35^\circ C$ , the temperature coefficient is 20 % of the stated specification per $^\circ C$ .
<b>Relative Humidity</b>	Operating: $<80\%$ to $30^\circ C$ , $<70\%$ to $40^\circ C$ , $<40\%$ to $50^\circ C$ Storage: $<925\%$ , non-condensing
<b>Altitude</b>	Operating: 2,000m (6,500 ft) maximum Non-operating: 12,200m (40,000 ft) maximum
<b>Safety</b>	Meets EN. 61010-1:2001, CAN/CSA-C22.2 No. 61010-1-04, UL 61010-1: 2004
<b>Analog Low Isolation</b>	20V
<b>EMC</b>	Meets EN613261:2006.
<b>Line Power</b>	Line Voltage (selectable): 100V, 120V, 220V, 240V Line Frequency: 47 to 63 Hz Line Voltage Variation: + 25% about line voltage seing
<b>Power Consumption</b>	600 VA
<b>Calibration Documentation</b>	Report of calibration with data included; 17025 accredited report optional

<b>Dimensions</b>	Height:19.3 cm (7.6 in) Width:43.2 cm (17 in), 44.3 cm (17.5 in) including handles Depth:53.8 cm (21.2 in)
<b>Weight (without options)</b>	22 kg (48 lbs.)
<b>Absolute Uncertainty Definition</b>	The specifications include stability, temperature coefficient, linearity, line and load regulation, and the traceability of the external standards used for calibration. It is not necessary to add anything to determine the total specification for the temperature range indicated.
<b>Specification Confidence Interval</b>	99%

## Ordering information



### **5080A**

Multi-Product Calibrator

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### **5080A/MEG**

Multi-Product calibrator with Megohm Meter Calibration Option

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### **5080A/SC**

Multi-Product Calibrator with Oscilloscope Calibration Option

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### **5080A/SC/MEG**

Multi-Product Calibrator with Megohm Meter and Oscilloscope Calibration Option

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### **5080A -> 5080A/MEG**

Upgrade 5080A to 5080A/MEG - Installable only at Fluke service centers for extra installation and calibration cost.

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### **5080A -> 5080A/SC/MEG**

Upgrade 5080A to 5080A/SC/MEG - Installable only at Fluke service centers for extra installation and calibration cost.

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### **9100-200**

10/50 Turn Coils

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**Fluke.** *Keeping your world up and running.®*

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04/2025

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