

# 5522A Multi-Product Calibrator

Part of the 55XX family of multi-product calibrators, including the 5500A, 5502A, and 5522A.

## Highlights

### Robust, transportable wide workload coverage

The 5522A Multi-Product Calibrator addresses a wide calibration workload and comes with internal and external protection features that protect it against damage and make it easier to transport for on-site or mobile calibration. The 5522A can also be fully automated with MET/CAL® *Plus* Calibration Management Software (version 7.3 SP1 or later). It is the ideal calibrator for metrology professionals who need to perform resistance calibration, voltage calibration, current calibration and more, and who want a transportable instrument that offers them a high return on investment.

The 5522A is a voltage calibrator, a resistance calibrator, a current calibrator and much more. It sources direct voltage and current, alternating voltage and current with multiple waveforms and harmonics, two simultaneous voltage outputs or voltage and current to simulate dc and ac power with phase control, resistance, capacitance, thermocouples and RTDs. The 5522A can also measure thermocouple temperature, and pressure using one of 29 Fluke 700 Series pressure modules. Two options add the capability to calibrate oscilloscopes either 600 MHz or 1.1 GHz. And the 5520A-PQ Power Quality Option enables the 5522A to calibrate power quality instrumentation to the standards of the IEC and other regulatory agencies.

Learn the top three pitfalls of using DMM specs in "Understanding specifications for precision multimeters."

[Read it now »](#)

The 5522A calibrator covers many of the electronic test tools you use to keep your company up and running, including:

- Handheld and bench meters (analog and digital) up to 6 ½ digits
- Current clamps and clamp meters
- Thermocouples and RTDs
- Process calibrators
- Data loggers
- Strip and chart recorders
- Watt meters
- Power harmonics analyzers
- Panel meters
- Graphical multimeters
- Power quality analyzers (with option)
- Analog or digital handheld and bench oscilloscopes to 600 MHz or 1.1 GHz (with options)
- ...and more, including pressure gauges and transducers and three-phase power meters

### 5522A features at a glance

- Calibrates a wide variety of electrical test equipment
- Robust protection circuits prevent costly damage from operator error
- Resistance calibrator, voltage calibrator, current calibrator and more
- Redesigned carrying handles make the 5522A easy to transport
- Rugged optional carrying case with built-in handles and wheels and removable front/rear access doors for in-situ calibration in almost any environment
- Remarkably affordable

## Description

### Rugged carrying case enables safe transport and efficient onsite calibration

An innovative carrying case accessory makes it easier than ever to calibrate outside of the calibration laboratory, as well as inside. The shock-mounted case features built-in handles and wheels, enabling you to move the calibrator from place to place easily and safely.

The front and rear access doors are removable, so you can calibrate with the 5522A while its top, bottom and side panels remain protected – and avoid having to completely unpack and then re-pack the calibrator.

A redesigned front panel and ergonomic carrying handles make it easy to transport the calibrator short distances within the cal lab.

## Internal circuitry offers "mistake proof" protection

The 5522A provides reverse power protection, immediate output disconnection, and/or fuse protection on the output terminals for all functions. This protection is for applied external voltages up to +/-300 V peak.

## Innovation from the leader in calibration

Fluke Calibration pioneered the multi-product calibrator concept, creating a family of instruments that allow you to calibrate the widest range of today's electronic test tools with a single instrument instead of requiring separate voltage calibrators, resistance calibrators, current calibrators, and so forth. Fluke Calibration multi-product calibrators offer simple, portable, cost-effective voltage calibration, resistance calibration, and current calibration solutions that allow you to match your calibrator to your workload and your budget.

In addition to its product line of resistance calibrators, dc calibrators, voltage calibrators and current calibrators, 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.

## Automate to increase throughput and efficiency

Quality standards impose stringent requirements for documenting, reporting, and controlling calibration processes and results. Using MET/CAL *Plus* Calibration Management Software can help you meet these requirements easily while also enabling you to increase throughput and streamline your voltage calibration, resistance calibration, and current calibration processes.

MET/CAL *Plus* is a powerful application for creating, editing and testing calibration procedures and collecting and reporting results on a wide variety of instruments. It includes MET/CAL® – the industry-leading software for automated calibration and MET/TRACK® – a dedicated system to manage your test and measurement assets. It is the most complete software solution available to calibration professionals.

## Priority software support helps you stay productive

MET/SUPPORT Gold is an annual membership program offering premium support and services to help you stay as productive as possible with MET/CAL *Plus* software. Services include free software updates and upgrades, free access to the Fluke MET/CAL Warranted Procedures Library, plus discounts on training and custom procedure development. Members also receive invitations to regular calibration software web seminars and user group meetings. Use only a few of the Gold services and you can easily recover more than the cost of your membership fee.

## Metrology training increases skill levels

Calibration and metrology training from Fluke Calibration can help you and your staff become more knowledgeable in a wide variety of disciplines. Instructor-led classroom training is available for general topics in metrology, as well as for calibration software. On-site training can also be scheduled if you have a number of people in your organization who would benefit.

Fluke Calibration also offers other educational events such as web seminars and road shows on a wide variety of topics. The best way to stay informed about these events is to register to receive email and direct mail from Fluke Calibration. You can register online at [subscribe to news](#).

## Calibration and repair service

Fluke Calibration offers extensive calibration support and service to ensure your long-term satisfaction and return on investment in resistance calibrators, dc calibrators, current calibrators, voltage calibrators, and other calibration equipment. Our worldwide network of calibration centers offers accredited calibrations traceable to national standards. We also offer fast, quality repair and calibration services including a module exchange program and full support in setting up your lab.

## Specifications

Summary Specifications		Models and Accessories	
		Model Name	Description
Function & Range		5522A	Multiproduct Calibrator
Direct volts	0 to ± 1020 V		
Direct Current	0 to 20.5 A		
Alternating volts	1 mV to 1020 V		Multiproduct

Alternating volts	10 Hz to 500 kHz	5522A/6	Calibrator with 600 MHz Oscilloscope Calibration Option
Volt*Hertz	1000 V@ 10 kHz/330 V@100 kHz		
Alternating current	29 $\mu$ A to 20.5 A 10 Hz to 3s0 kHz	5522A/1GHZ	Multiproduct Calibrator with 1100 MHz Oscilloscope Calibration Option
Waveforms	Sine, square, triangle, truncated sine		
Resistance	0 M $\Omega$ to 1100 M $\Omega$	5522A-PQ	Multiproduct Calibrator with Power Quality Option
Capacitance	220 pF to 110 mF		
Power (phantom loads)	20.9 kW	5522A-PQ/6	Multiproduct Calibrator with Power Quality and 600 MHz Oscilloscope Calibration Options
Phase control	0.01°		
Thermocouple (source and measure temperature)	B, C, E, J, K L N R, S, T, U 10 $\mu$ V/°C	5522A-PQ/1GHZ	Multiproduct Calibrator with Power Quality and 1100 MHz Oscilloscope Calibration Options
RTD (source temperature)	Pt 385-100 $\Omega$ , Pt 3926-100 $\Omega$ Pt 3916-100 $\Omega$ , Pt 385-200 $\Omega$ , Pt 385-500 $\Omega$ , Pt385 1000 $\Omega$ , PtNi 385-120 $\Omega$ , (Ni120), Cu 427 10 $\Omega$		
Interfaces	RS-232, IEEE 488	5522A-PQ/6	Multiproduct Calibrator with Power Quality and 600 MHz Oscilloscope Calibration Options
Phase lock	Yes		
Frequency uncertainty	<2.5 ppm	5522A-PQ/1GHZ	Multiproduct Calibrator with Power Quality and 1100 MHz Oscilloscope Calibration Options
External frequency reference (10 MHz)	Yes		
Calibration Documentation	17025 accredited report of calibration included	MET/CAL-L	License disk for MET/CAL <a href="#">Complete MET/CAL Plus information and licensing here »</a>
Oscilloscope calibrator (optional)	Levelled sine wave from 5 mV to 5.5 Vpp max, frequencies 50 kHz to 600 kHz and 3.5 Vpp max to 1100 MHz; edge rise times of < 300ps, multiple trigger functions, lowest dc, square wave and timing uncertainty		
Power calibrator (optional)	Composite harmonic, flicker simulation, sags and swells simulation modes		

### Accessories common to all models:

Accessory	Description
<a href="#">5500A/COIL</a>	50-Turn Current Coil
5500A/HNDL	Side handle
<a href="#">5520A-525A/LEADS</a>	Test Lead Set
5522A/CARRYCASE	Rugged Carrying Case with removable front/back panels
55XX/CASE	Transit case with wheels

Y5537	Rack mount kit
Fluke-700Pxx	Pressure Module Series

