

8588A/8558A

Reference Multimeter and 8 ½ Digit Multimeter

Safety Information



1-year limited warranty. See the Operators Manual for the full warranty.

Contact Fluke Calibration

To register your product, or to view, print, or download the latest manual or manual supplement, go to:

www.fluke.com/productinfo.

Introduction

This document supplies safety information for the Reference Multimeter and 8 ½ Digit Multimeter (the Product).

Safety Information

A **Warning** identifies conditions and procedures that are dangerous to the user.

Warning

To prevent possible electrical shock, fire, or personal injury:

- Read all safety information before you use the Product.
- Do not alter the Product and use only as specified, or the protection supplied by the Product can be compromised.
- Examine the case before you use the Product. Look for cracks or missing plastic. Carefully look at the insulation around the terminals.
- Do not use the Product if it is altered or damaged.

- Do not use the Product if it operates incorrectly.
- Disable the Product if it is damaged.
- Do not use the Product around explosive gas, vapor, or in damp or wet environments.
- Make sure the ground conductor in the mains power cord is connected to a protective earth ground. Disruption of the protective earth could put voltage on the chassis that could cause death.
- Do not put the Product where access to the mains power cord is blocked.
- Use only the mains power cord and connector approved for the voltage and plug configuration in your country and rated for the Product.
- Replace the mains power cord if the insulation is damaged or if the insulation shows signs of wear.
- The Product enclosure must be grounded through the grounding conductor of the power cord, or through the rear panel ground binding post.

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- Do not use test leads if they are damaged. Examine the test leads for damaged insulation and measure a known voltage.
- Use this Product indoors only.
- Carefully read all instructions.
- Do not touch voltages >30 V ac rms, 42 V ac peak, or 60 V dc.
- Do not exceed the Measurement Category (CAT) rating of the lowest rated individual component of a Product, probe, or accessory.
- Limit voltage sources connected to the Product to ≤ 1050 V dc or rms ac, and ≤ 200 mA. Do not connect voltages that have high-energy transients.
- Only use probes, test leads, and accessories that have the same measurement category, voltage, and amperage ratings as the Product.
- Remove all probes, test leads, and accessories that are not necessary for the measurement.
- Use the correct terminals, function, and range for measurements.
- Keep fingers behind the finger guards on the probes.
- Limit operation to the specified measurement category, voltage, or amperage ratings.
- Measure a known voltage first to make sure that the Product operates correctly.
- Use only current probes, test leads, and adapters supplied with the Product.
- Connect the common test lead before the live test lead and remove the live test lead before the common test lead.
- Do not apply more than the rated voltage, between the terminals or between each terminal and earth ground.
- Do not touch the probes to a voltage source when the test leads are connected to the current terminals.
- Do not use a current measurement as an indication that a circuit is safe to touch. A voltage measurement is necessary to know if a circuit is hazardous.
- Remove the input signals before you clean the Product.
- Use only specified replacement fuses.
- Use only specified replacement parts.
- Turn the Product off and remove the mains power cord. Stop for two minutes to let the power assemblies discharge before you open the fuse door.
- Replace a blown fuse with exact replacement only for continued protection against arc flash.
- Have an approved technician repair the Product.
- Disconnect the mains power cord before you remove the Product covers.
- Do not operate the Product with covers removed or the case open. Hazardous voltage exposure is possible.
- Do not use an extension cord or adapter plug.
- Do not put the Product where access to the mains power cord is blocked.
- Do not use a two-conductor mains power cord unless you install a protective ground wire to the Product ground terminal before you operate the Product.
- Ensure that no interruption of the protective ground conductor inside or outside the Product has occurred. Any interruption of the protective ground makes the Product dangerous.
- Never touch any lead or terminal unless you are certain that no dangerous voltage is present.
- Connect an approved three-conductor mains power cord to a grounded power outlet.
- Make sure that the Product is grounded before use.
- Do not put metal objects into connectors.
- Do not use exposed metal BNC or banana plug connectors.
- Remove circuit power before you connect the Product in the circuit when you measure current. Connect the Product in series with the circuit.
- Disconnect power and discharge all high-voltage capacitors before you measure resistance, continuity, capacitance, or a diode junction.
- The Product could accumulate LETHAL charge while making a voltage measurement. DO NOT TOUCH the Product terminals or circuitry under test unless you are sure it is safe to do so.

Symbols

The symbols used in the manuals and on the Product are shown below.

Symbols

Symbol	Description
	WARNING. HAZARDOUS VOLTAGE. Risk of electric shock.
	WARNING. RISK OF DANGER.
	Consult user documentation.
	Conforms to European Union directives.
	Fuse
	This product complies with the WEEE Directive and its marking requirements. The affixed label indicates that you must not discard this electrical/electronic product in domestic household waste. Do not dispose of this product as unsorted municipal waste. For information about take-back and recycling programs available in your country, see the Fluke website.

Safety Specifications

Full specifications are located online in the *8558A/8588A Specifications*.

Power Line 100 V to 120 V, 200 V to 240 V,
50 Hz or 60 Hz.

Power Consumption 80 VA maximum

 **Fuse** T1.25AH 250 V

Temperature:

Operating 0 °C to 50 °C

Specified Operation 5 °C to 40 °C

Storage -20 °C to +70 °C

Relative Humidity

Operating <90 % (5 °C to 40 °C)

Storage <95 % (0 °C to 70 °C)

Altitude

Operating 3000 m

Storage 12 000 m

Dimensions

Height 88 mm (3.5 inches)

Width

Excluding handles 431 mm (17 inches)

Overall 440 mm (17.3 inches)

Depth

Excluding handles 475 mm (18.7 inches)

Overall 510 mm (20.1 inches)

Weight 9.8 kg (21.5 lb)

Compliance

Mains IEC 61010-1: Overvoltage

Category II, Pollution Degree 2

Measurement IEC 61010-2-030: Not Category
Rated, 1485 Vpk Max, 1050 Vrms
Max

Electromagnetic Compatibility (EMC)

International IEC 61326-1: Controlled Electromagnetic
Environment

CISPR 11: Group 1, Class A

Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.

Class A: Equipment is suitable for use in all establishments other than domestic and those directly connected to a low-voltage power supply network that supplies buildings used for domestic purposes. There may be potential difficulties in ensuring electromagnetic compatibility in other environments due to conducted and radiated disturbances.

Emissions that exceed the levels required by CISPR 11 can occur when the equipment is connected to a test object.

Korea (KCC) Class A Equipment (Industrial Broadcasting & Communication Equipment)

Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.

USA (FCC) 47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103.

