

# 5790B

## AC Measurement Standard

## Safety Information

#### Introduction

The 5790B AC Measurement Standard (the Product) is a systems instrument that measures ac voltage with the uncertainty of a thermal transfer standard.

#### **Contact Fluke Calibration**

To contact Fluke Calibration, call one of the following telephone numbers:

Technical Support USA: 1-877-355-3225
Calibration/Repair USA: 1-877-355-3225
Canada: 1-800-36-FLUKE (1-800-363-5853)

Europe: +31-40-2675-200
Japan: +81-3-6714-3114
Singapore: +65-6799-5566
China: +86-400-810-3435
Brazil: +55-11-3759-7600

Anywhere in the world: +1-425-446-6110

To see product information or download manuals and the latest manual supplements, visit Fluke Calibration's website at <a href="https://www.flukecal.com">www.flukecal.com</a>.

To register your product, visit <a href="http://flukecal.com/register-product.">http://flukecal.com/register-product.</a>

### **Symbols**

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

Symbol	Description	
A	WARNING. HAZARDOUS VOLTAGE. Risk of electric shock.	
$\triangle$	WARNING.RISK OF DANGER.	
[]i	Consult user documentation.	
-	Fuse	
© ® us	Certified by CSA Group to North American safety standards.	
C€	Conforms to European Union directives.	
<u>&amp;</u>	Conforms to relevant Australian EMC standards.	
	Conforms to relevant South Korean EMC Standards.	
CATII	Measurement Category II is applicable to test and measuring circuits connected directly to utilization points (socket outlets and similar points) of the low-voltage MAINS installation.	
<u>X</u>	This product complies with the WEEE Directive marking requirements. The affixed label indicates that you must not discard this electrical/electronic product in domestic household waste. Product Category: With reference to the equipment types in the WEEE Directive Annex I, this product is classed as category 9 "Monitoring and Control Instrumentation" product. Do not dispose of this product as unsorted municipal waste.	

### Safety Information

A **Warning** identifies conditions and procedures that are dangerous to the user. A **Caution** identifies conditions and procedures that can cause damage to the Product or the equipment under test.

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

- Read all safety information before you use the Product.
- Carefully read all instructions.
- Use the Product only as specified, or the protection supplied by the Product can be compromised.
- 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.
- Do not apply more than the rated voltage, between the terminals or between each terminal and earth ground.
- Limit operation to the specified measurement category, voltage, or amperage ratings.
- Use the correct terminals, function, and range for measurements.
- Do not touch voltages >30 V ac rms, 42 V ac peak, or 60 V dc.
- Do not use the Product around explosive gas, vapor, or in damp or wet environments.
- Do not use the Product if it operates incorrectly.
- 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.
- Make sure that the space around the Product meets minimum requirements.
- Do not use test leads if they are damaged. Examine the test leads for damaged insulation, exposed metal, or if the wear indicator shows. Check test lead continuity.
- . Use this Product indoors only.
- 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.
- Use only the mains power cord and connector approved for the voltage and plug configuration in your country and rated for the Product.
- Make sure that the Product is grounded before use.
- Disconnect the mains power cord before you remove the Product covers.
- Remove the input signals before you clean the Product.

- Use only specified replacement parts.
- · Use only specified replacement fuses.
- Have an approved technician repair the Product.
- · Use only cables with correct voltage ratings.
- Connect the common test lead before the live test lead and remove the live test lead before the common test lead.
- Keep fingers behind the finger guards on the probes.
- Remove all probes, test leads, and accessories that are not necessary for the measurement.
- Disable the Product if it is damaged.

Operating.......3,050 meters (10,000 feet)

· Do not use the Product if it is damaged.

### Safety Specifications

#### Altitude

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Non-Operating	12,200 meters (40,000 feet)
Temperature	
Operating	0 °C to 50 °C
Calibration	15 °C to 35 °C
Storage	40 °C to 70 °C
Line Power	50 Hz/60 Hz; 100 V - 120 V, 220 V - 240 V
Safety	IEC 61010-1: Overvoltage Category

II, Pollution Degree 2
IEC 61010-2-030: Measurement

1000 V CAT O

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 meet 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

#### LIMITED WARRANTY AND LIMITATION OF LIABILITY

This Fluke product will be free from defects in material and workmanship for one year from the date of purchase. This warranty does not cover fuses, disposable batteries, or damage from accident, neglect, misuse, alteration, contamination, or abnormal conditions of operation or handling. Resellers are not authorized to extend any other warranty on Fluke's behalf. To obtain service during the warranty period, contact your nearest Fluke authorized service center to obtain return authorization information, then send the product to that Service Center with a description of the problem.

THIS WARRANTY IS YOUR ONLY REMEDY. NO OTHER WARRANTIES, SUCH AS FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSED OR IMPLIED. FLUKE IS NOT LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, ARISING FROM ANY CAUSE OR THEORY. Since some states or countries do not allow the exclusion or limitation of an implied warranty or of incidental or consequential damages, this limitation of liability may not apply to you.

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