

# 1586A

## *SUPER-DAQ Precision Temperature Scanner*

### *Safety Information*

### **Introduction**

This document supplies safety information for the 1586A SUPER-DAQ Precision Temperature Scanner (the Product).

### **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 and download the latest manual supplements, visit Fluke Calibration's website at [www.flukecal.com](http://www.flukecal.com).

To register your product, visit <http://flukecal.com/register-product>.

### **Safety Specifications**

#### **Mains Voltage**

100 V Setting.....	90 V to 110 V
120 V Setting.....	108 V to 132 V
220 V Setting.....	198 V to 242 V
240 V Setting.....	216 V to 264 V

**Frequency** ..... 47 Hz to 440 Hz

**Power Consumption**..... 36 V A peak (24 W average)

#### **Relative Humidity (non-condensing)**

Operating.....	0 °C to 30 °C <80 %
	30 °C to 50 °C <50 %
Storage.....	-20 °C to 70 °C <95 %

#### **Temperature**

Operating.....	0 °C to 50 °C
Storage.....	-20 °C to 70 °C
Warm-up.....	1 hour to full uncertainty specifications

**Input Protection** ..... 50 V all functions, terminals and ranges

#### **Altitude**

Operating.....	< 2,000 m
Storage.....	< 12,000 m

## 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.
- Carefully read all instructions.
- Use the Product 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 operates incorrectly.
- Do not use and disable the Product if it is damaged.
- 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.
- 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 correct measurement category (CAT), voltage, and amperage rated probes, test leads, and adapters for the measurement.
- Use only cables with correct voltage ratings.
- Do not use test leads if they are damaged. Examine the test leads for damaged insulation and measure a known voltage.
- Do not exceed the Measurement Category (CAT) rating of the lowest rated individual component of a Product, probe, or accessory.
- Keep fingers behind the finger guards on the probes.
- Do not apply more than the rated voltage, between the terminals or between each terminal and earth ground.
- Do not touch voltages >30 V ac rms, 42 V ac peak, or 60 V dc.
- Limit operation to the specified measurement category, voltage, or amperage ratings.
- Measure a known voltage first to make sure that the Product operates correctly.
- Consider all accessible channels to be hazardous live and an electric shock hazard if any channel is connected to a hazardous voltage source.
- Remove inputs from hazardous voltage sources before touching or changing external wiring.
- Remove inputs from hazardous voltage sources before opening an input module.
- Use the correct terminals, function, and range for measurements.
- Use this Product indoors only.
- Do not use the Product around explosive gas, vapor, or in damp or wet environments.

Table 1 shows the symbols used in the manuals and on the Product.

**Table 1. Symbols**

Symbol	Description
	Risk of danger. Important information. See manual.
	Hazardous voltage. Voltage >30 V dc or ac peak might be present.
	DC (Direct Current).
	AC or DC (Alternating or Direct Current)
	Digital signal.
	Power ON / OFF
	Earth ground.
<b>CAT II</b> <sup>[1]</sup>	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.
<b>CAT III</b> <sup>[1]</sup>	Measurement Category III is applicable to test and measuring circuits connected to the distribution part of the building's low-voltage MAINS installation.
<b>CAT IV</b> <sup>[1]</sup>	Measurement Category IV is applicable to test and measuring circuits connected at the source of the building's low-voltage MAINS installation.
	This product complies with the WEEE Directive (2002/96/EC) 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. Go to Fluke's website for recycling information.
	Recycle.
<b>CE</b>	Product conforms with the requirements of the applicable EC directives.
<p>Note: [1] - This equipment is not intended for measurements in CAT II, CAT III, or CAT IV environments. These definitions are included because the test leads supplied with the product include these ratings.</p>	

**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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