

### A Greater Measure of Confidence

### TRACEABLE CALIBRATION

DMM6500, 4648119 Cal Date: 27-AUG-2024 Cal Due: Lab: Kei

KEITHLEY

KEITHLEY INSTRUMENTS, INC \* 28775 AURORA RD, CLEVELAND, OHIO - USA \* 440-248-0400 \* Fax: 440-248-6168 \* 1-888-KEITHLEY \* www.keithley.com

Calibration Facility: This product was calibrated for Keithley Instruments by

Tektronix (China) Co. Ltd., 1227 Chuan Qiao Road, Pudong New District, Shanghai, China 201206

## **Calibration Certificate**

Certificate No: PC2K176NX58

Manufacturer: Keithley

Description: 6 1/2 Digit Multimeter

Calibration Date: 27-AUG-2024

Revision: 00

Model: DMM6500

Temperature: 23.0 °C

Date Placed In Service:

Serial No: 4648119

Humidity: 41 %

Due Date:

\* Optional customer entry fields: The due date may be established by adding the Keithley recommended cal interval stated in the product manual to the "Date placed in service"

Initial Condition: Not applicable, new product

Final Condition: In Tolerance

- · Keithley Instruments, Inc. certifies that the above instrument meets its published measurement specifications.
- This instrument has been calibrated using measurement standards traceable to the International System of Units (SI) through the PRC National Institute of Metrology (NIM), or other National Metrology Institutes (such as NIST, NPL, PTB, etc.).
- The policies and procedures used for the calibration of this product are based upon ANSI/NC\$L Z540.1-1994 (R2002).
- The quality system used by the calibration facility is ISO 9001:2015 registered.
- · This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.
- · This calibration certificate shall not be reproduced, except in full, without the written approval of Keithley Instruments,
- · The test results shown in this report apply to the calibrated item identified on page one of this certificate.

Calibration Procedure Used: MANIFEST: Product Dmm 2019-KeithlevDMMs Full VERSION:51

## Calibration Standards Used:

ivianutacturer/iviodei				
Fluke 5725A				
Fluke 5730A				
Fluke 8588A				
IET Labs 1423-9801				
IET Labs HACS-Z-A-2E-1uF				
Keithley 3390				

Model Description	ID Number	Due Date
Power Amplifier	KI10610	13-Apr-2025
Multifunction Calibrator	CT1904	18-Feb-2026
Digital Multimeter	CT2126	30-Sep-2024
Decade Capacitor	CT2120	24-Aug-2025
Decade Capacitance Substituter	KI10441	08-Apr-2025
Function/Arbitrary Waveform Gen	KI10629	13-May-2025

Issued By:

Certified By: Biao Luo

**Quality Director:** 

LI Yongdong

Date Issued: 27-AUG-2024

DMM6500 4648119

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PA-1061B







# **Environmental Disclosure Report**

Instrument/System

Keithley Instruments 28775 Aurora Road Cleveland, Ohio 44139 1-800-833-9200 tek.com/keithley



This symbol indicates that this product complies with the applicable European Union requirements according to Directives 2012/19/EU and 2006/66/EC on waste electrical and electronic equipment (WEEE) and batteries. For information about recycling options, go to the Tektronix Web site <a href="tek.com/recycle">tek.com/recycle</a>.

The following information is provided as required by the China regulation Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products ("Management Methods").

#### Hazardous substances1

deditious substail	000				
Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr(VI))	Polybrominated biphenyl (PBB)	Polybrominated diphenyl ether (PBDE)
0	0	0	0	0	0
X	0	0	0	0	0
X	0	0	0	0	0
X	0	0	0	0	0
X	0	0	0	0	0
Х	0	0	0	0	0
X	0	0	0	0	0
X	0	0	0	0	0
0	0	0	0	0	0
	Lead (Pb) O X X X X X X X	Lead (Pb)         Mercury (Hg)           O         O           X         O           X         O           X         O           X         O           X         O           X         O           X         O           X         O           X         O	Lead (Pb)         Mercury (Hg)         Cadmium (Cd)           O         O         O           X         O         O           X         O         O           X         O         O           X         O         O           X         O         O           X         O         O           X         O         O           X         O         O           X         O         O	Lead (Pb)         Mercury (Hg)         Cadmium (Cd)         Chromium (Cr(VI))           O         O         O         O           X         O         O         O           X         O         O         O           X         O         O         O           X         O         O         O           X         O         O         O           X         O         O         O           X         O         O         O           X         O         O         O           X         O         O         O	Lead (Pb)         Mercury (Hg)         Cadmium (Cd)         Hexavalent Chromium (Cr(VI))         Polybrominated biphenyl (PBB)           O

<sup>1</sup> This table is prepared in accordance with the provisions of SJ/T 11364.

The "General product and accessories" symbol applies to products and accessories but does not apply to batteries. Batteries are addressed by the "Battery" symbol.



General product and accessories symbol



Battery symbol

- The number displayed within the symbol indicates the Environmentally Friendly Use Period (EFUP) for the accompanying electrical or electronic product. The EFUP is the number of years from date of manufacture that the electrical or electronic product may be used under normal conditions or customary use without risk that the contained hazardous substances will leak from or mutate in the product.
- The date of manufacture is included on the product packaging label and is provided in a Year/Month/Day format or equivalent. If you do not have access to the
  packaging label, the product date of manufacturing may also be traced through the product serial number, where applicable. Contact Keithley Instruments if you
  need further information.
- The "General product and accessories" EFUP excludes the contribution of any batteries. The EFUP for any included batteries is shown in the "Battery" symbol. The EFUP assumes that consumable items, such as batteries, are replaced as required for proper maintenance.
- Except as specifically required by the "Management Methods," Keithley makes no representation or warranty of any kind, expressed or implied, with respect to the EFUP and expressly disclaims any representations or warranties, expressed or implied, with respect to EFUP.

<sup>&</sup>quot;X" indicates that the content of the hazardous substance in at least one homogeneous material of the part exceeds the concentration limit requirement as described in GB/T 26572.

<sup>&</sup>quot;o" indicates that the content of the nazardous substance in all the homogeneous materials of the partie below the concentration limit requirement as described in GB/T 26572.

<sup>&</sup>lt;sup>2</sup> The listing of part names includes entries that are subassemblies, as permitted by the "Management Methods."



## **Perchlorate Materials Handling**

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## Handling perchlorate materials

This product contains one or more type CR lithium batteries. According to the state of California, CR lithium batteries are classified as perchlorate materials and require special handling. See <a href="https://www.dtsc.ca.gov/hazardouswaste/perchlorate">www.dtsc.ca.gov/hazardouswaste/perchlorate</a> for additional information.







# Keithley End User License Agreement

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- 3. Fully transfer the Equipment to a third party but only if prominently accompanied by this End User License Agreement, and such third-party recipients agree to be bound by the terms of this Agreement; and
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The following safety precautions should be observed before using this product and any associated instrumentation. Although some instruments and accessories would normally be used with nonhazardous voltages, there are situations where hazardous conditions may be present.

This product is intended for use by personnel who recognize shock hazards and are familiar with the safety precautions required to avoid possible injury. Read and follow all installation, operation, and maintenance information carefully before using the product. Refer to the user documentation for complete product specifications.

If the product is used in a manner not specified, the protection provided by the product warranty may be impaired.

The types of product users are:

Responsible body is the individual or group responsible for the use and maintenance of equipment, for ensuring that the equipment is operated within its specifications and operating limits, and for ensuring that operators are adequately trained.

**Operators** use the product for its intended function. They must be trained in electrical safety procedures and proper use of the instrument. They must be protected from electric shock and contact with hazardous live circuits.

Maintenance personnel perform routine procedures on the product to keep it operating properly, for example, setting the line voltage or replacing consumable materials. Maintenance procedures are described in the user documentation. The procedures explicitly state if the operator may perform them. Otherwise, they should be performed only by service personnel.

Service personnel are trained to work on live circuits, perform safe installations, and repair products. Only properly trained service personnel may perform installation and service procedures.

Keithley products are designed for use with electrical signals that are measurement, control, and data I/O connections, with low transient overvoltages, and must not be directly connected to mains voltage or to voltage sources with high transient overvoltages. Measurement Category II (as referenced in IEC 60664) connections require protection for high transient overvoltages often associated with local AC mains connections. Certain Keithley measuring instruments may be connected to mains. These instruments will be marked as category II or higher.

Unless explicitly allowed in the specifications, operating manual, and instrument labels, do not connect any instrument to mains.

Exercise extreme caution when a shock hazard is present. Lethal voltage may be present on cable connector jacks or test fixtures. The American National Standards Institute (ANSI) states that a shock hazard exists when voltage levels greater than 30 V RMS, 42.4 V peak, or 60 VDC are present. A good safety practice is to expect that hazardous voltage is present in any unknown circuit before measuring.

Operators of this product must be protected from electric shock at all times. The responsible body must ensure that operators are prevented access and/or insulated from every connection point. In some cases, connections must be exposed to potential human contact. Product operators in these circumstances must be trained to protect themselves from the risk of electric shock. If the circuit is capable of operating at or above 1000 V, no conductive part of the circuit may be exposed.

Do not connect switching cards directly to unlimited power circuits. They are intended to be used with impedance-limited sources. NEVER connect switching cards directly to AC mains. When connecting sources to switching cards, install protective devices to limit fault current and voltage to the card.

Before operating an instrument, ensure that the line cord is connected to a properly-grounded power receptacle. Inspect the connecting cables, test leads, and jumpers for possible wear, cracks, or breaks before each use.

When installing equipment where access to the main power cord is restricted, such as rack mounting, a separate main input power disconnect device must be provided in close proximity to the equipment and within easy reach of the operator.

For maximum safety, do not touch the product, test cables, or any other instruments while power is applied to the circuit under test. ALWAYS remove power from the entire test system and discharge any capacitors before: connecting or disconnecting cables or jumpers, installing or removing switching cards, or making internal changes, such as installing or removing jumpers.