



User Manual

UTE-M01 Electrical Connector (Test Fixture)

REV.0

January 16th, 2025

1. UTE-M01 Overview

The UTE-M01 is a high-performance electrical connector designed to provide convenient and efficient line connections. It is widely utilized in applications such as power measurement for household appliances, office equipment, and the connection of various other electrical devices.

When paired with the UTE300 series digital power meters, the UTE-M01 allows for current measurement of electrical equipment without requiring wire cutting. Additionally, this connector is equipped with an overcurrent tripping function, which automatically disconnects the circuit if the current exceeds safe limits. The UTE-M01 ensures safe, reliable, and rapid connections for electrical systems.

2. Safety Instructions

To ensure the personal safety of operators and prevent damage to the instrument, please read and comply with the following regulations before installing and using UTE-M01.

If the user fails to follow the preventive measures and the specific warnings provided in other parts of this manual, they will be violating the established safety specifications regarding the design, manufacture, and use of the instrument. In such a case, UNI-T shall not be responsible for any consequences resulting from the user's non-compliance with these regulations.

1. **Power-off operation:** Before installing, maintaining, or making wiring connections, disconnect the power supply to prevent electric shock.
2. **Proper grounding:** Ensure the equipment is reliably grounded to mitigate safety hazards caused by electric leakage.
3. **Avoid overloading:** Do not exceed the equipment's maximum rated current to prevent circuit damage or fire hazards.
4. **Keep away from hazardous environments:** Do not install the equipment in humid, corrosive, or strong magnetic field environments.
5. **Use compliant accessories:** Use cables, connectors, and other accessories that meet specified standards to ensure proper equipment operation.
6. **Prevent faulty operation:** Unauthorized personnel must not disassemble or modify the equipment. For technical support, contact after-sales service.
7. **Emergency handling:** If smoke, unusual odors, or abnormalities occur, immediately disconnect the power supply and seek professional assistance.
8. **Before moving the instrument:** Ensure all power and connection cables are unplugged. Confirm the switch is in the OFFO position before moving the equipment.

3. Product Specifications

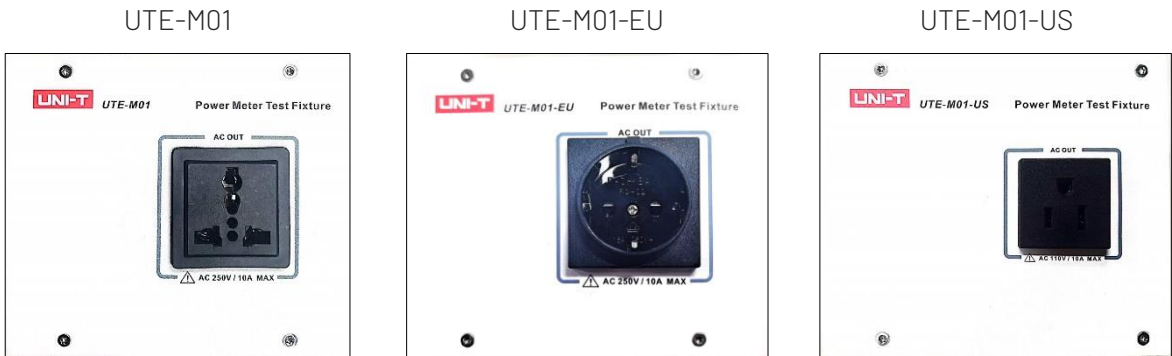
Model Specification	UTE-M01	UTE-M01-EU	UTE-M01-US
Rated Input	AC 250V 10A	AC 250V 10A	AC 125V 10A
Cable Accessories	UT-L0110-BB (1 pair)	UT-L0110-BB (1 pair)	UT-L0110-BB (1 pair)
	UT-L0110-BU (1 pair)	UT-L0110-BU (1 pair)	UT-L0110-BU (1 pair)
	Three-core power cord (1.8 meters)	French two-pin round power cord (1.8 meters)	US three-core power cord (1.8 meters)

4. Interface

1. Top Surface

The device model, output interface, and rated voltage/current are displayed on the top surface of the electronic connector.

During measurement, insert the power cord of the DUT (Device Under Test) directly into the output interface on the upper cover plate. The interfaces of different models correspond to the interface standards of various countries, as shown below.

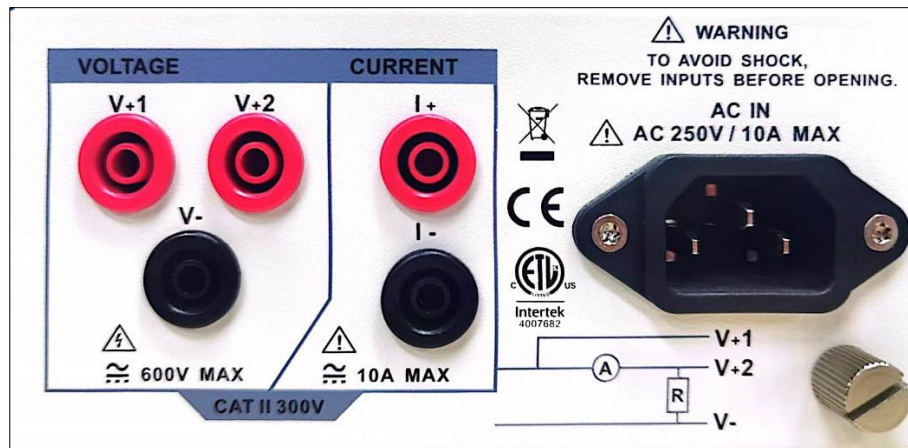


2. Rear Side

The power input jack, voltage and current test interfaces, grounding screw, and device certification marks are located on the rear side of the device.

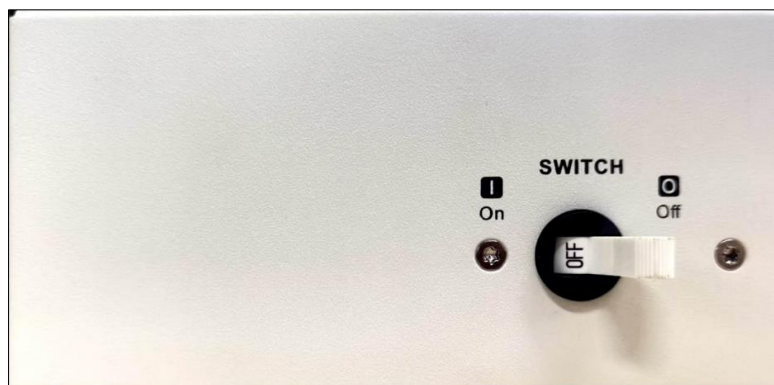
Users can use the provided test cables to connect these interfaces to the voltage and current test interfaces of UTE300 series digital power meters and supply power to the DUT through the AC IN

interface. The interfaces on the rear side are shown below.



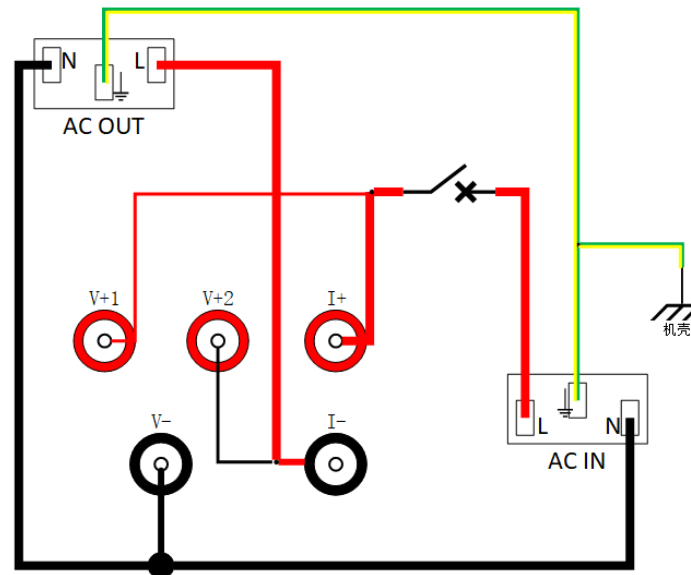
3. Front Side

An overcurrent protection switch is installed on the front of the device. Ensure the switch is in the Off position before making circuit connections. If the tested current exceeds the switch's tripping current, it will trip automatically. The front view is shown below.



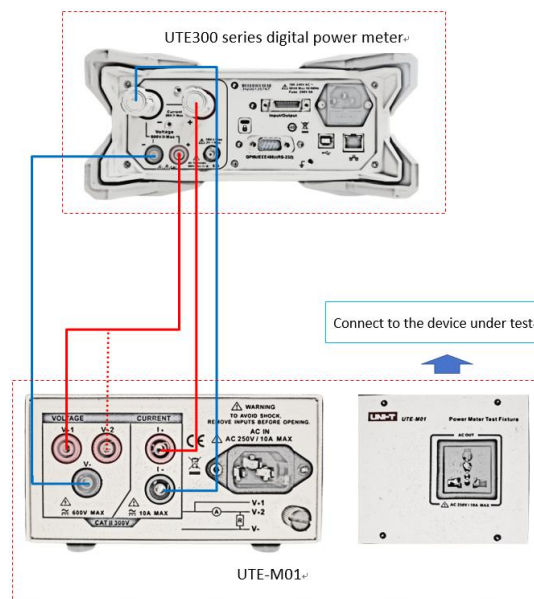
5. Internal Wiring Diagram

The internal wiring diagram of UTE-M01 electrical box is shown below. When in use, ensure that the DUT's current does not exceed the electrical box's maximum safe current-carrying capacity. Otherwise, the internal circuits and input/output interfaces may be damaged.



6. Operation Step

1. Use the test cables to connect UTE300 series power meter, as shown below.



- Connect the electrical box to the voltage interface of UTE300 series power meter using the UT-L0110-BB cable.

- Connect the electrical box to the current interface of UTE300 series power meter using the UT-L0110-BU cable.
 - Connect the DUT to the AC OUT interface of the electronic box using a three-core power cord.
2. Use a compliant power cord to supply power to the power meter.
 3. Use the standard power cord to connect the AC IN interface of the electrical box.
 4. After verifying that all circuits are correctly connected, connect to the power source, then toggle the overcurrent switch of the electrical box to the ON position.

7. Maintenance and Cleaning

1. General Maintenance

Keep the probe and its accessories away from the direct sunlight.

Caution: Avoid contact with sprays, liquids, or solvents to prevent probe damage.

2. Cleaning

Check the probe frequently according to the operating condition. Follow these steps to clean the external surface of the probe:

- Use a soft cloth to remove dust from the probe.
- Disconnect the power supply and clean the probe with mild detergent or water.
- Do not use abrasive or chemical cleaners, as they may damage the probe.

Warning: Please confirm that the instrument is completely dry before use, to avoid electrical shorts or even personal injury caused by moisture.

8. Limited Warranty and Liability

UNI-T guarantees that the Instrument product is free from any defect in material and workmanship within three years from the purchase date. This warranty does not apply to damages caused by accident, negligence, misuse, modification, contamination, or improper handling. If you need a warranty service within the warranty period, please contact your seller directly. UNI-T will not be responsible for any special, indirect, incidental, or subsequent damage or loss caused by using this device. For the probes and accessories, the warranty period is one year. Visit instrument.uni-trend.com for full warranty information.



Learn more at: www.uni-trend.com



Register your product to confirm your ownership. You will also get product notifications, update alerts, exclusive offers and all the latest information you need to know.

UNI-T is the licensed trademark of UNI-TREND TECHNOLOGY (CHINA) CO., Ltd.

UNI-T products are protected under patent laws in China and internationally, covering both granted and pending patents. Licensed software products are the properties of UNI-Trend and its subsidiaries or suppliers, all rights reserved. This manual contains information that replaces all earlier published versions. The product information in this document subject to update without notice. For more information on UNI-T Test & Measure Instrument products, applications, or service, please contact UNI-T instrument for support, the support center is available on www.uni-trend.com -> instruments.uni-trend.com

<https://instruments.uni-trend.com/ContactForm/>

Headquarter

UNI-TREND TECHNOLOGY (CHINA) CO., Ltd.

Address: No.6, Industrial North 1st Road, Songshan Lake Park, Dongguan City, Guangdong Province, China

Tel: (86-769) 8572 3888

Europe

UNI-TREND TECHNOLOGY EU GmbH

Address: Affinger Str. 12

86167 Augsburg Germany

Tel: +49 (0) 821 8879980

North America

Uni-Trend TECHNOLOGY US INC.

Address: 3171 Mercer Ave STE

104, Bellingham, WA 98225

Tel: +1-888-668-8648