

EITAI ETCR6300

EITAI ETCR6300 High Precision Leakage Clamp Meter

User Manual

1. INTRODUCTION

The EITAI ETCR6300 is a high-precision leakage clamp meter designed for accurate measurement of AC leakage current and AC current. This device is essential for professionals in various industries requiring precise electrical safety testing and monitoring. Its compact and portable design, combined with advanced features, ensures reliable performance in diverse environments.

2. SAFETY INFORMATION

To ensure safe operation and prevent damage to the device or injury, please read and understand all safety instructions before use.

- Always adhere to local and national electrical safety regulations.
- Ensure the device is used within its specified measurement categories (CAT III 600V).
- Do not attempt to measure currents exceeding the maximum rating of 60A AC.
- Inspect the device for any damage before each use. Do not use if damaged.
- Wear appropriate personal protective equipment (PPE) when working with electrical systems.
- Avoid touching live circuits with bare hands or conductive materials.
- Keep the device dry and away from extreme temperatures.

3. PRODUCT OVERVIEW

3.1 Components

Familiarize yourself with the main components of your ETCR6300 Leakage Clamp Meter:



Figure 1: Labeled components of the EITAI ETCR6300 Clamp Meter.

- **Clamp Head:** Used to enclose the conductor for current measurement.
- **Trigger:** Opens and closes the clamp head.
- **HOLD Key:** Freezes the current reading on the display.
- **Power Key:** Turns the device on or off.
- **LCD Display:** Shows measurement readings, units, and other indicators.
- **Strap:** For secure handling and portability.
- **USB Connection Port:** For data transfer or charging (if applicable).

3.2 Key Features

- **Ultra-High Precision:** Measures AC current from 0.001mA to 60.0A with a resolution of 1uA.
- **Portable Design:** Features an open/close clamp structure, eliminating the need to disconnect or cut lead

wires. Compact and lightweight for easy transport.

- **Multi-functionality:** Includes Peak Hold, Data Hold, and Data Storage for up to 99 sets of measurements.
- **Clear Display:** Equipped with a backlit LCD display for direct and clear presentation of measurement results, even in low-light conditions.
- **Stable Performance:** Offers a wide measurement range with stable performance and excellent analytical capabilities for accurate results.

4. SETUP

4.1 Unboxing and Initial Inspection

Upon receiving your EITAI ETCR6300, carefully unpack all components and inspect for any signs of damage.

Your browser does not support the video tag.

Video 1: Unboxing the EITAI ETCR6300 Leakage Clamp Meter, showing included accessories like the USB cable, manual, and storage pouch.



日本語の説明書が付いており、安全に操作を行えます

メーカー直販、アフターサポートがより保障的

Figure 2: Contents of the EITAI ETCR6300 package.

The package should include:

- EITAI ETCR6300 Leakage Clamp Meter (x1)
- Japanese Instruction Manual (x1)
- USB Cable (x1)
- Storage Pouch (x1)

4.2 Battery Installation

The ETCR6300 is battery-powered. Ensure batteries are installed correctly before first use. Refer to the battery compartment on the back of the device for proper polarity and type. (Note: Batteries are not included due to import regulations; please prepare them in advance.)





Figure 3: Rear view of the ETCR6300, indicating the battery compartment.

5. OPERATING INSTRUCTIONS

5.1 Power On/Off

- To power on, press the **POWER** key.
- To power off, press and hold the **POWER** key until the display turns off.

5.2 Taking Measurements

The ETCR6300 measures AC current and leakage current without direct contact with the conductor.

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Video 2: Demonstration of the EITAI ETCR6300 measuring current in real-time.

1. Power on the device.
2. Press the trigger to open the clamp head.
3. Carefully enclose the single conductor (for leakage current) or multiple conductors (for total current) within the clamp head. Ensure the clamp is fully closed.
4. Read the current value displayed on the LCD. The device provides real-time readings.

5.3 Data Hold and Storage

- **Data Hold:** Press the **HOLD** key to freeze the current reading on the display. Press again to release.
- **Peak Hold:** The device can capture peak values. Refer to the detailed manual for specific instructions on activating and using the peak hold function.
- **Data Storage:** The ETCR6300 can store up to 99 sets of measurement data. Consult the full instruction manual for steps on saving and recalling stored data.

5.4 Backlight

The LCD display features a backlight for improved visibility in dimly lit environments. The backlight typically activates

automatically or can be toggled via a dedicated button (refer to the manual for exact control).

6. MAINTENANCE

Proper maintenance ensures the longevity and accuracy of your ETCR6300.

- **Cleaning:** Use a soft, dry cloth to clean the device. Do not use abrasive cleaners or solvents.
- **Storage:** Store the meter in its provided storage pouch in a cool, dry place when not in use. Avoid areas with high humidity or extreme temperatures.
- **Battery Replacement:** Replace batteries promptly when the low battery indicator appears on the display. Ensure correct battery type and polarity.
- **Calibration:** For continued accuracy, periodic calibration by qualified personnel is recommended.

7. TROUBLESHOOTING

If you encounter issues with your ETCR6300, refer to the following common troubleshooting steps:

- **Device not powering on:** Check if the batteries are correctly installed and have sufficient charge. Replace if necessary.
- **Display issues (blank or erratic readings):** Ensure batteries are fresh. If the problem persists, contact support.
- **Inaccurate readings:** Verify that the clamp head is fully closed around a single conductor for leakage current measurement. Ensure no external magnetic fields are interfering.
- **No reading:** Confirm the device is powered on and the conductor is properly positioned within the clamp.

For persistent issues, please contact EITAI customer support.

8. SPECIFICATIONS

Specification	Value
Brand	EITAI
Model Number	ETCR6300
Measurement Type	AC Current, Leakage Current
Measurement Range	0.001mA ~ 60.0A AC
Resolution	1uA AC
Power Source	Battery-powered
Item Weight	210 grams
Product Dimensions (LxWxH)	22 x 11 x 7 cm
Compliance Standard	IEC1010-1, IEC1010-2-032, CAT III
Upper Temperature Rating	40°C
Country of Origin	China

9. WARRANTY AND SUPPORT

EITAI provides comprehensive customer support for its products. Your ETCR6300 Leakage Clamp Meter comes with a Japanese instruction manual and access to Japanese technical support, ensuring safe and effective operation.



Figure 4: EITAI's commitment to direct manufacturer support and technical assistance.

As a manufacturer-direct product, you benefit from reliable after-sales service and technical assistance directly from EITAI. For any inquiries, technical assistance, or warranty claims, please refer to the contact information provided in your product packaging or visit the official EITAI website.