

Product

BT6065 Precision Battery Tester

Headline

2-in-1 precision battery tester and voltmeter

Short Description

Precision Battery Tester for simultaneous internal resistance (AC-IR) and open circuit voltage (OCV) measurements, 6.5-digit resolution and two ranges for OCV (10 V and 100 V), 5.5-digit resolution and 5 ranges for AC-IR at 1 kHz, fully remote-controllable via LAN, RS-232C, USB, and External I/O.

Banner Specs

- OCV ranges: 10 V, 100 V
- 6.5 digits display range for OCV measurement
- AC-IR ranges: 5 ranges from 5 m Ω to 50 Ω
- 5.5 digits display range for AC-IR measurement at 1 kHz
- Smallest resolution: 10 n Ω (AC-IR) and 10 μ V (OCV)

USPs

- Referential adjustment accurately compensates for the effects of eddy currents by using actual batteries as a reference
- Mutual Interference Reduction (MIR) enables stable, parallel inspection with two instruments positioned close to each other
- Simultaneous Ω V measurement reduces measurement time by up to 50 %
- Route Resistance Monitoring allows to reliably monitor test leads for predictive maintenance or troubleshooting

Applications

- Incoming goods inspection of cells
- Ageing process monitoring
- EOL cell grading
- Formation process monitoring

Product Description

Enhance your battery testing capabilities with the unmatched accuracy and speed of the HIOKI BT6065 Precision Battery Tester. Designed for high-capacity cells with low internal resistance, this compact 2-in-1 instrument delivers precise Open Circuit Voltage (OCV) and AC Internal Resistance (AC-IR) measurements at the industry-standard frequency of 1 kHz. Its 5 resistance ranges, spanning from 5 m Ω to 50 Ω , make it perfect for advanced cell grading and quality assurance in battery production. Featuring a 6.5-digit display, the BT6065 achieves a highly precise DC voltage resolution of 10 μ V and an AC-IR resolution of 10 n Ω , combining the capabilities of two instruments into one compact unit.

In addition to its high measurement accuracy, the BT6065 Battery Tester offers four innovative features developed in collaboration with leading battery manufacturers. These features not only improve usability but also help to avoid typical issues that are known to arise in the battery testing process.

Referential Adjustment accurately compensates for the effects of eddy currents by using actual batteries as a reference, ensuring more reliable measurement results, especially when testing batteries in trays. Route Resistance Monitoring enables continuous detection of issues like probe wear and wire breaks to support predictive maintenance and prevent good cells from being misidentified as bad due to poor contacts or wiring. The Mutual Interference Reduction (MIR) function allows two instruments in close proximity to operate in parallel without interfering with each other. Finally, simultaneous AC-IR and OCV measurement reduces measurement time by up to 50%.

For time-efficient use in production environments, the BT6065 can be used with a multiplexer to increase measurement channels while maintaining its exceptional accuracy. The instrument provides all necessary interfaces for seamless integration, including LAN, RS-232C, Ext. I/O, USB-C, and a temperature sensor terminal. Communication commands from the BT3562A model can be used without modification, allowing seamless upgrades of the battery tester in existing test systems.

What's in the box

- BT6065 Precision Battery Tester
- Power cord
- Startup guide
- Operating precautions

Related Products

- BT6075 Precision Battery Tester
- L2100 Pin Type Lead
- L2120 Pin Type Lead
- L2121 Clip Type Lead
- Z5038 Zero-Adjustment Board
- Z2005 Temperature Sensor
- L9510 USB Cable
- L9637 RS-232C Cable
- Z4006 USB Drive
- 9642 LAN Cable
- SW1001 Switch Mainframe
- SW1002 Switch Mainframe

Version	Date	Author	Approved	Document changes
1.0	09.11.2024	OW / KS	KS	First Release
1.1	05.01.2025	KS	KS	Added missing current ranges