

# **BATTERY CHECK**

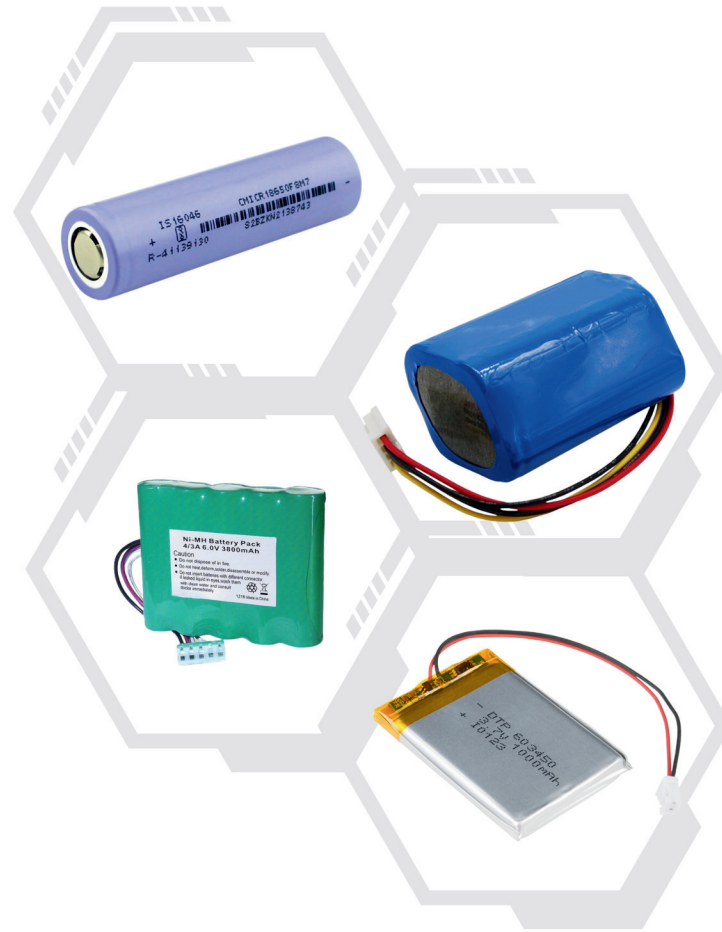
## Battery Characterization & Test Solutions



BatteryCheck is a ready-to-use customizable platform for validation and characterization of a wide range of battery cells and packs used in consumer electronics and medical applications.

### Key Benefits

- Evaluate performance of a battery or compare competing products
- Works for most battery types as-is with no customization required
- Designed for single or multiple cell testing, as well as battery packs
- Proven industry-standard test specifications performed using high-quality equipment



Your partner in test and automation solutions

Common battery tests out-of-the-box, with endless customization options for measurement parameters and data analysis.

Typical Applications

- Evaluate performance of a battery or compare competing products
- Fast tests for manufacturing
- Extended, repeated, detailed product characterization
- Generate or verify datasheet contents
- Record and playback charge, discharge, usage scenarios
- Any other application, defined by User Scripts



Standard Manufacturing Tests (faster)

- Test one cell, multiple cells, or packs
- Open Circuit Voltage (OCV)
- Maximum Charge & Discharge Rates
- AC Internal Resistance (ACIR)
- DC Internal Resistance (DCIR)
- Temperature Images (Thermal Camera)
- Include smart batteries, thermistors, comms, etc

Digital Multimeter

|          |              |
|----------|--------------|
| Accuracy | 7 1/2 Digits |
| Voltage  | ± 1000 V     |
| Current  | ± 3 A        |
| Speed    | 1.8 MS/s     |

Source Measurement Unit

|                        |                    |
|------------------------|--------------------|
| Number of SMU Channels | 1 Ch               |
| Voltage Range          | ± 60 V             |
| Current Range DC       | ± 3 A              |
| Pulsed Current Range   | ± 10 A             |
| Current Sensitivity    | 100 fA to 1µA      |
| Max DC Source Power    | 40 W               |
| Max DC Sink Power      | 40 W               |
| Setting Time (Current) | <200 µs to <1100ms |
| Maximum AC Voltage     | 7.07 V RMS         |
| Maximum AC Current     | 70.7 mA RMS        |

Extended Characterization Tests (slower)

- Open Circuit Voltage (OCV)
- Charge & Discharge Profiles
- Performance in various scenarios (temp, charge state)
- Calculate IR
- Compare Charge Rate
- Performance of charge/discharge cycles
- Stress Cycling, Repeatability
- Maximum Charge Capacity
- Temperature Measurements (TC, RTD)
- Temperature Images (Thermal Camera)
- AC Internal Resistance (ACIR)
- DC Internal Resistance (DCIR)

Battery Types

- Lithium Ion, Lithium Polymer (LiPo), and NiMH
- 18650 and 21750 Battery cells and packs
- Foil Pouch Cells
- Smart Battery Packs
- Battery Backup & UPS Packs

Endless Customizations

- High Speed Transients on State/Load Change
- Temperature Images (Thermal Camera)
- Refurbish and re-testing
- Long-Term or Accelerated Life Testing
- Long-Term Shelf Life