

EP101

Portable Single-Cell Charger & Discharger



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EP101 is specifically designed for cell-level testing, integrates charging, discharging, capacity, and internal resistance measurement, features high-precision control and multiple safety protections, lightweight and portable, suitable for cell-level maintenance and recycle testing.

 **50A high-current, efficient charging and discharging**

 **Supports capacity testing, accurately evaluates cell degradation**

 **Supports internal resistance testing, quickly assesses battery cells health**

 **Isolated sampling and output cables, for more accurate testing**



Features

1. Portable and lightweight design: Compact body, low weight, suitable for on-site mobile operations and desktop workstation testing;
2. 50A high-current: Supports up to 50A constant current charge and discharge, meets efficient battery cell activation and restoration needs;
3. All-in-one testing: Integrates charge/discharge, capacity testing, and internal resistance testing, provides comprehensive assessment of battery cell performance and health;
4. High-precision measurement: Voltage and current sampling channels with isolated design, ensures stable and reliable test results;
5. Safer testing: Integrates battery temperature monitoring and multiple protection mechanisms, enhances equipment safety level.

Functions

- 1. Single cell charge/discharge testing:** Supports constant current and constant voltage modes, precisely controls output current and voltage
- 2. Capacity testing:** Measures battery cell capacity through charge/discharge process, used for battery cell performance verification and lifespan evaluation.
- 3. Internal resistance testing:** Supports DC internal resistance measurement of battery cells, quickly assesses cell degradation and consistency.
- 4. Multi-battery type compatibility:** Supports maintenance of ternary lithium, lithium iron phosphate, lithium titanate, and lithium manganese oxide batteries.
- 5. Real-time monitoring and data traceability:** Continuously displays core data such as voltage, current, capacity, internal resistance, and temperature, supports local storage and USB export.
- 6. Multiple safety protections:** Features overvoltage, undervoltage, overcurrent, reverse connection, disconnection, and overtemperature protection, ensures safe and stable testing process.

Parameters

Input	Supports AC 110/220V, 50/60 Hz
Voltage range	1V ~ 5V
Current range	0.5 ~ 50A
Voltage accuracy	$\pm 0.2\%$ F.S +5mV (maximum range 5V) resolution 0.001V
Current accuracy	$\pm 0.5\%$ F.S+0.1A (maximum range 50A) resolution 0.1A
Charge and discharge power	250W Max
Display	4.3-inch LCD color screen
Input method	Knob + Button

Storage and data export	Supports exporting from USB drive
Cooling method	Forced air cooling
Operating temperature	-10~ 60°C
Storage temperature	-20~ 70°C
Ambient humidity	10%~90%RH
Protection level	IP21
Protection function	Battery overtemperature protection, system overtemperature protection, short-circuit protection, reverse connection protection, disconnection protection, overcurrent protection, overvoltage protection, undervoltage protection.