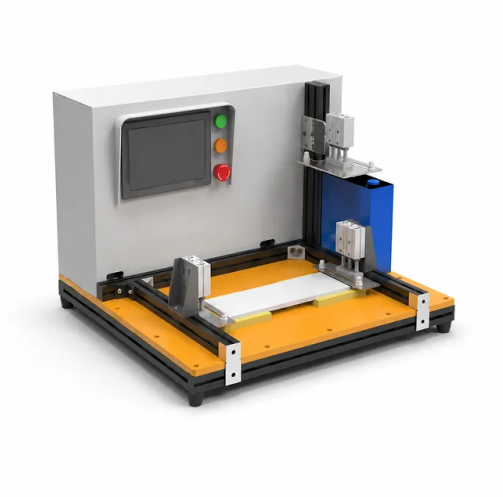
Prismatic Battery Automatic Testing And Sorting Equipment

Item Number: FX08



Introduction

Prismatic battery automatic testing and sorting equipment measures open circuit voltage and AC internal resistance, automatically pairs up to eight grades, supports traceable database management, and processes approximately 600 cells per hour for consistent pack quality in lithium battery production.

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Application	Description	Key Benefit
Prismatic lithium battery cell production	Tests open-circuit voltage and AC internal resistance before cells are assigned to performance grades.	Establishes a measured electrical basis for downstream cell sorting.
Battery pack cell pairing	Matches cells according to the specified electrical parameters in as many as eight groups during one sorting operation.	Supports improved consistency among cells selected for pack assembly.
Pack production quality control	Applies automatic test, sorting, marking, and unloading steps before cells proceed into pack manufacturing.	Helps protect pack quality through controlled cell classification.
Incoming-cell inspection	Evaluates cells supplied to a production operation using open-circuit voltage and AC internal-resistance measurements.	Creates retained measurement records for reviewed cell batches.
Edge-grade confirmation	Performs secondary testing on cells near a grade boundary using the stated voltage and resistance deviation controls.	Provides a closer check before assigning borderline cells to a group.
Production-line automation	Uses hopper batch loading, robotic grade sorting, and automatic unloading in a coordinated process.	Reduces manual involvement in repetitive test-and-sort handling.
Process performance monitoring	Stores cell performance data and presents automatically generated curve charts and bar charts for review.	Supports long-term observation of product quality trends.
Battery R&D and process improvement	Uses database records and software analysis to compare product-performance information over time.	Provides data that can guide formulation development and process-flow improvement.

Parameter	Specification
Site-facing equipment identifier	FX08 automated testing and sorting system
Core test functions	Open-circuit voltage testing; AC internal-resistance testing; sorting and pairing
Sorting parameters	Open-circuit voltage; AC internal resistance
Maximum sorting and pairing groups per operation	8 groups
Data acquisition	Automatic acquisition of AC internal resistance and open-circuit voltage
Sorting process control	Automatic
Loading method	Hopper batch loading
Sorting mechanism	Robotic automatic grade sorting
Unloading method	Automatic unloading
Marking mechanism	Inkjet marking mechanism
Computer and software	Industrial computer; software system; database function

Parameter	Specification
Data output	Automatically generated curve charts and bar charts; historical-data traceability; data export
Data retention	Long-term database management of cell performance data
Resistance measurement instrument	FX08 precision AC internal-resistance meter, 1 set
Voltage measurement instrument	FX08 automatic voltage meter, 1 set
Secondary test voltage deviation for edge grades	±0.1mV
Secondary test internal-resistance deviation for edge grades	±0.05mΩ
Sorting efficiency	≥10PPM
Approximate testing and pairing capacity	Approximately 600 cells per hour
Product qualification rate	≥99%
Equipment operation rate	≥95%
Sorting qualification rate	≥98%
Sorting accuracy	99.9%
Power supply	220V, 0.5KW
Air supply	0.5□ 0.6 Mpa (dry air)
Equipment weight	≥300KG
Overall dimensions	1600 (length) × 1600 (width) × 1700 (height) mm