

Battery Testing Temperature Control System

Item Number: DC19



Introduction

Battery testing temperature control system provides a 240L stable 5C to 70C environment for accurate charging and discharging evaluation of coin pouch prismatic and cylindrical cells across research production and quality testing applications.

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Application	Description	Key Benefit
Coin cell charge-discharge evaluation	Test coin cells in a controlled 5C to +70C environment during research or routine performance assessment.	Supports comparison of electrical behavior under a defined thermal condition.
Polymer pouch cell testing	Place polymer pouch cells in the chamber for charging and discharging tests representing normal-use environmental conditions.	Provides a documented internal space and shelf geometry for test planning.
Prismatic battery quality testing	Evaluate prismatic batteries during production quality checks where temperature-controlled charging and discharging data are required.	Helps establish consistent chamber conditions through stated fluctuation, deviation, and uniformity values.
Cylindrical battery research	Use the system for controlled-temperature investigation of cylindrical cells during battery R&D.	Covers a specified 5C to +70C operating range stable from 5C.
Energy technology product testing	Assess battery-containing products used in energy technology under controlled environmental temperature conditions.	Enables defined heating and cooling sequences using stated average rates.
Vehicle-related battery evaluation	Conduct battery performance tests for vehicle-related products within a temperature-controlled chamber environment.	Supports use cases where battery charging and discharging data must be obtained under repeatable conditions.
Electronics and communications product quality testing	Evaluate batteries used in electronic, electrical, communications, or instrumentation products.	Gives quality teams a standards-referenced temperature test equipment basis.
Medical and aerospace product testing	Apply controlled battery testing to products for medical and aerospace sectors listed in the applicable fields.	Provides a specified chamber capacity, power requirement, and installation footprint for test-lab review.

Item	Specification
Site-facing identifier	DC19
Equipment type	Battery constant-temperature test system
Nominal volume	240L
Internal dimensions	Width 688mm x Depth 400mm x Height 882mm
External dimensions	Width 810mm x Depth 570mm x Height 1540mm
Shelf dimensions	Length 665mm x Width 400mm x Thickness 15mm
Height between shelf layers	120mm
Weight	120KG
Power supply	220V
Maximum power	2.5KW
Test environment	Ambient temperature +5~+40C, relative humidity <=85%, with no sample in the test chamber

Item	Specification
Test method	GB/T 5170.2-2008 Temperature test equipment
Test method	GB/T 5170.5-2008 Damp heat test equipment
Temperature range	5C~+70C (Stable from 5C)
Temperature fluctuation	$\leq 1C$ (Note: expressed according to GB/T5170.2-1996, fluctuation is $\leq \pm 0.5C$)
Temperature deviation	$\pm 1C$
Temperature uniformity	Less than or equal to $\pm 1C$
Heating time	4C/min (average heating rate)
Cooling time	0.5C/min (average cooling rate)
Applicable battery types	Coin cells, polymer pouch batteries, prismatic batteries, cylindrical batteries
Applicable fields	Energy technology, electronics, electrical appliances, communications, instrumentation, vehicles, plastic products, metal products, food, chemicals, building materials, medical products, aerospace products