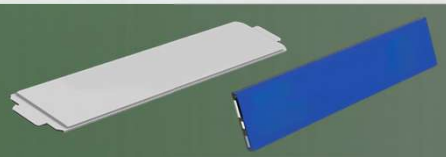
Compact Cars Corporation

Battery, Energy Storage & Management Systems

2024/2025

zzSMRT

Main Business & Customer Applications



Cell

Module

PACK

Passenger vehicle

Performance car

Luxury electric motorcycle

Logistics vehicle

eVTOL

Energy Storage

Construction Machinery

Large Scale Energy Storage & Management

Industrial and commercial energy storage


Intelligent manufacturing


High voltage cable test


Logistics car charging station


Energy Management for commercial buildings


Energy Recycler


Photovoltaic power

Distributed energy storage


Large-scale photovoltaic power generation

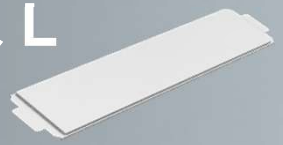

Large wind power station

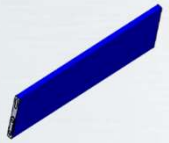

New power generation project


Grid substation


Large-scale grid energy management system

Products P6,P7& L



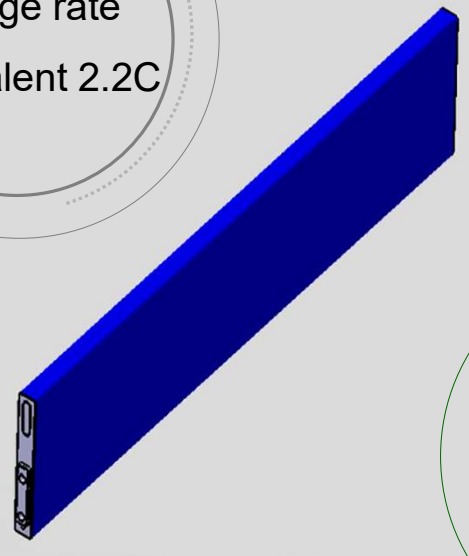
Item	P64D	P75C	P72	L400
Material system	NCM mid. nickel	NCM mid. nickel	NCM mid. nickel	LFP
Dimension（mm）	573*88*8.15	542*100*8.21	542*100*8.23	13.7*409*88
Nominal capacity（Ah）	64.4（1C）,66（1/3C）	72（1C）,74.9（1/3C）	72（1C）,74.5（1/3C）	54（1C）,55（1/3C）
Nominal voltage（V）	3.7（1C）, 3.76（1/3C）	3.62（1C）,3.68（1/3C）	3.7（1C）,3.76（1/3C）	3.13（1C）,3.2（1/3C）
Full Voltage Range（V）	2.8~4.4	2.8~4.2	2.8~4.4	2.0~3.65
Charging tem. range（℃）	-20~55	-20~55	-20~55	-20~55
Discharge tem. range（℃）	-30~55	-30~55	-30~55	-30~55
Max. pulse charging current（A，25℃，50SOC，10s）	167.4（2.6C）	225（3C）	193.7（2.6C）	220（4C）
Max. pulse discharge current（A，25℃，50SOC，10s）	354.2（5.5C）	710（9.5C）	409.8（5.5C）	330（6C）
Cycle life (25℃，SC/1C，≥80%SOH)	≥2000	≥2500	≥2500	≥3500
Specific energy（Wh/kg）	263	267	264	≥165
Weight（g）	944±20	1030±15	1044±20	1032±25
Safe condition	GB/T38031	GB/T38031	GB/T38031	By needling
Development status	SOP	SOP	2025SOP	2027SOP
Application	Passenger cars, other	Passenger cars, other	Passenger cars, other	Passenger cars, other

L400 product (Li-Fe-Po)

L400

PHEV cell, Geely 19-degree electric platform

Charge rate
Equivalent 2.2C



Industry leading

Extra long life
3500 times

Discharge power ≥2000W

Passed the needle prick test

Item	L400
Material system	LFP
Dimensions（mm）	13.7*409*88
Nominal capacity (Ah)	54（1C），55（1/3C）
Nominal voltage (V)	3.13（1C），3.2（1/3C）
Full voltage range (V)	2.0~3.65
Charging temp. range（℃）	-20~55
Discharge temp. range（℃）	-30~55
Discharge power(W) 50%SOC,10S	≥2000
Fast charging capability 25℃，10-80%SOC	≤19min
Weight（g）	1032±25
Safe condition	GB/T38031
Mass-energy density（Wh/kg）	≥165
Volumetric energy density（Wh/L）	≥357
Cycle life（times）	≥3500
Development status	2025SOP
Application	Passenger vehicles etc.

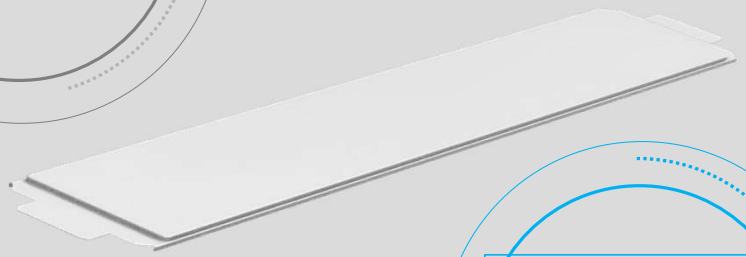
P64 – NCM product

IMP08088573P64D

High voltage

Single cell full charging platform voltage up to 4.4V

Industry leading



-30℃ can be used in normal

-20℃ capacity retention rate is 80%

Low temp. Resistant -30℃

Battery type/system	NCM soft package (Mid. Nickel 622 system)
Dimensions (mm)	573 * 88 * 8.15
Weight (g)	947±20
Nominal capacity (Ah)	64.4（1C），66（0.33C）
Voltage range (V)	2.8~4.4
Nominal voltage (V)	3.7（1C），3.76（0.33C）
Max. pulse charging current（A，25℃，50%SOC，10S）	322（5C）
Max. pulse discharge current（A，25℃，50%SOC，10S）	670（10.4C）
Charging temp. range（℃）	-20~55
Discharge temp. range（℃）	-30~55
Specific energy (Wh/Kg)	263
Applications	Passenger vehicles, etc.

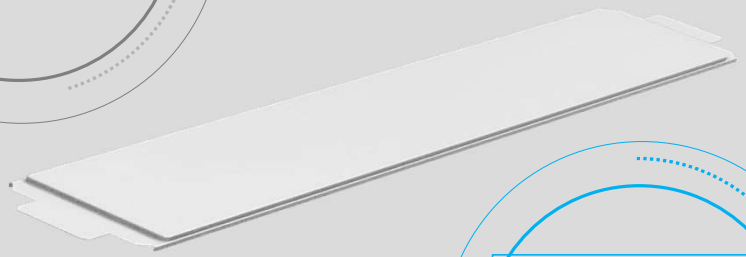
P75 – NCM Product

IMP08100542P75C

High Nickel system

Single cell full charging platform voltage up to 4.2V

Industry leading



Low temp. Resistant -30℃

-30℃ can be used in normal

-20℃ capacity retention rate is 80%

Battery type/system	NCM soft package (High Nickel 811 system)
Dimensions (mm)	542 * 100 * 8.21
Weight (g)	1030±15
Nominal capacity (Ah)	72.7（1C），74.9（0.33C）
Voltage range (V)	2.8~4.2
Nominal voltage (V)	3.62（1C），3.68（0.33C）
Max. pulse charging current（A，25℃，50%SOC，10S）	225（3C）
Max. pulse discharge current（A，25℃，50%SOC，10S）	710（9.5C）
Charging temp. range（℃）	-20~55
Discharge temp. range（℃）	-30~55
Specific energy (Wh/Kg)	267
Applications	Passenger vehicles etc.

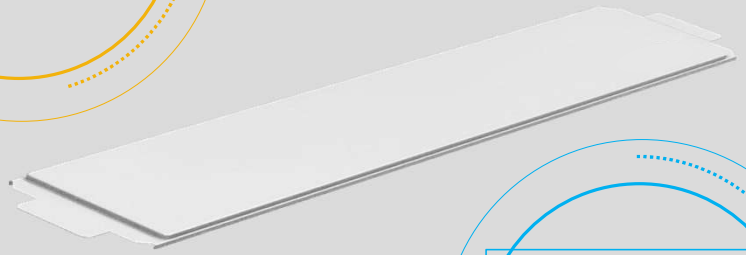
P72 – NCM Product

IMP08100542P72

High voltage

Single cell full charging platform voltage up to 4.4V

Industry leading



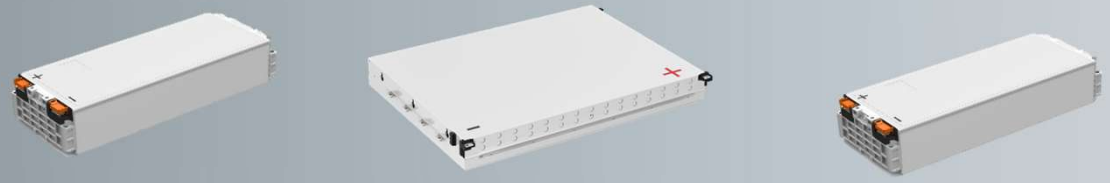
Low temp. Resistant -30℃

-30℃ can be used in normal

-20℃ capacity retention rate is 80%

Battery type/system	NCM soft package (Mid. Nickel 613 system)
Dimensions (mm)	542*100*8.23
Nominal capacity (Ah)	72.2（1C），75（1/3C）
Nominal voltage (V)	3.7（1C），3.76（1/3C）
Voltage range (V)	2.8~4.4
Charging temp. range（℃）	-20~55
Discharge temp. range（℃）	-30~55
Max. pulse charging current（A，25℃，50%SOC，10S）	190.3（2.6C）
Max. pulse discharge current（A，25℃，50%SOC，10S）	402.6（5.5C）
Cycle life	≥2500
Specific energy (Wh/Kg)	270
Weight (g)	1044±20

Other Configurations



Specifications	3P8S	2P12S	2P20S	2P22S	3P8S	2P12S
Cell	P75C	P75C	P64D	P64D	P72	P72
Nominal energy（KWh） (0.33C，1C)	6.6 6.3	6.6 6.3	9.9 9.3	9.9 9.3	6.6 6.3	6.6 6.3
Nominal voltage（V） (0.33C，1C)	29.4 28.9	44.1 43.4	75.2 74	82.7 81.4	30.08 29.6	45.12 44.4
Volumetric energy density (Wh/L)	463.0	463.0	430	430	472	472
Mass-energy density (Wh/kg)	222.7	216.9	224.6	225.1	216	216
Operating voltage range (V)	22.4~33.6	33.6~50.4	56-88	61.6-96.8	22.4~35.2	33.6~52.8
Module Weight (kg)	29.7	30.5	44.2	48.5	30.9	30.9

590 Series – in high volume EV use

Strong versatility
590 standard

590 standard module, can be widely used in sedans, SUVs, MPVS, supercars, commercial cars, trucks, ebus and other applications

Structural Integrity

High strength aluminum alloy shell integrated welding structure, light weight, high structural strength

590 module series

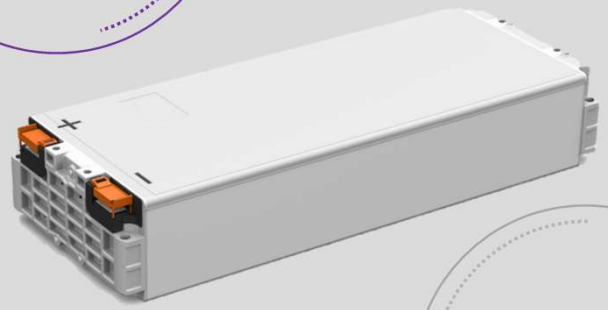
	3P8S	2P12S
Cell no.	P75	P75
Module structure	3P8S	2P12S
Dimensions (mm)	594 * 225 * 108	590 * 225 * 108
Nominal energy（0.33C，Wh）	6615.168	
Nominal voltage (0.33C，V)	29.44	44.16
Max. pulse discharge current (0.33C，Ah)	224.7	149.8
Work temp. range	22.4 ~ 33.6	33.6 ~ 50.4
Cycle life（@80%）	≥2000	
Weight (kg)	29.7	30.5
Mass energy density (0.33C，Wh/kg)	222.7	216.9
Volumetric Energy Density (0.33C，Wh/L)	463	
Insulation resistance (@500VDC，MΩ)	> 500	

590 Series – in high volume EV use

590 module series

Strong versatility
590 standard

590 standard module, can be widely used in sedans, SUVs, MPVS, supercars and other models



High strength aluminum alloy shell integrated welding structure, light weight, high structural strength

Structural Integrity

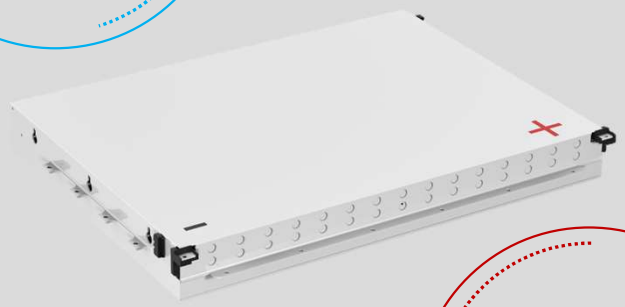
	3P8S	2P12S
Cell no.	P72	P72
Module structure	3P8S	2P12S
Dimensions (mm)	594 * 225 * 108	590 * 225 * 108
Nominal energy（0.33C，Wh）	6678	
Nominal voltage (0.33C，V)	29.6	44.4
Max. pulse discharge current (0.33C，Ah)	224.7	144
Work temp. range	22.4~35.2	33.6~52.8
Cycle life（@80%）	≥2000	
Weight (kg)	30.9	
Mass energy density (0.33C，Wh/kg)	219	
Volumetric Energy Density (0.33C，Wh/L)	472	
Insulation resistance (@500VDC，MΩ)	> 500	

P64 2P Series Configurations

A02 module series

Low temp.
Resistant -30℃

-30℃ can be used in normal
-20℃ capacity retention rate is 80%



800VTC implements charging
from 10% to 80% only takes 10 minutes

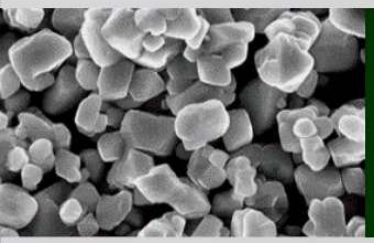
Super fast
Charge 24min

	2P20S	2P22S
Cell no.	**P64**	**P64**
Module structure	2P20S	2P22S
Dimensions (mm)	602 * 412 * 93	602 * 449 * 93
Rated voltage (V)	75.2	82.7
Rated capacity (Ah)	132.0	132.0
Rated energy (kWh)	9.9	10.9
Weight (kg)	44.2	48.5
Energy density (Wh/kg)	224.6	225.1

Ultra-long service life

Cycling schemes range 150 to 400
Capacity retention rate ≥80%.

Balancing mileage of 0.9-2.4 million km, addressing range anxiety.



Positive and negative electrode materials

The positive and negative electrode materials utilize a special coating technology to enhance the stability of the interface and internal structure.

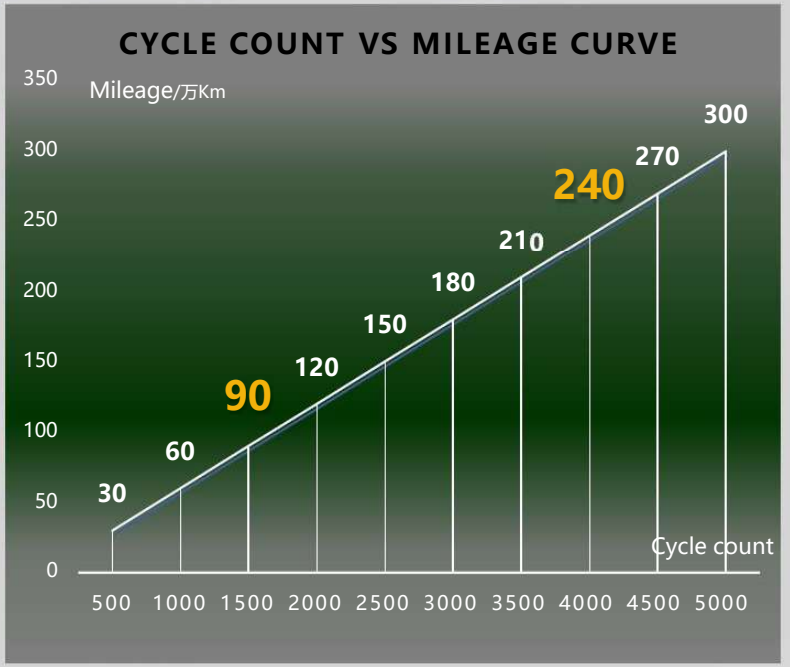
Long-cycle electrolyte

Containing SEI self-repair additives, ensures the long-cycle stability, significantly reducing internal side reactions and the growth of internal resistance within cell, guaranteeing cycle life.

Advanced charging strategy

A multi-step charging strategy based on the EC three-electrode system, ensure no lithium plating.

Formulated a cell retirement strategy based on health status, maintaining safe usage over long cycles.



Low Temperature Performance

We have options!

Li-Fe-Po systems maintains 70% capacity at -20℃

- General usage and dependable, stable performance

Ternary Ni-Co-Mn operates near normally at -30℃ & Maintains 80% capacity below -20℃

- Superior to Li-Fe-Po, suited for High Performance & demanding cold applications.

Composite conductive agent

- Excellent conductivity, low IR and good LT DC and power PERF.

LT graphite negative Material

- Application of LT graphite Neg helps Rapid lithium ion deintercalation at LT, ensuring fast charging capability.

LT negative Binder

- LT Neg binder ensures good flexibility and strong adhesion of the Neg at LT, resulting in stable C&D PERF.

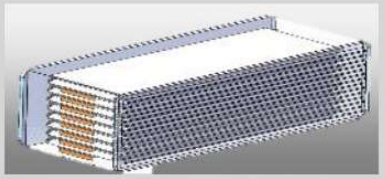
LT Electrolyte Solvent Formula

- Low melting point, low viscosity at LT, high dielectric constant, high ionic conductivity, low IR, and excellent fast charging PERF.

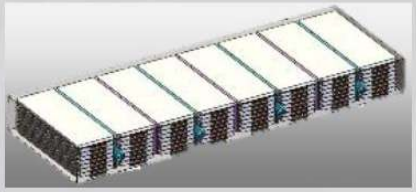
Ultra-thin Battery System

8 to145mm Variable Height , fully adaptable to supercars to MPVs

- The size and shape of the cells can be customized by product design and customer needs.



- This satisfies the spatial requirements of a wider range of vehicle models for power batteries, suitable for both the layout of flat battery packs and the modified layout of irregular-shaped packs for traditional vehicles.



- With the advantages of high energy density and flexible design, it can also be adapted to various types of electric aircraft.

Global Customer Relationships

Various Industry & products YNCL

Private Vehicle

New Operations

Developing

Module R&D Roadmap

	2021	2022	2023	2024	2025
Standard	• VDA355、390 • VDA590	 ~224Wh/Kg		 ~256Wh/Kg	 ~280Wh/Kg
Customized	• Modules for KA • Liquid Cooling Integration • Battery Management Unit Integration • Modular Design	 ~220Wh/Kg	 ~245Wh/Kg	 ~275Wh/Kg	

2024/2025
zzSMRT

YNCL

Seen our product catalog;
Send us your needs.

Join hands Worldwide.
win-win cooperation!

Serving the Globe & Manufactured in China

Contact: contact@CompactCarsCorp.Com

Appendix

2024/2025

zzSMRT

YNEL

OEM Profile & Multi-Gigawatt Facility

Capacity	12GWh
Land Area	3466.66 Are
Annual value	US$1440 Million

YaoNeng New Energy Co., Ltd (YNEL) was established in Ganzhou, Jiangxi in 2021 and is affiliated with **Geely Group**, a Fortune 500 company. YNEL has been in full production in 2023.

YNEL is committed to the R&D of lithium-ion battery systems, introducing international **advanced production standards, top manufacturing equipment, intelligent MES, SAP and MOM** systems to manufacture lithium-ion power battery cells, modules and PACK of different specifications to meet customers' requirements.

Agent of the Americas & Western Hemisphere Compact Cars Corporation, Canada and USA. Procurement, Sizing quality and other services related to the use and zz SMRT Ltd. Expertise in integration of Battery & Energy Management Systems. Including Hydrogen Fuel Cell infrastructure or vehicles.

Certifications & International Standards
Excellence in quality management

International Standards and certifications. Audited Quality.

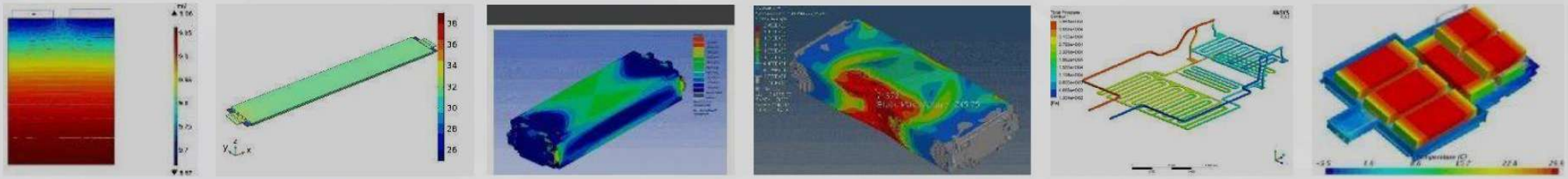
YNEL has passed **ISO9001**, **IATF16949**, **ISO14001**, **ISO45001** and **ISO26262** international authoritative certification for the automotive industry and strict audits by customers. The maturity of quality management is gradually moving towards excellence.

Full Life Cycle Data Monitoring

Big data monitoring of the whole life cycle of production and after-sales products to ensure "zero risk“ ideal in the market.

Full-system Simulation

Digitall driven, building a CSM across all domains



Utilizing simulation capabilities across multiple scales and physical fields, from cell to system, to support the development process from concept design to product delivery

Cell Simulation

- **Electrochemical Simulation**
- **Thermal Simulation, Thermal-Electrical Coupling Simulation**
- **Mechanical Simulation** (Compression, Needle Penetration, Drop Test, Expansion)
- **Safety Simulation** (Electrical Safety, Thermal Safety, Mechanical Safety)
- **Reliability Simulation** (Operating Window, Service Life)
- **Cell Design Optimization**

System Simulation

- **Thermal Simulation, CFD Simulation, Fluid-Structure Coupling Simulation, Thermal Management Design**
- **Mechanical Simulation** (Statics, Stiffness, Modal Analysis, Vibration, Fatigue, Compression, Impact, Drop Test, Collision, Expansion)
- **Safety Simulation** (Electrical Safety, Thermal Safety, Mechanical Safety)
- **Reliability Simulation** (Operating Window, Service Life)
- **Structural Design Optimization**

Advanced Technology

High-end Equipment, Precise Control, Comprehensive Inspection System

High-efficiency Mixer

The only manufacturer in the industry that uses a **3500L** high-capacity mixing cylinder for mass production of battery cells.

High-speed Coating Machine

Double-layer high-speed wide-width coating machine is a First-class automatic equipment in the industry, with a coating speed of **80 meters per minute** and a folding dou ble-layer coating.

Continuous Rolling process for Neg

The first manufacturer in the industry to use a **1300mm** wide continuous rolling process, equipped with bending cylinder and arcuate rolling tech.

Punching & Stacking Machine

Using laser die-cutting for high-speed slicing with a punching efficiency of **≥300PPM**, and fully automatic "Z"-shaped lamination with a speed of up to **0.5s/pcs**.

X-ray inspection of Overhang

Using X-ray non-destructive tech to penetrate the interior of the cell, automatically analyzing and judging the coating dimensions of the cell.

Ultrasonic welding

Using advanced ultrasonic welding, the first domestic manufacturer capable of welding soft-pack batteries with tab thicknesses ranging from **0.6-1mm**.

Comprehensive Testing Resources

Recognized and audited Daimler, Volkswagen, and BAIC, etc.

- 13,000㎡ Testing Laboratory, 100+ Professional Talents, 800+ Advanced Testing Equipment.
- 160 test items comprehensively cover performance/reliability/safety testing for All Products.


Mechanical vibration


Cycle life


Seawater immersion


Needle puncture test


Electromagnetic compatibility


Thermal characteristics


LT Heating


HT/LT storage