

SMOOTH CONTROL
HIGHER EFFICIENCY



HANGCHA provides Li-ion battery (LiFePO4)
with 6 years or 12000 hours warranty.

6 YEARS
WARRANTY

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delivered may differ slightly from those in brochures.



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ISO 45001:2018



ISO 14001:2015



ISO 9001:2015



HANGCHA trucks conform
to the European Safety
Requirements.



X SERIES

LOW-LEVEL ORDER PICKERS
(FORK LIFT, SCISSOR LIFT & DOUBLE LIFT)

With capacity of 1,000 to 2,000kg

X SERIES LOW-LEVEL ORDER PICKER EXTENDED MODELS

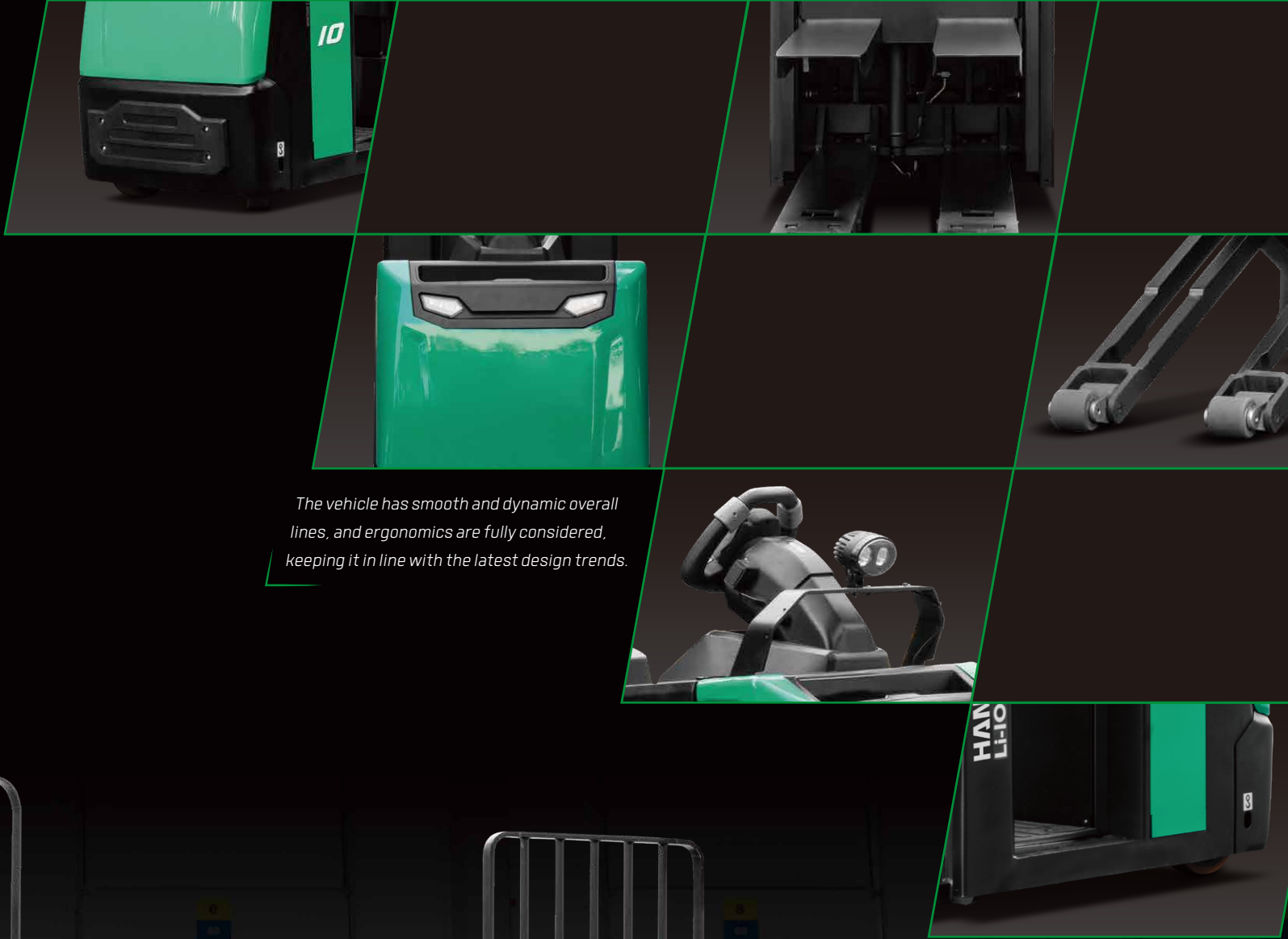
The X Series Fork Lift, Scissor Lift and Double Lift low-level order pickers all feature an advanced permanent magnet brushless drive system and a brand new 48V system platform. Safe and reliable, they offer comfort and efficiency with outstanding performance and low maintenance costs, making them ideal for picking large items from the lower shelves in large supermarkets.

48V

V O L T A G E

WITH

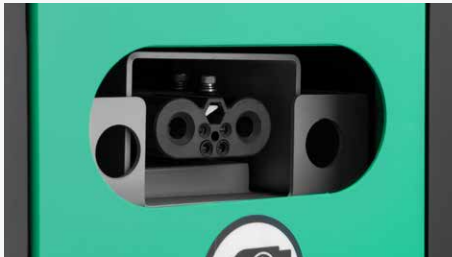
PERMANENT MAGNET
SYNCHRONOUS DRIVE MOTOR



The vehicle has smooth and dynamic overall lines, and ergonomics are fully considered, keeping it in line with the latest design trends.

The truck's outer body is made of stamped steel plates - strong, robust, durable, and environmentally friendly.

ENJOY YOUR WORK



It comes standard with a side charging design, and the battery can be lifted and removed from the side, making it convenient and quick.



The dashboard offers multiple working modes to meet the needs of different working conditions.



The standard side control and walking mode functions effectively improve work efficiency.

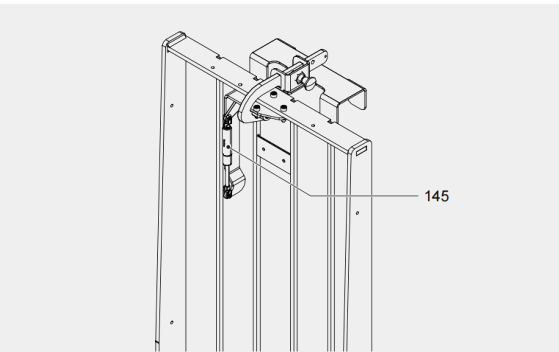


Low-level order pickers with a lifting operator platform come standard with a footrest platform that can be lifted and lowered, facilitating picking at higher locations.



HIGH PERFORMANCE

- Equipped as standard with a high-power traction motor for high travelling speeds.
- Employs a permanent magnet synchronous drive system with excellent performance and low energy consumption; a new 48V power supply system with low heat generation.
- The truck uses a VCU (Vehicle Control Unit) for precise and smooth control, leading to higher efficiency.



Pallet holder

COMFORT

- A newly developed multifunctional steering wheel with integrated design, novel and aesthetically pleasing, making operation more convenient.
- The steering wheel can be adjusted in multiple degrees of freedom to suit operators of different heights and arm lengths.
- Ample storage space provides greater convenience for the operator.
- All lifting mechanisms are designed with a buffering function to effectively reduce impact and improve the operator's comfort.
- The combination of a suspended-structure pedal assembly and a thick multi-layer pedal pad can effectively reduce the operator's fatigue.



Multifunctional steering wheel



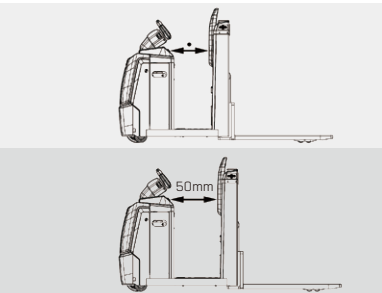
Adjusted in multiple degrees



Buffering function



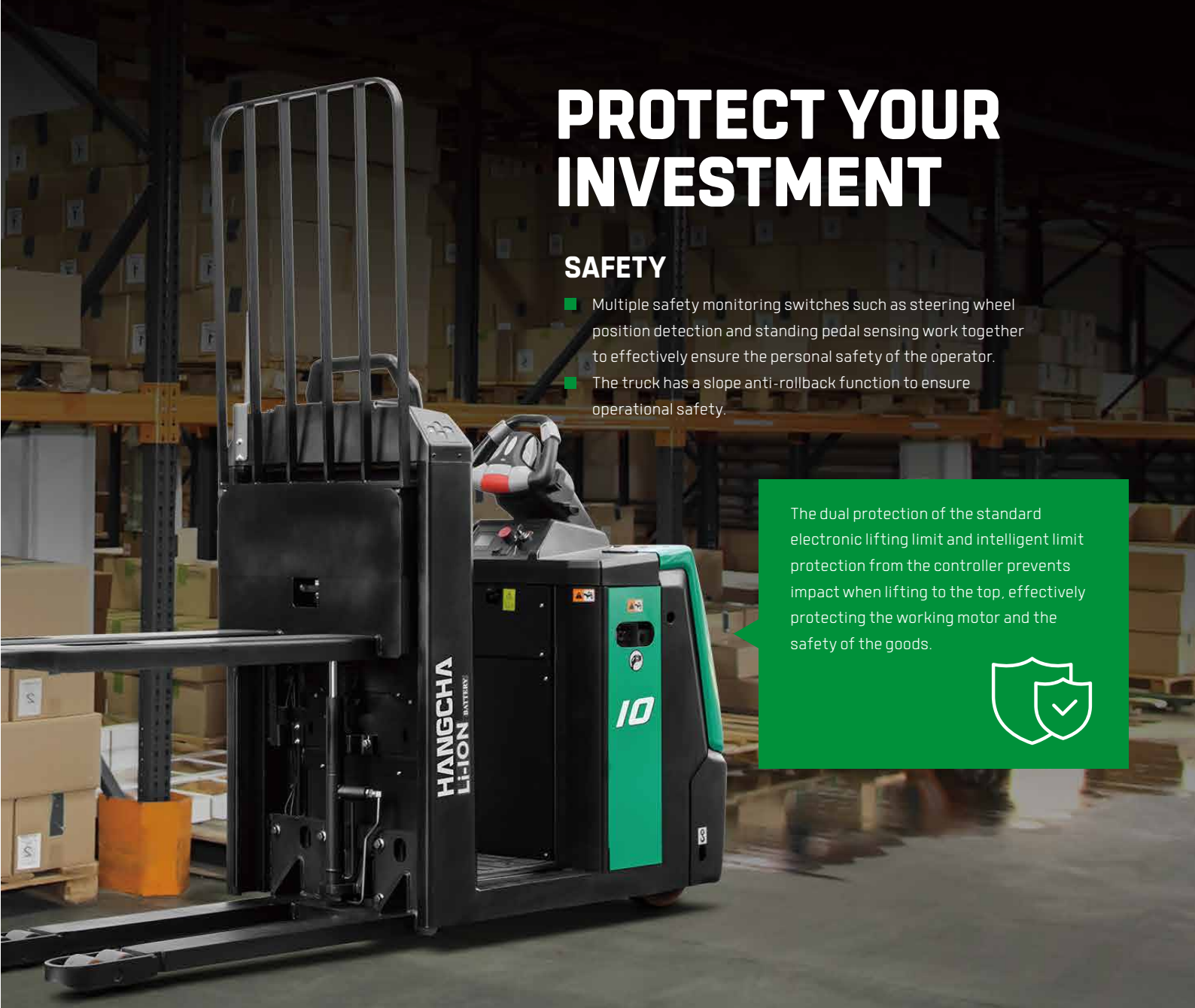
Storage space



The "Extended" operator compartment (28) is 50 mm longer than in the standard version.
The overall length and turning radius of "Extended" trucks are 50 mm greater than the standard version.

RELIABILITY

- The truck frame is made of high-strength steel plates, ensuring a long service life.
- All models in the series use waterproof connectors, and all electrical wires and cables are well protected, greatly improving the reliability of the electrical system.
- The pallet holder is held in the fully open or closed position by a gas pressure spring. When opening and closing, the pallet holder is moved against the pressure of the gas pressure spring.



PROTECT YOUR INVESTMENT

SAFETY

- Multiple safety monitoring switches such as steering wheel position detection and standing pedal sensing work together to effectively ensure the personal safety of the operator.
- The truck has a slope anti-rollback function to ensure operational safety.

The dual protection of the standard electronic lifting limit and intelligent limit protection from the controller prevents impact when lifting to the top, effectively protecting the working motor and the safety of the goods.



Features

Truck	Standard	Options
48V Permanent Magnet Synchronous Traction Motor	●	
Hydraulic Power Unit	●	
Polyurethane Wheels	●	
Side Charging	●	
Battery Lifting/Side roll out	●	
Backrest Pad	●	
Multi-Layer Pedal Pad	●	
Electronic Lifting Limit	●	
Multifunctional Steering Wheel	●	
Adjustable Steering Wheel Height/Angle	●	
Lithium Battery 48V/105Ah (EVE)	●	
Auxiliary Wheel	●	
Dual Load Wheels	●	
USB	●	
Cornering Speed Reduction	●	
Standing Platform Lift (Model: CJD25-XT1-LIJT, CJD10-XT1-LIDT)	●	
Lift / lower operator platform foot switch (Model: CJD25-XT1-LIJT, CJD10-XT1-LIDT)	●	
Key Switch	●	
Various Fork Lengths		○
Various Distance Between Fork Arms		○
On-board Charger (Only for 48V/105Ah Lithium Battery)		○
Lithium Battery 48V/125Ah (CATL)		○
Lithium Battery 48V/228Ah (CATL)		○
48V 30A Portable Charger		○
48V 50A Portable Charger		○
Adjustable Height Backrest		○
Front Multifunctional Bracket		○
Load Backrest (Standard on CJD25-XT1-LIJT, CJD25-XT1-LIJ)		○
Pallet Retaining Bracket (Only for CJD20-XT1-LIL)		○
"Extended" Operator Compartment Space (50mm)		○
Stretch Film Holder		○
Contour Monitoring (Not Available for Standing Platform Lift Models)		○
Controls and instruments		
Electric Power Steering	●	
Permanent Magnet Synchronous Motor Controller	●	
Interactive Dashboard	●	
Contactless Interlock Switch	●	
Side Operation Panel	●	
Neutral Handle (Domestic)		○
Safety		
Emergency Power Off Switch	●	
Horn	●	
Bumper		○
Protective PC Panel (Only for CJD20-XT1-LIL)		○
Foot Guard (Standard on CJD25-XT1-LIJT, CJD25-XT1-LIJ)		○
Lights		
Front LED Light	●	
Turn Signals	●	
Projector Spotlight (Blue Light / Red Light)		○

MAINTENANCE AND SERVICE

- The permanent magnet synchronous motor requires no maintenance.
- Removable Rear Cover: Facilitates easy maintenance of components such as the hydraulic unit, electronic control, and motor.



Interactive Dashboard: Allows direct viewing of fault information without the need for a manual.



Foot Guard(Options)



Contour Monitoring(Options)



Key Switch(Standard)

LITHIUM POWERED

EMPOWER YOURSELF WITH THE BEST



Li
Lithium

POWER THE POSSIBILITIES
RELIABLE LITHIUM-ION TECHNOLOGY

LITHIUM BATTERY ADVANTAGES



Long service life

4000 full charging cycles with at least 75% residual capacity.



Return on investment

Add flexibility to your operation, cost-saving in the long term, increased efficiencies.



Maintenance free

No topping up of water or checking acid levels.



High energy density

The high energy density of the Li-Ion battery ensures long working times and increases the high availability.



Cold area application

Li-Ion batteries maintain high performance at temperatures below freezing.



High safety and reliability

Intelligent battery management monitoring every important function, no emission of battery gasses.



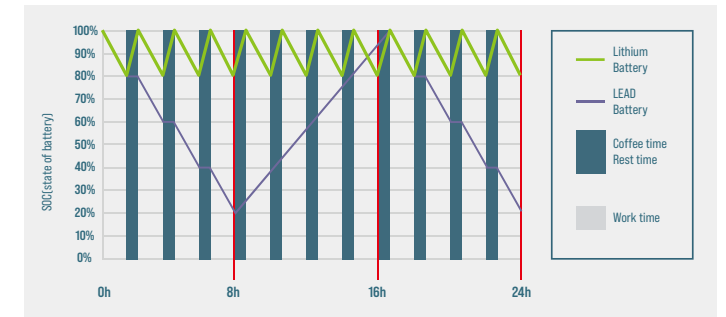
Opportunity charging

Full performance during several shifts thanks to effective interim charging.

FEATURES & BENEFITS THE HANGCHA DIFFERENCE

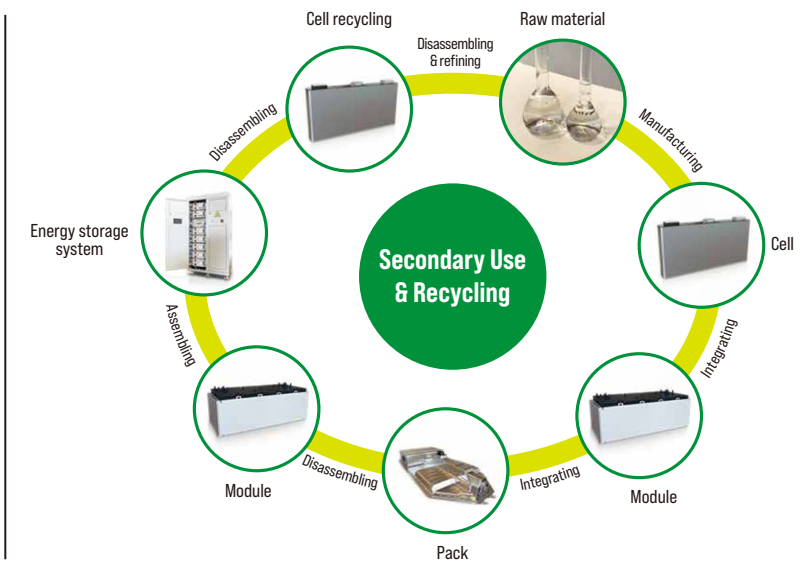
Efficiency

By quick opportunity charging any downtime, such as a lunch break, can be efficiently used and the battery is recharged in a very short period of time. Interim charging does not affect the battery service life.



Safety

- / Intelligent battery management monitoring every important function.
- / Higher user safety, thanks to acid-free use.
- / User friendly due to avoided battery change.
- / No emission of battery gasses.



QUESTION 1

Q: What are the characteristics of lithium batteries, especially when used in high and low temperature environments?

Charging temperature: -30 C - 65 C
Discharge temperature: -30 C - 65 C
Storage environment temperature: -30 C - 65 C

After the truck key switch is closed, the instrument battery condition needs to be checked:

1. Confirm that there is no battery system alarm message on the instrument panel.
2. Please check the remaining power before use. It is recommended to use the SOC between 50% and 100%.
3. If the SOC is lower than 20%, it is not recommended to continue using it. Please charge it as soon as possible.

QUESTION 2

Q: What is the charging time and usage time calculation of forklift lithium battery?

1. Available power of lithium battery (kWh) = rated voltage * rated power * 90% (To avoid over-discharge damaging the battery, the forklift is equipped with low power protection (less than 10%)).
 2. Charging time (h) = rated capacity of lithium battery (Ah) * 90% * charger output current (A).
 3. The power consumed for charging (kWh) = the available power of the lithium battery * 93% (the charging efficiency of the charger is calculated as 93%).
 4. Usage time (h) = available power of lithium battery * energy consumption data.
- For specific energy consumption values, please refer to the technical table on the sharing platform.**

QUESTION 3

Q: How does Hangcha BMS work to ensure the safety of the lithium battery?

HANGCHA BMS (battery management system) can monitor the cells at all times. As a result, hangcha lithium power is the reliable solution.



Battery Safety Management:

- Overcharge/over discharge protection
- Overcurrent/over-temperature/low-temperature protection
- Multi-level fault diagnosis protection
- Double fault monitoring



Battery Parameter Detection:

- Battery voltage detection and analysis
- Battery current detection and analysis
- Battery temperature detection and analysis



Equilibrium Management:

- Equalization based on voltage mode
- Equalization based on time mode
- Equalization based on battery cell SOC
- Active/passive equalization optional



Other Features:

- Low cost, low power consumption
- Historical data record
- Flexible cascade expansion
- CRC data validation