ISO9001 / ISO45001 / ISO14501

UL / IEC / CE / FCC / KC / PSE / ROHS / UN38.3 / MSDS

OVER 14 YEARS OEM & ODM EXPERIENCE

China Top 10 Lithium Ion Battery brands for Light Electrical Vihicle Worry-free integrated solutions with ID design,cell selection, BMS design and allocate testing with vehicle before manufacturing Aftersale service center in US and EU



Shenzhen World New Power co., Ltd.



COMPANY PROFILE

Shenzhen World New Power Co., Ltd., established in 2009, specializing in the design, development and manufacturing of stable quality lithium Ion battery module solutions including CANBus/SMBUS/RS485 software design and development for worldwide customers.

By continuous research and development and investment for more and more reliable and intelligent Battery Management System, World Power has won nearly 50 patents and certificates, and has been awarded by the government as National High Tech Enterprise. and China's Top 10 lithium Ion battery brands for Light Electrical Vehicle and ESS applications. Operates in strict accordance with modern management standards, World Power plant has passed ISO9001, ISO14001, ISO45001 system certification, and initially intro– duced the MES system.

Depends on its strong R&D and design capabilities, a strict quality control system and professional service capabilities, the company has successfully entered the supply chain system of well-known manufacturers such as ZTE, Joyoung, Honda, SF Logistics, Ocean King, Yuwell Medical, Biolight, Shangchao(supermarket) ,TOMOLLO, Easybike, Swytch bike, INMOTION,and other well-known manufacturers.



COMPANY HISTORY

2009

In 2009, Worldpower

passed the IS09001

quality certification

system; established

dedicated to the

and two-wheeler power battery packs.

the R&D department,

was formally established and

2013

Become a supplier of listed medicalequipment companieslike Yuwell Co., Ltd, Biolight MeditechCo., Ltd.,and Shanchao

2011

Awarded the title of Shenzhen high-tech enterprise, the energy storage technology project was identified as a new energy research and development project, and awarded the govermment funding. The compary was ratedas a national high-techenterprise andofficially became aqualified supplier of INMOTION.

2014

Cooperated with the P&D team of National University of Defense Technology. Established the BMS R&D Center in Changsha.

2016

Set up a sales centerin Netherlands. Provided battery modules for SF VAN.

ine sector

Internetti

2018

Passed ISO9001 reviewand ISO140001 certification, ISO45001 certification. Established cooperativerelations with ZTE andJoyoung Honda CO, LTD.

2019

Establisheda branch in the United States.

TO

2020

חחחה

- UNV

Set up anoverseas warehouse in Poland.



Set up a 2000m2 head office for sales service and R&D. Set up aftersale service in US and Germany.

COMPETITIVE ADVANTAGE



R&D Team

With 40+ average 15 years professional experience software engineer, electrial engineer and nearly 50 related national invention patents, utility model patents, software copyrights,

appearance patents, etc. World Power delivered 100+ projects successfully by independently design BMS with UART/canbus control ,to provide customers with a full range of reliable customized battery module solutions. Meanwhile, World power engineer work with sales engineer as a close project group starts from the very beginning of a project technical demand discussion and confirmation,technical imporvements and updation,and any aftersale consult freely.



Strong Production Capacity

Advanced automatic production lines & semi-automatic production lines, which can ensure high production capacity/consistency and reliable quality









Worldpower has cooperated with well-known enterprises like TOMOLLO, Easybike, INMOTION, Swytch bike, etc, and won the honor of excellent supplier from our partner, and our company is the Executive Vice President Unit of Guangdong Battery Industry Association

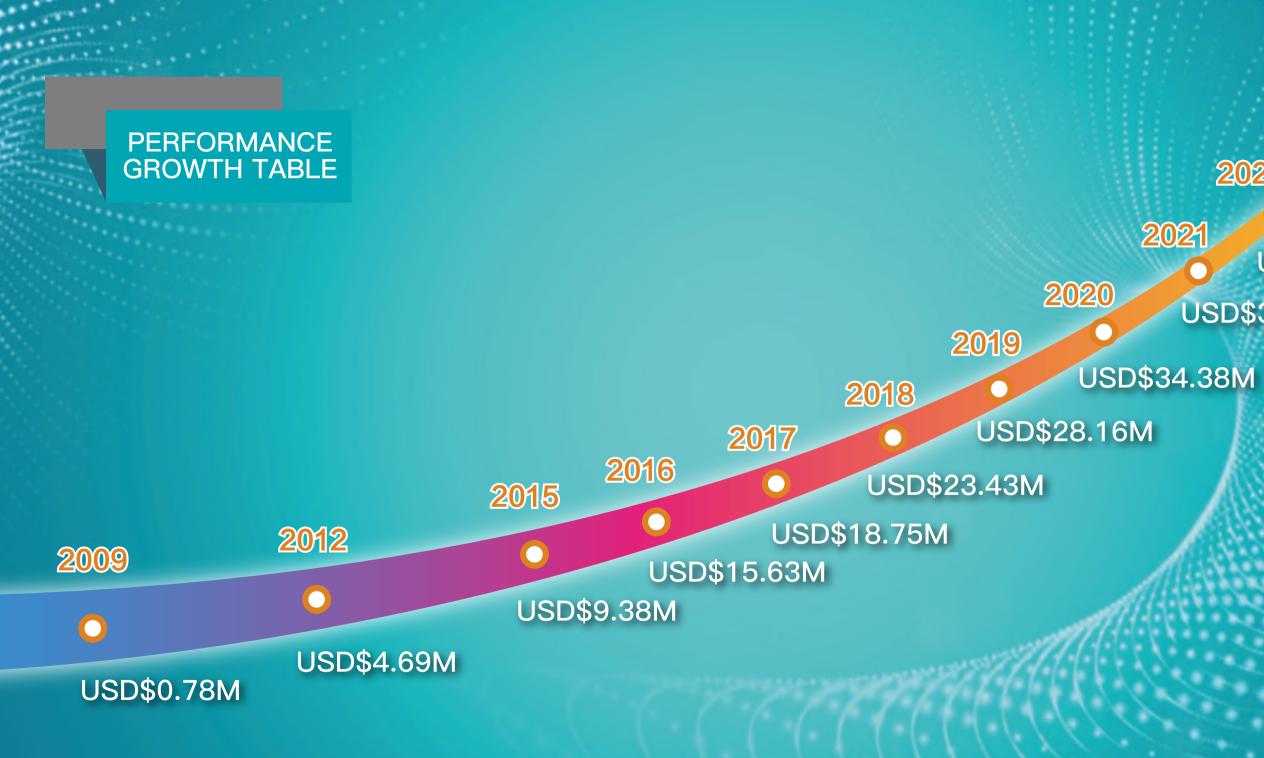
Complete Quality Management System

Digital Production Management Achieving 100% tracking to production process through MES system, providing intelligent, flexible and digital production mode.

Quality Management and Control

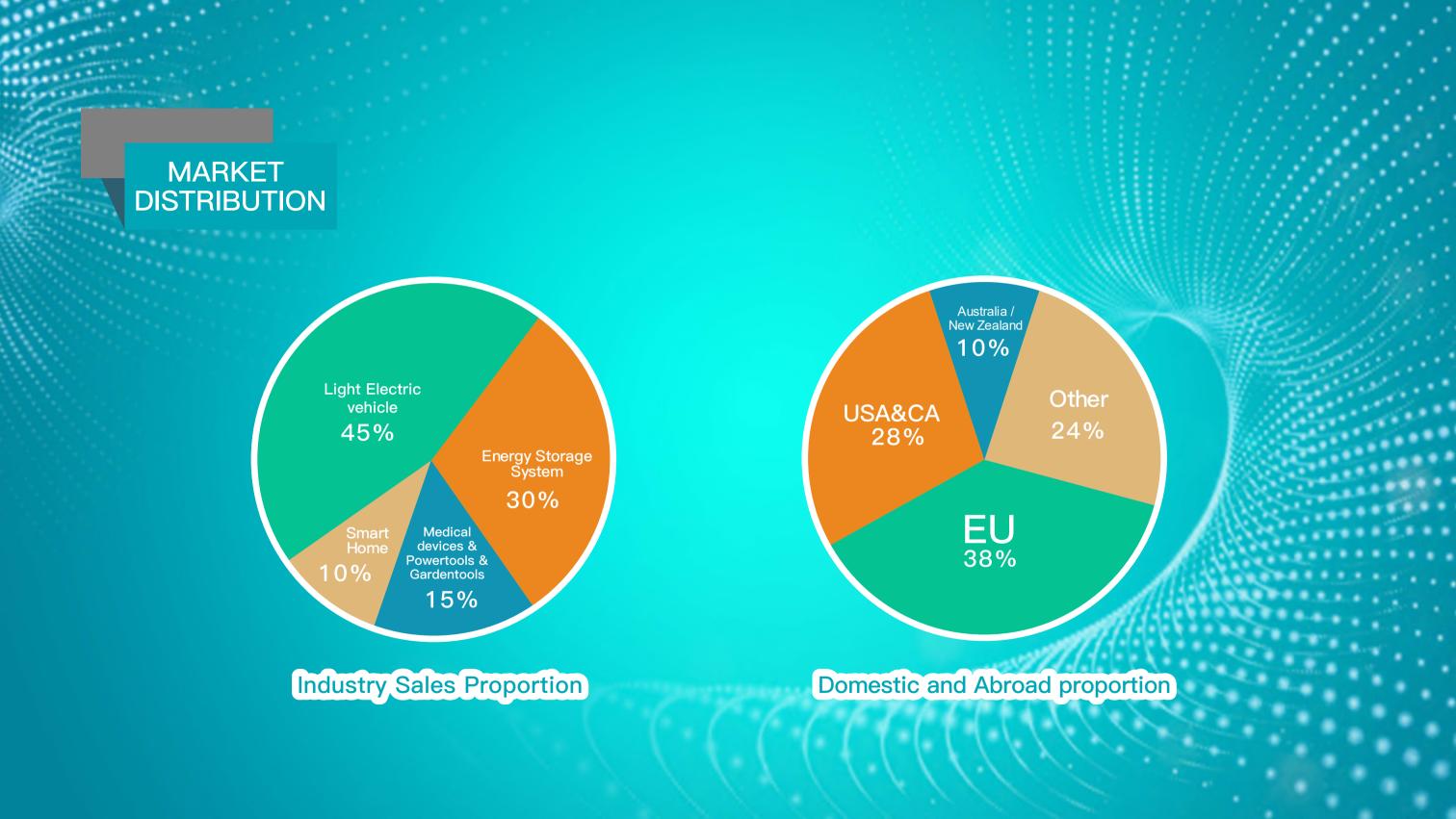
Make sure the quality management and control of products through the advanced instruments and data acquisition system

Rich Industry Experience





USD\$40.58M USD\$34.78M



ENTERPRISE HONOR>>



COMPANY AWARDS





"LITTLE GIANT" FIRM

QUALIFICATION PATENT CERTIFICATE





Worldpower has gained management certifications of

- ISO9001 Quality Management System
- ISO14001 Environment Management System
- ISO45001 Occupational Health and Safety Management

And products are certificated with VDE, FCC, PSE, KC, UL, CE, UN38.3 etc.

We have authorized more than 50 patents:

- National invention patents
- Utility model patents
- Software copyrights
- Appearance patents



R&D CAPABILITIES



0

WorldPower

PROVIDE CUSTOMERS WITH A FULL RANGE OF PERSONALIZED BATTERY MODULE SOLUTIONS STABLE BMS IN A RAPID RESPONSE WITH EFFICIENT COOPERATION

O Design and development of battery protection circuit (PCM);

- Power battery module BMS management design and development;
- Design and development of software and various communication schemes such as URAT, Canbus, and Smbus;
- Product ID modeling and structure design and development;
- Safety/environment/electrical performance/ reliability testing and verification;

UNIQUE ADVANTAGES:

Rich project experience with power battery high-current output, waterproof and high-performance requirements, intelligent communication matching ability, to meet high-end customer needs.

R&D TEAM





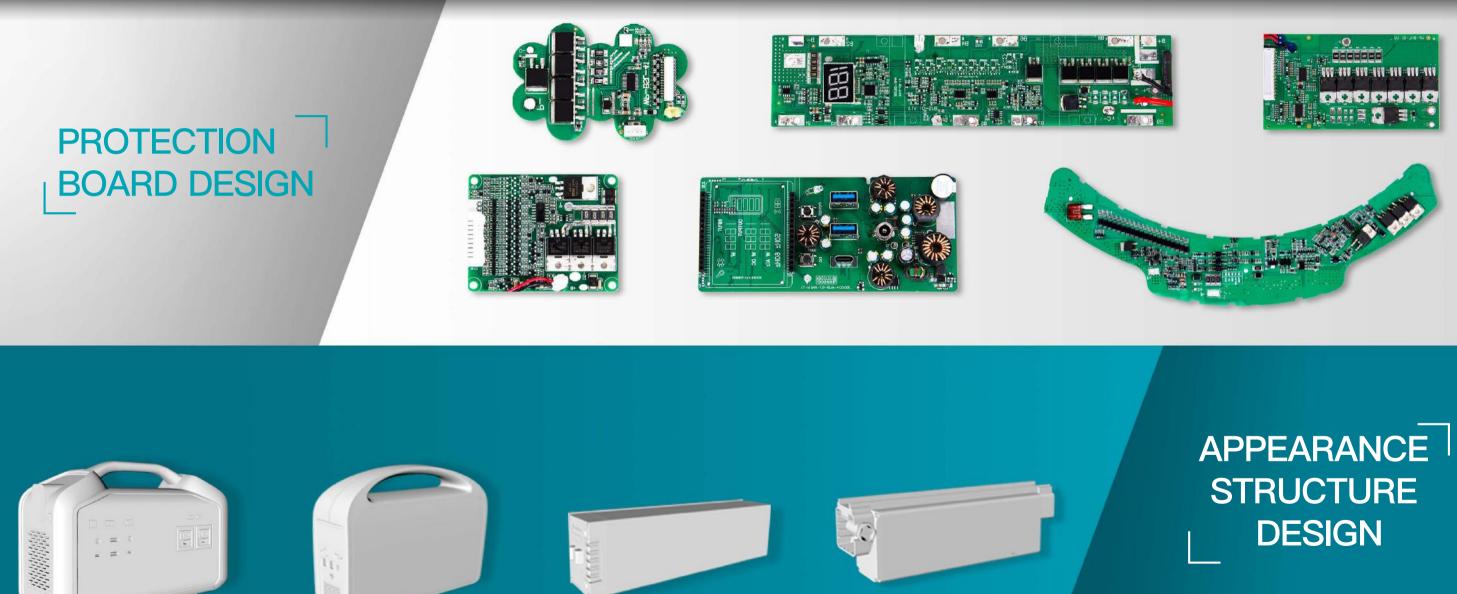
Professional Team Over 40 People

Complete service including software and hardware development, and structural process design 10 years+ project experience in the lithium battery industry.

- Two R&D Centers in Shenzhen and Changsha.
- Nearly 50 Related National Invention Patents, Utility Model patents, software copyrights, appearance patents, etc.



PROTECTION BOARD AND STRUCTURE DESIGN





DESIGN

R&D TEST ITEM







- Electric scooter working condition test
- Electric bicycle working condition test
- High-speed electric motorcycle
 working condition test
- Garden tool working condition test

000

TEST EQUIPMENT DISPLAY













PRODUCTION PROCESS FLOW CHART



Finished product 3 Laser Welding Aging Pre-processing Δ assembly READY READY READY READY Paste the Debugging aging Insulation sheet **Bms test** Assemble process Battery pack on Welding balance line Bms processing 2 the cabinet Cell sorting Welding b+ Scan the code Mount the welding b-line 3 3 to start Cover processing 3 Holder **Terminal wire** Wire shaping Mount the Check aging data And fixing Processing 4 4 Nickel jig Battery pack Paste fibreboard Insulation glue Laser welding 5 5 5 5 off cabinet Inspection spot 6 Blown film Scan the bar code Install the case To MES system

Packing

READY

Appearance inspection

Paste tag

Scan code test

Clean appearance

Pack and deliver

Electric Motorcycle Hight current output

Electric motorcycle battery modules are mainly matched with 1500–15000W motors, voltages are 60V, 72V, 84V, 96V, and capacity can be 20–120Ah.

The applied cells are usually imported 18650 cells, 21700 cells, automobile grade polymer or aluminum shell batteries. BMS with communication such as RS485 protocol, CANBUS protocol, UART protocol is main feature of our product to cater to market needs, realizing multiple data interaction, Bluetooth and GPS function.

WorldPower engineer does not only test and improve the battery performance, but also allocate testing the whole vehi– cle performance with battery before trial production, to make sure the customized new project going smoothly. Worldpow– er sales always responsible incase any service in demand.



HIGH-SPEED ELECTRIC MOTORCYCLE BATTERY



WP-BM01	

Main Specification

Voltage48V/60VCapacity20-65AhCharging portDC5.1/DC8.0/DC10ProtocolUART/CANBusDimensionsCustomizable





WP-DLP02

Main Specification

/oltage	50.4V
Capacity	20Ah
Configuration	14S5P
Discharge Surrent	45A Continuous
Charging port	Same Port
Protocol	CANBus





WP-BMF03

Main Specification

/oltage	72V / 60V
Capacity	35-45Ah
Discharge current	50A Continuous
Charging port	Same Port
Protocol	UART/CANBus



WP-BHE03

Main Specification

Voltage	60V
Capacity	20Ah
Discharge current	40A Continuous
Charging port	DC5.1 / DC8.0 / DC10
Protocol	UART+Bluetooth



WorldPower

WP-DT01

Main Specification

Voltage Capacity Charging port Protocol

50.4V 33Ah DC5.1 / DC8.0 / DC10 UART/CANBus

WP-DFN01

Main Specification

Voltage Capacity Charging port Protocol Dimensions

72V 40Ah DC5.1 / DC8.0 / DC10 UART/CANBus Customizable

Electric Bicycle

Since 2009, Worldpower has been committed to the research and development of electric bicycles and providing customers with personalized electric bicycle lithium battery solutions. To adapt market, we have independently developed Bosh models, Rear Hanger models,Down tube inline models, etc.

Currently available in 24V/36V/48V, with capacities ranging from 5.2Ah to 30Ah;



ELECTRIC BICYCLE BATTERY





WP-GN01

Main Specification

Voltage	36V / 48V
Capacity	6.6-14Ah
Max Number	40 cells
Charging port	DC2.1/GX16 3pin
Protocol	Standard/UART/
	CANBus



DP-9/9C DP21700

Main Specification

Voltage	36V / 48V
Capacity	35Ah / 24.5Ah
Charging port	DC 2.1 or High Charge Current
Discharge Port	5 pin

4 LED lights indicator With **Power Switch**

Model:IG-PLUS-T



T:up-take style

Model:IG-PLUS-U/IG-PLUS-S



U:down-take style,case with safety lock lever S:side-take style,case with safety lock lever



IR-21700

Main Specification

/oltage	36V / 48V
Capacity	30Ah / 20Ah
Max Number	60 cells
Charging port	DC 2.1 or High
	Charge Current
Protocol	6Pin
USB port	Without
LED indicator	4 LED lights



WP-FN01

Main Specification

Voltage	36V / 48V
Capacity	8.8-17.5Ah
Max Number	50 cells
Charging port	RCA-B
Protocol	Standard / UART /
	CANBus





IG-PLUS







Voltage Capacity Charging port

Discharge Port USB Port

36V / 48V 14-24.5Ah DC 2.1 or High Charge Current 6 pin Without



Main Specification

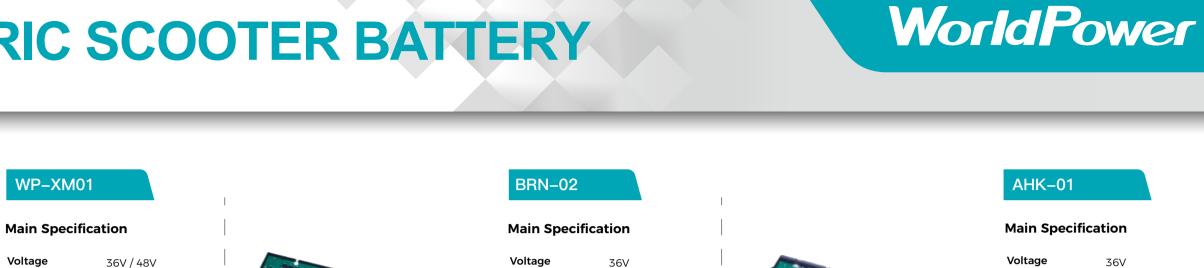
Voltage	36V/48V/51.8V
Capacity	20-25Ah
Max Number	56 pcs(21700)/ 80 pcs(18650)
Charging port	DC2.1/PLA0271 3pin
Protocol	Standard / UART / CANBus

Electric Scooter

The electric scooter is becoming a popular transportation tool, commute model and professional model are wildly used in the recent years. The voltage of commute model is 36V and 48V, the capacity range is in 4.0–10Ah. 60V and 72V are for off–road and enthusiast models, the capacity range is in 20–50Ah. We have developed lots of public models for scooter batteries, its mature technology, stable performance, safety and reliability characteristics help us build a good reputation in the market;



ELECTRIC SCOOTER BATTERY





Voltage	36V
Capacity	7.5Ah
Charging port	XT60
Protocol	Standard/UART/
	CANBus



WP-XM02

WP-XM01

6.6-14Ah

CANBus

Standard/UART/

XT60

Voltage

Capacity

Protocol

Charging port

Main Specification

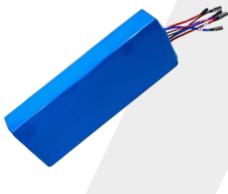
Voltage	36V
Capacity	4.4Ah
Charging port	XT60
Protocol	Standard / UART / CANBus



AWP-69

Main Specification

36V / 48V
12Ah/16Ah/ 18Ah/20Ah
XT60
Standard / UART CANBus



Capacity Charging port Protocol

7Ah/8Ah/10Ah/12Ah XT60th Standard/UART/ CANBus

BMN-06

Main Specification

Voltage Capacity Charging port Protocol

18.2Ah XT60 Standard / UART / CANBus

60V



Wheelchair

WorldPower electric wheelchair battery is usually 24V, 36V, 48V,72V. The capacity ranges from 6AH–30AH. BMS solution focuses on hardware BMS solution or smart BMS with CANBUS protocol or SMBUS solution mainly, realizing in–time communication with devices to benefit customers the best. All of our batteries are able to pass CE, ROHS, UL, IEC62133–CB, IEC60601–1 and other certif– icates as per customers needs. The batter– ies case can use public–shared mold or we can co–develop with customer together.



WHEELCHAIR BATTERY



WP-WI01

Main SpecificationVoltage24VCapacity20AhConfiguration7S6PBMSHardware/
CANBUS/SMBUS/
UART/RS485Charge PortCustomized



WP-HL01

Main Specification

Voltage	36\
Capacity	10-
Configuration	105
BMS	Har
Charge Port	DC



WP-QT01

Main Specification

Voltage	72V
Capacity	6.4Ah
Configuration	20S2P
BMS	Hardware BMS
Charge Port	Customized



WP-WI04

Main Specification

Voltage	24V
Capacity	20A
Configuration	7S6
BMS	Har
	CAN
	UAF
Charge Port	Cus



V/48V -21.5Ah S6P/13S5P ardware BMS C2.1/DC5521

h

Ρ

rdware/ NBUS/SMBUS/ RT/RS485 stomized Voltage:24V Capacity: 20AH Configuration: 7S6P BMS: Hardware/ CANBUS/SMBUS/UART/RS485 Charge Port: Customized

Electric Hydrofoiler (IP68 WATERPROOF)

With higher waterproof performance matching, smarter communication capabilities, and more stable quality assurance, The safer battery helps you experience more free sports on the water without limit



ELECTRIC HYDROFOILER BATTERY



WP-GN01

Main Specification

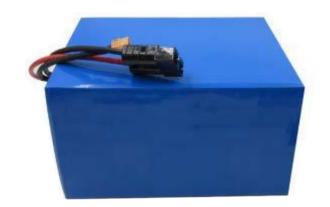
Voltage	50.4V
Capacity	30Ah
Configuration	14S6P
Discharge Current	50A
Charging Port	Same Port
Waterproof Level	IP68



WP-DLP02

Main Specification

Voltage	50.4V
Capacity	20Ah
Configuration	14S5P
Discharge Current	45A Continuous
Charging Port	Same Port
Protocol	CANBus



WP-GN01

Main Specification

Voltage

Capacity

Configuration

Charging Current

Communication



29.6V
15.6Ah
8S6P
5A
CANBus/UA

ART/ RS485

AUTOMATED WORKSHOP

Strong and Efficient Productivity Guarantee, Flexible and Rapid Response to Your Various Order Needs

At present, we have 8 battery assembly lines, one battery welding line, one front-end processing line, one finished product packaging line, and nearly 4000 points aging cabinet, which is a completely 100% aging test for the product; 1,500 square meters warehouse is built strictly in accordance with safety supervision standards. In order to improve quality informatization, in June 2019, our company officially introduced the production MES system to make each key step of the product trackable and controllable;



WorldPower

PRODUCT EQUIPMENT DISPLAY

WorldPower has equipped with professional and comprehensive producing and testing equipment to guarantee quality and efficient.

We have the BMS test equipment, the semi-finished product tester, the air tightness tester, the ultrasonic, dispensing machine, the sorting machine, the automatic spot welding machine, and other equipment and instruments;



WorldPower

QUALITY DEPARTMENT INTRODUCTION



Worldpower insists in serving customers with high-quality products, we have complete testing processes with advanced experiment apparatus which can conduct more than 20 experiments on battery safety and reliability. We strictly follow ISO9001 system operation, make sure to provide customers with safe and reliable lithium battery products through the incoming quality control (IQC), process quality control (IPQC), outgoing quality control (OQC), and other control methods.

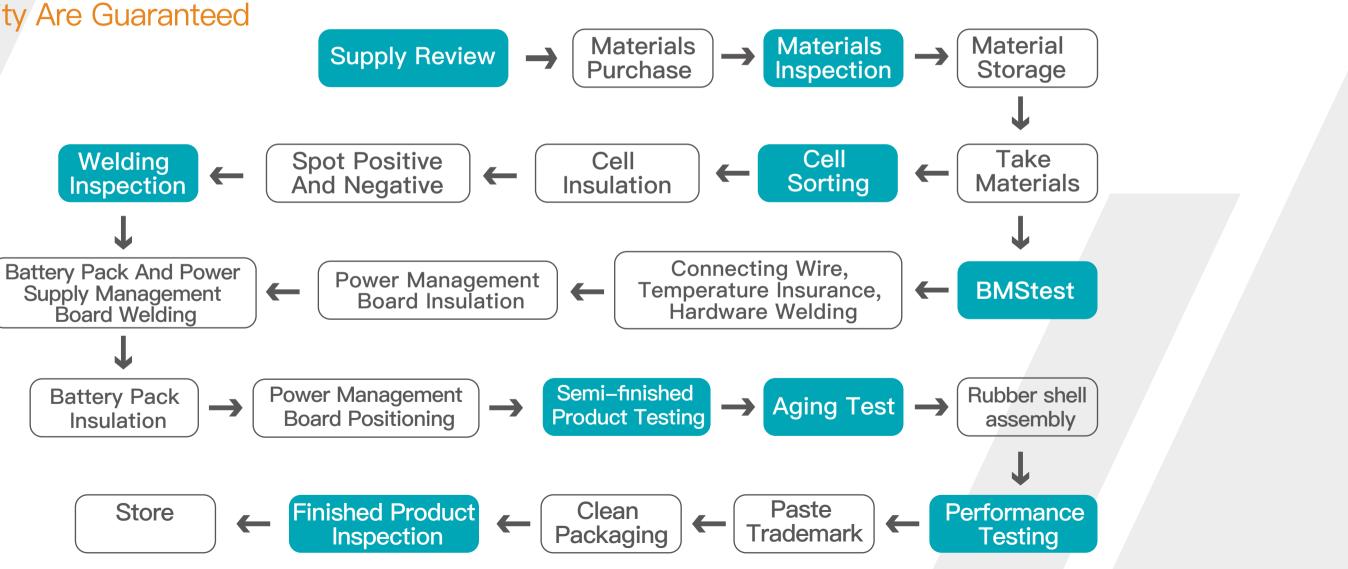


QUALITY CONTROL



PAY ATTENTION QUALITY INSPECTION

Security Are Guaranteed



BATTERY ADVANTAGE



LISMEN

SANYO

• EVE

STEMS

Worldpower had a long-term and stable cooperative relationship with internationally famous cell manufacturing companies. In order to integrate industry chain resources and enhance competitive advantages, it establishes cell production lines through joint ventures. Different brands of batteries can be selected according to the customer's product positioning and performance requirements.



COOPERATIVE PARTNER





swytch

COMen

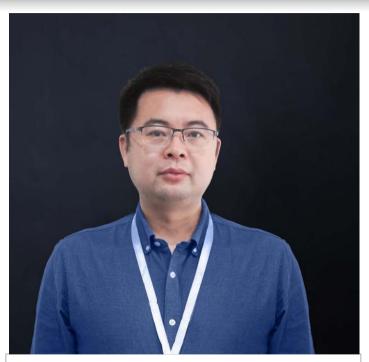






CORE TEAM MEMBERS





Wenjie Liu

CEO of Worldpower Electronic Co.,Ltd Liu Wenjie started to establish World Electronics Co., Ltd. in 2009. He is not only a senior engineer in lithium battery manufacturing, but also an executive vice president of the Guangdong Battery Association, an outstanding youth in the battery industry, and a love ambassador for the bloggers charity fund.



Puping Zong

After graduating in 2006, Zong Puping entered in the lithium battery industry and has deeply involved in it. He obtained PMP qualification certificate by taking part in project management professional training has been engaged in designing of lithium battery product and related management for more than 13 years, and has deep technical accumulation and project management experience. Mr Zone served as an electronic engineer from 2006 to 2010, responsible for the design and development of protection boards for assembled batteries, digital batteries and laptop batteries, electric vehicle batteries and power tool batteries.

> **Deputy General** Manager



Changqian Luo

After graduated in 2003, Mr.Luo Changgian has 19 years of experience in world leading electronic circuit design and R&D management in the lithium battery field, good at solving complex problems encountered in circuit design. In-depth research on cell sorting and matching groups, BMS high current, thermal management, etc.; Rich experience in complex BMS communication, SOC algorithm, Customized battery modules such as multi-machine serial parallel, and know the standards of different countries very well.

R&D manager

Founder



Yuehai Yi

Graduated from Lanzhou University, bachelor degree, has long been engaged in design work and R&D management. He has obtained 5 domestic invention patents and 3 US patents. Since 2004, he has entered the energy storage industry and has extensive industry experience.

Director of solar power Technology

THANKS!

Headquarter ADD: 2nd Floor, Building Spring, Lingya Wonderful Life Wisdom Green Valley,
Tang Tou 1st Road, Shi Yan Town, Bao'An District, Shen Zhen, China
Factory ADD: Building B, Li Yuan Industrial Park, Zhou Shi Road, Shi Yan Town,
Bao'An District, Shen Zhen City, China. 518108
Tel: +86-13923731376
E-mail: Sales09@wpbattery.com
Web: www.wpbattery.com



