

TCS[®]

Lithium Battery

Stable | Secure | Powerful





- TCS Sales Network
- Global Sales Network

TCS BATTERY

For better life



6 Million
KVAH / Year



400 Thousand
Square meters



Enterprise
Official Website



Alibaba
International Site



Factory Panorama

CATALOGUE



About us

- 01-02 Company profile
- 03-04 Production process

Product Catalogue

- 05-06 Type of cells
- 07-08 Customized battery pack
- 09-11 Power tool batteries
- 12-14 Golf cart batteries
- 15-16 Electric bike batteries
- 17-21 Home energy station
- 22-24 Wall or Rack Mounted Batteries
- 25-28 Portable power
- 29-30 Commercial ESS
- 31-32 Motorcycle starting



PRODUCT CERTIFICATION

Our products have passed CE, UN38.3, CQC, ISO and other certifications, and obtained the access qualification of European Union, European Free Trade Area and other international markets, providing technical support and guarantee for expanding the international market.



COMPANY PROFILE

TCS battery established in 1995 is one of the earliest battery brands in China which comprehensive high-tech enterprise specializing in the advanced battery research, development, production and marketing. Our products are widely used in UPS, residents energy storage, industrial and commercial ESS, electric tools, forklifts, golf cart, AGV, electric bicycles and motorcycles etc..

TCS battery keeps growing during the passed 30 years, the production base covers an area of more than 400,000 square meters, we have more than 3000 employs with a complete set of modern standard factory buildings, office buildings and employee apartment buildings. TCS battery has advanced battery production line and technology, continuously introduce the world's leading automatic assembly welding, automatic wrap machine and other equipment to strengthen our brand advantage. Our monthly output is up to 2,000,000 batteries and the total annual production capacity is over 6 million KVA.



Reception



Office area



Conference room



Leisure Area



Laboratory



In recent years, TCS has been led by the global trend of carbon peak and carbon neutrality, in order to rapidly form economies of scale and participate in market competition, the company has made rapid development of the overall economy through technological transformation, technological development, joint venture cooperation, mergers and acquisitions.

The company has formed a group operation mode with Hong Kong Songli Group as the core, Xiamen Songli New Energy Technology Co., Ltd., Xiamen Songli Import and Export Co., Ltd., and Jinjiang Songli Battery Co., Ltd. as subsidiaries, Also invested and cooperated with several battery enterprises. Through these to control (participating) companies and integrate market resources.

Facing the market and striving hard, we has formed a large enterprise from scratch and grown from small to large, gradually developing and growing into one of the large battery manufacturing companies in China. We passed ISO9001, ISO14001,UL1642,UL1973 and other certifications. Experienced in battery production, perfect innovation system, good customer relationship and reliable before-sales, sales and after-sales service, with stable and excellent distributors in local and abroad market, business has expanded to more than 100 countries and regions in all over the world.

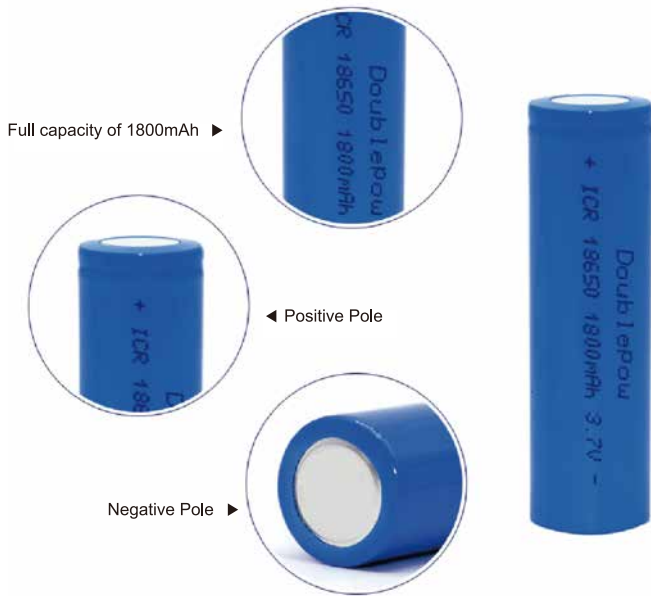


PROCESS FLOW

Mix Material	1
Coating	2
Calendering	3
Auto Cutting	4
Welding	5
Auto Winding	6
Bottom Welding	7
Roll Slot	8
Battery Baking	9
Electrolyte Injection	10
Formation And Capacity Grading	11
Sorting And Matching Group	12

PRODUCTION PROCESS

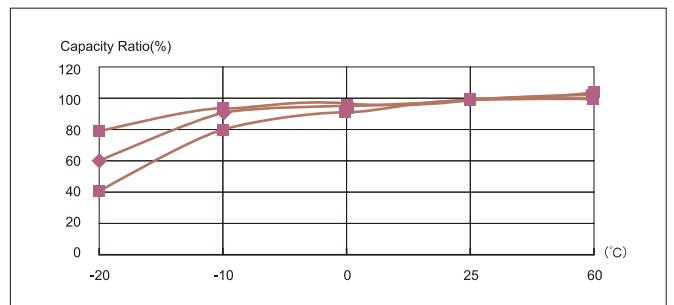
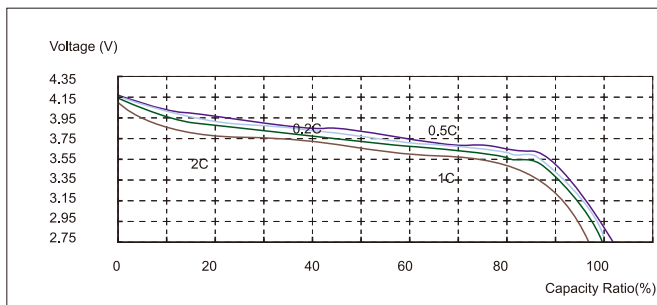
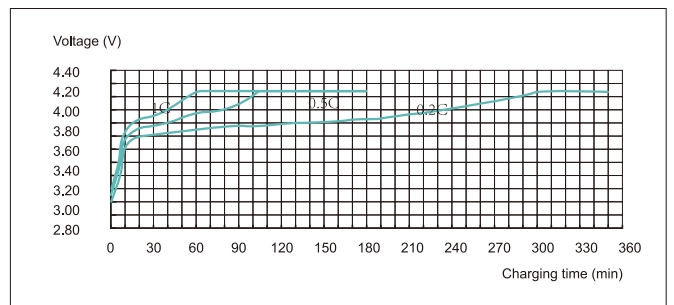
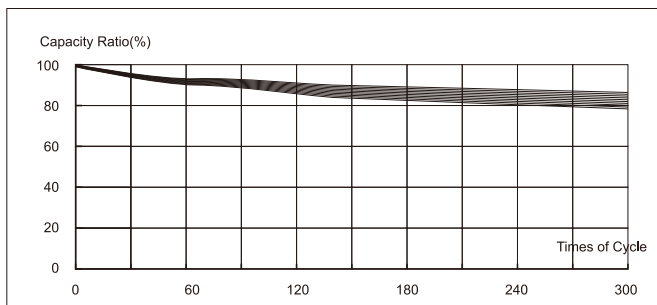




Capacity Cell 1800/2000/2200/2500mAh

- Adopt high quality imported materials
- Excellent safety performance, energy density up to 150-300wh/kg
- Small size, light weight, can be connected in series or parallel
- RoHS, REACH, FCC, UN38.3, CE, CB, CQC, ISO certified

RoHS REACH FC UN38.3 CE CB CQC ISO 9001

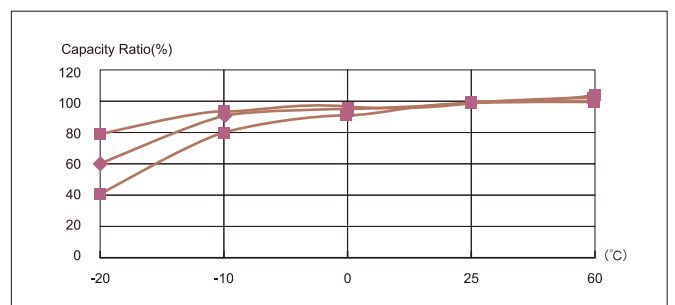
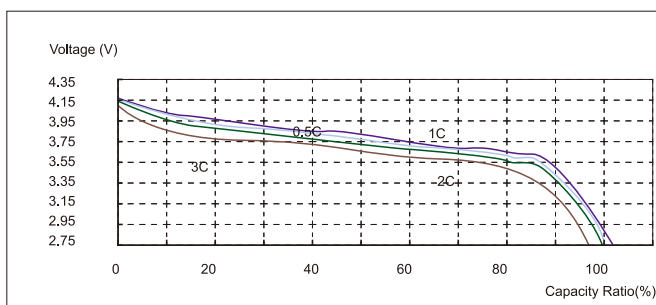
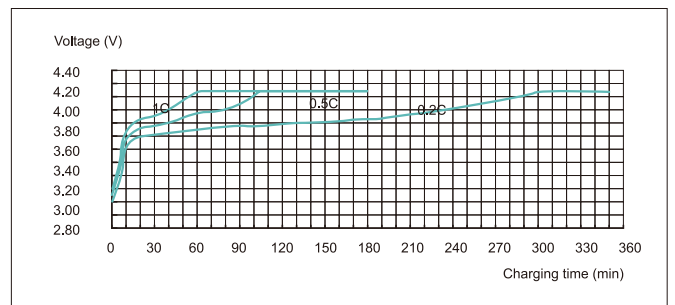
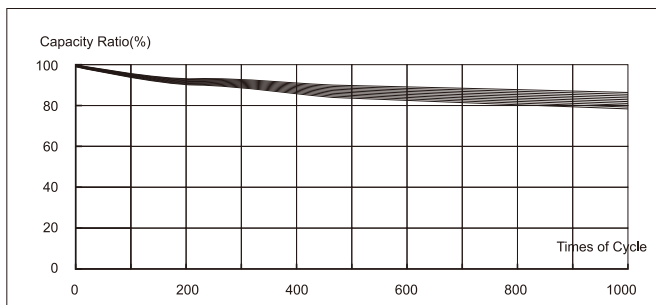




High Rate Cell 1800/2000/2200/2500mAh

- High rate battery with maximum discharge rate up to 30C and capacity retention rate over 95%
- 5C fast charging system that can charge the battery more than 90% in 12 minutes
- Customized in different capacities and sizes; maximum capacity can reach 10Ah
- RoHS, REACH, FCC, UN38.3, CE, CB, CQC, ISO certified

RoHS REACH FC UN38.3 CE CB CQC ISO 9001



* The above data are for reference only, please refer to the actual object.

CUSTOMIZED BATTERY PACK

Applications :Solar street lights, emergency lights, alarm system, etc.



Customized battery pack

Product Description

TCS emergency power supply series are for low-voltage UPS, solar power, portable power tools, home emergency power, electric toy car, medical cart and other applications battery pack. It has obvious advantages in safety, energy density, operating temperature range, service life, environmental protection, etc., with intelligent battery management system, we can provide customers with safe, stable and highly customized power supply guarantee service.

Product Customization



Optional material: LiFePO4/NCM

Voltage range: 3.7V 7.4V 11.1V 14.8V 18.5V 22.2V

3.2V 6.4V 9.6V 12.8V 25.6V

Capacity range: 1.5AH-100AH

Application Range

Emergency Lights



Security Monitoring
& Alarm System



Portable Traffic Light



Medical Cart



Solar Street Light

SNAP-ON HANDHELD POWER TOOL BATTERIES

TLB12-2 12V2AH



[Battery Size] : 40*38*85MM

[Rated Voltage] : 11.1 V

[Rated Capacity] : 2000mAh

[Charging Voltage] : 12.6V

[Charging Current] : $\leq 4A$

[Protection Voltage] : 8.25V

[Discharge Current] : $\leq 20A$

TLB21-2 21V2AH



[Battery Size] : 105*75*60MM

[Rated Voltage] : 18V

[Rated Capacity] : 2000mAh

[Charging Voltage] : 21V

[Charging Current] : $\leq 2A$

[Protection Voltage] : 14V

[Discharge Current] : $\leq 20A$

BACKPACK POWER

POWER TOOL BATTERIES

TLB12-40 12V40AH



[Battery Size] : 260*175*75MM

[Rated Voltage] : 11.1 V

[Rated Capacity] : 40000mAh

[Charging Voltage] : 12.6V

[Charging Current] : <5A

[Protection Voltage] : 8.25V

[Discharge Current] : 50A

TLB48-20 48V20AH



[Battery Size] : 360*230*80MM

[Rated Voltage] : 48V

[Rated Capacity] : 20000mAh

[Charging Voltage] : 54.6V

[Charging Current] : <5A

[Protection Voltage] : 35.75V

[Discharge Current] : 60A



LEAD ACID REPLACEMENT

POWER TOOL BATTERIES

TLB12-8 12V8AH



[Battery Size] : 150x65x96MM

[Rated Voltage] : 11.1 V

[Rated Capacity] :

6000mAh/8000mAh/10000mAh

[Charging Voltage] : 12.75V

[Charging Current] : <4A

[Protection Voltage] : 8.5V

[Discharge Current] : ≤6A , ≤8A

TLB12-16 12V16AH



[Battery Size] : 150x65x96MM

[Rated Voltage] : 11.1 V

[Rated Capacity] :

12000mAh/14000mAh/16000mAh

[Charging Voltage] : 12.75V

[Charging Current] : <4A

[Protection Voltage] : 8.5V

[Discharge Current] : ≤14A , ≤16A

GOLF CART BATTERIES

Applications: Golf carts, fishing boat, sweepers, etc.





Sweepers



Fishing boat



Golf cart

Product Features



Applicable to multiple scenarios

Multi usages for golfcart, RV, marine.



Beautiful appearance

Unique design and drop-in replacement.



Function Of BMS

Built-in BMS, high surge current available.



Bluetooth for monitoring

Bluetooth for monitoring, check product data information.



Advanced technology

Long life, deep cycle, low self-consumption and advanced technology.

In order to prevent the battery leaking, getting hot and exploding, please pay attention to preventing measure as following:

Warning

- *Do not throw the battery into water, keep it under dry, shady and cool circumstance when not use.
- *Do not upside down the positive and negative.
- *Do not connect the positive and negative terminal with metal.
- *Do not ship or store the battery together with metal.
- *Do not knock, throw or trample the battery.
- *Do not cut through the battery with nail or other edge tool.

Tips

- *Do not use or keep the battery under the high temperature. Otherwise it will cause battery heat, get into fire or lose some function and reduce the cycle life.
- *The proposed temperature for long-term storage is 10-45℃.
- *Do not throw the battery into fire or heating machine to avoid fire, explosion and environment pollution;
- *Scrap battery should be returned to the supplier and handled by the recycle station.
- *Never use the battery under strong static and strong magnetic field, otherwise it will destroy the protecting device of the battery.
- *If battery leaked and the electrolyte get into eyes, please wash eyes by water and if serious please go to hospital.
- *If battery emit peculiar smell, heating, distortion or appear any unconventionality during using, storage or charging process, please take it out from device and stop using or charging.
- *Do not cut the battery in socket directly; please use the stated charger when charging.
- *Check the voltage of battery and relevant connectors before using the battery. It can't be used until everything turns out to be normal.
- *Before charging please fully check the insulativity, physical condition and ageing statu.
- *Battery voltage must not be less than the cutoff voltage, if not, it's abnormal and that battery needs to be labeled. The user should contact our Customer Service Dept and it can't be charged until repaired by our staff.
- *The battery should be stored in 50% COC. It needs to be charged once if out of use for as long as half a year.
- *Clean the dirty electrode with a clean dry cloth.

Technical specification	TLB36105-G	TLB5150-G	TLB5165-G
Electrical Specifications			
Nominal Voltage	38.4V	51.2V	51.2V
Nominal Capacity	105Ah	50Ah	65Ah
Energy	4032Wh	2560Wh	3328Wh
Cycle Life	≥6000 cycles@80%DOD	≥6000 cycles@80%DOD	≥6000 cycles@80%DOD
Efficiency	99%	99%	99%
Mechanical Specifications			
Dimensions (L x W x H)	493x284x244 mm	279x178x277 mm	501*279*219 mm
Weight	31 KG	17 KG	32 KG
Terminal Type	M8	M8	M8
Enclosure Protection	IP54	IP54	IP54
Cell Type	Prismatic	Prismatic	Prismatic
Chemistry	LiFePO4	LiFePO4	LiFePO4
Configuration	12S1P	16S1P	16S1P
Discharge Specifications			
Maximum Continuous Discharge Current	100A	50A	65A
Peak Discharge Current	300 A (≤5 s)	150 A (≤5 s)	200 A (≤5 s)
BMS Discharge Voltage Cut-Off	30.0V	40.0V	40.0V
Reconnect Voltage	33.6V	44.8V	44.8V
Recommended Charge Current	50A	25A	30A
Maximum Charge Current	100A	50A	60A
Recommended Charge Voltage	43.8V	58.4V	58.4V
BMS Charge Voltage Cut-Off	45.0V(3.75±0.1V)	60.0V(3.75±0.1V)	60.0V(3.75±0.1V)
Reconnect Voltage	42.0V(3.5±0.1V)	56.0V(3.5±0.1V)	56.0V(3.5±0.1V)
Operating temperature	-4 to 140 °F (-20 to 60 °C)	-4 to 140 °F (-20 to 60 °C)	-4 to 140 °F (-20 to 60 °C)

Technical specification	TLB51105-G	TLB51210-G	TLB76105-G
Electrical Specifications			
Nominal Voltage	51.2V	51.2V	76.8V
Nominal Capacity	105Ah	210Ah	105Ah
Energy	5376Wh	10752Wh	8064Wh
Cycle Life	≥6000 cycles@80%DOD	≥6000 cycles@80%DOD	≥6000 cycles@80%DOD
Efficiency	99%	99%	99%
Mechanical Specifications			
Dimensions (L x W x H)	487x300x215mm	571x551x252 mm	691x334x266 mm
Weight	51 KG	92 KG	72 KG
Terminal Type	M8	M8	M8
Enclosure Protection	IP54	IP54	IP54
Cell Type	Prismatic	Prismatic	Prismatic
Chemistry	LiFePO4	LiFePO4	LiFePO4
Configuration	16S1P	16S2P	24S1P
Discharge Specifications			
Maximum Continuous Discharge Current	100A	200A	100A
Peak Discharge Current	300 A (≤5 s)	500 A (≤5 s)	300 A (≤5 s)
BMS Discharge Voltage Cut-Off	40.0V	40.0V	60.0V
Reconnect Voltage	44.8V	44.8V	67.2V
Recommended Charge Current	50A	100A	50A
Maximum Charge Current	100A	200A	100A
Recommended Charge Voltage	58.4V	58.4V	87.6V
BMS Charge Voltage Cut-Off	60.0V(3.75±0.1V)	60.0V(3.75±0.1V)	90.0V(3.75±0.1V)
Reconnect Voltage	56.0V(3.5±0.1V)	56.0V(3.5±0.1V)	84.0V(3.5±0.1V)
Operating temperature	-4 to 140 °F (-20 to 60 °C)	-4 to 140 °F (-20 to 60 °C)	-4 to 140 °F (-20 to 60 °C)

Electric two/three wheeler batteries

Applications: Golf carts, sightseeing carts, wheelchairs, etc.



TLB4820



[Number of cells] : 16S1P
 [Driving range] : 60-80Km
 [Voltage standard] : 51.2V 20AH
 [Size] : 180*156*265mm
 [Maximum capacity] : 20AH [Weight] : 8.6kg
 [Cycle life] : ≥2000 [Charging time] : 3-6hours
 [Charging port] : Pin port / Anderson port
 [Application range] : 48V electric motorcycle

TLB4825



[Number of cells] : 16S1P
 [Driving range] : 75-95Km
 [Voltage standard] : 51.2V 25AH
 [Size] : 176*141*248mm
 [Maximum capacity] : 25AH [weight] : 10.6kg
 [Cycle life] : ≥2000 [Charging time] : 3-6hours
 [Charging port] : Pin port / Anderson port
 [Application range] : 48V electric motorcycle

TLB4830



[Number of cells] : 16S1P
 [Driving range] : 90-120Km
 [Voltage standard] : 51.2V 30AH
 [Size] : 180*170*282mm
 [Maximum capacity] : 30AH [Weight] : 13.6kg
 [Cycle life] : ≥2000 [Charging time] : 3-6hours
 [Charging port] : Pin port / Anderson port
 [Application range] : 48V electric motorcycle

TLB6020



[Number of cells] : 20S1P
 [Driving range] : 75-95Km
 [Voltage standard] : 64V 20AH
 [Size] : 180*156*265mm
 [Maximum capacity] : 20AH [weight] : 10.5kg
 [Cycle life] : ≥2000 [Charging time] : 3-6hours
 [Charging port] : Pin port / Anderson port
 [Application range] : 60V electric motorcycle

TLB6030



[Number of cells] : 20S1P
 [Driving range] : 110-150Km
 [Voltage standard] : 64V 30AH
 [Size] : 180*156*265mm
 [Maximum capacity] : 30AH [Weight] : 14.5kg
 [Cycle life] : ≥2000 [Charging time] : 3-6hours
 [Charging port] : Pin port / Anderson port
 [Application range] : 60V electric motorcycle

TLB6040



[Number of cells] : 20S1P
 [Driving range] : 150-200Km
 [Voltage standard] : 64V 40AH
 [Size] : 180*226*350mm
 [Maximum capacity] : 40AH [weight] : 22.5kg
 [Cycle life] : ≥2000 [Charging time] : 3-6hours
 [Charging port] : Pin port / Anderson port
 [Application range] : 60V electric motorcycle

Product Characteristics



Light weight and small size
 Only 1/3 of the weight of traditional lead-acid batteries.



Large capacity
 Single charge range reaches 60-200km



Long service life
 Over 2000 discharges (80% DOD)



Overcurrent protection



Over-voltage device



Overcharge protection



Over discharge protection



Short circuit protection



Temperature control protection



Charge reversal



Balance performance

HOME ENERGY STATION

Application: Family use, factory, supermarket, school, office, etc.



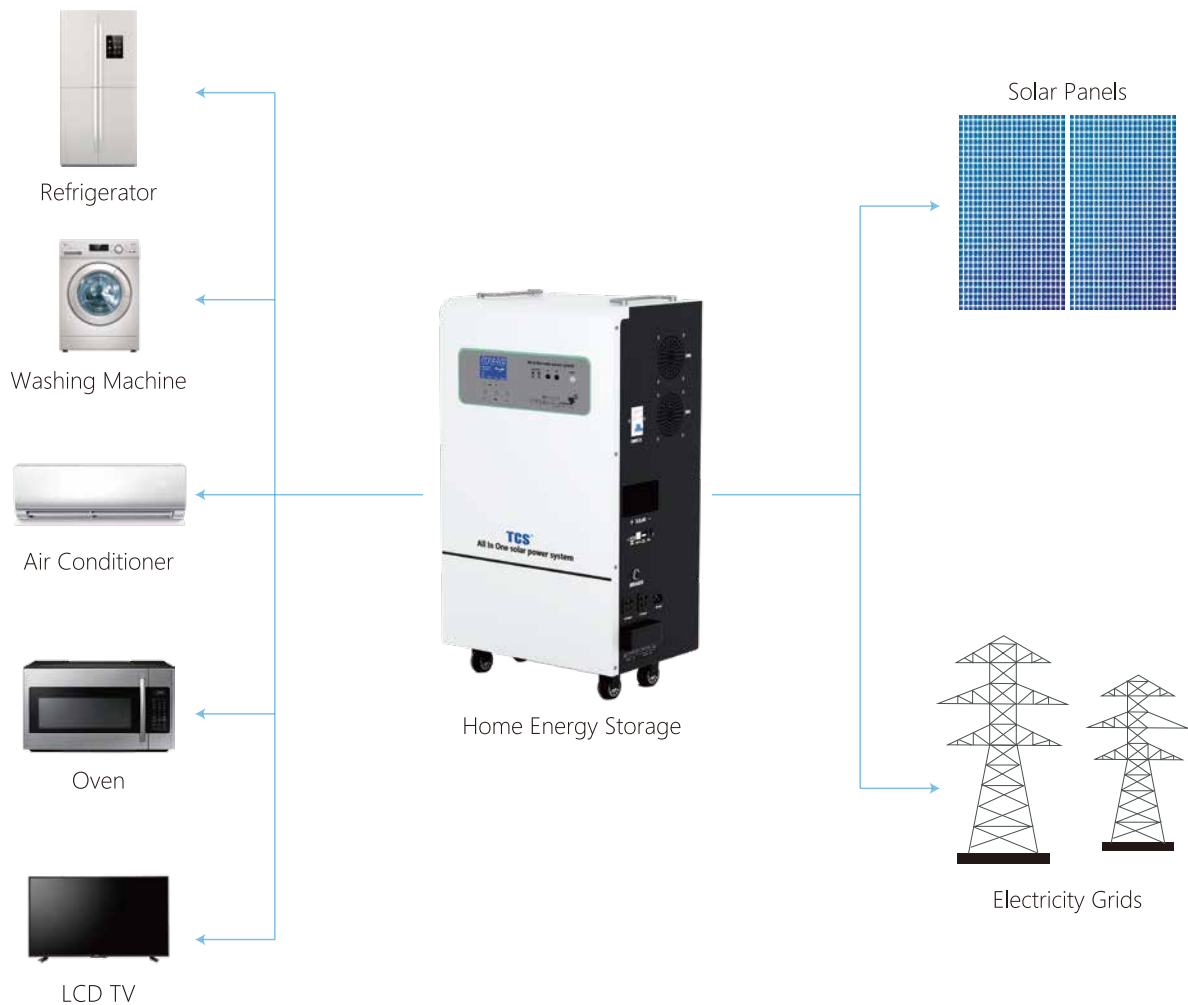
Home energy station

Product Description

The Home Energy Storage System is a convenient, modular battery design, integrated structure, simple and beautiful, easy to install, easy to operate and maintain, easy to expand, integrating inverter, EMS and UPS management system to create an efficient, safe and intelligent home energy storage system. It not only satisfies all energy needs such as seamless power switching and remote control, but can also be configured for intelligent operation according to electricity consumption habits and peak and valley tariffs, bringing an economical, safe and convenient operating experience to households.

Product Specification

Battery pack	Rated capacity	100Ah	Output	Output frequency	50Hz/60Hz ±0.1%	Input	Input standard	L+N+PE
	Min. Capacity	100Ah		Rated output power	5000W		Rated input power	208/220/230/240VAC
	Nominal voltage	51.2V		Waveform	Sine wave		Range of frequencies	50Hz/60Hz (self-adaption)
	Discharge cut-off voltage	40V		Output voltage	208/220/230/240VAC+5%	Other	LCD interface	Display of operating modes/ loads/inputs/outputs etc
	Charging cut-off voltage	58.4V		Peak power	10000VA		Parallel interface	Parallel function available
	Arrangement method	16S1P	PV charging method	MPPT	Noise level		≤50db	
	Max.charging current	50A	PV Max. Input power	5500W	IP level		IP 54	
	Max.Continuous discharge current	100A	MPPT tracking range	120~430Vdc	Dimension	430*262*770mm		
	Peak current	150A	Max. PV input voltage	450Vdc	Weight	About 58.5kg		
	Working Temperature range	Charge: 0~55°C / Discharge: -20~60°C	Optimum open-circuit voltage	370~430V				
Communication protocols	RS485/RS232	Max. PV charging current	40A					

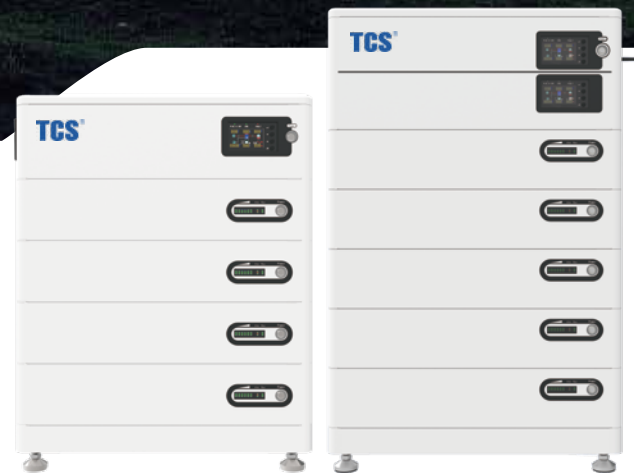


Off-Grid Energy Storage System

Stacked all-in-one off-grid energy storage system, which can connect solar panel, grid (or generator) and load.

It contains expandable LFP battery, off-grid inverter and battery management system (BMS).

It has multiple work modes to meet lots of application scenarios, and reduce the electricity bill, store the energy for emergency back-up.



High Reliability

- LFP battery cell technology, safe than ever.
- Multiple protections, safe and reliable.



User-Friendly

- Multi-purpose AC outlet, easy to use.
- Multiple work modes, meet lots of scenarios.



Advanced Design

- Both PV and grid charge, fast and convenient.
- Peak-shaving mode, reduce the electricity bill.
- Modular and all in one design, compact and elegant appearance, battery is expandable.



Solar



Grid / Generator



Load










Monitoring

T3500W/T5000W Series Off-grid Energy Storage System

Model	T3500W	T5000W
Inverter		
Rated output power	3500W	5000W
Output surge power	7000W,5s	10000W,5s
Max. output current	16A	22.7A
Rated output voltage	220/230/240V	
Rated frequency	50/60Hz	
THDv	<3%	
Output wave	Pure Sine Wave	
Output type	Pluggable connector	
AC input voltage range	170~280V	
AC input frequency	50/60Hz	
AC charge current per inverter(Battery)	30A(0~60A) Adjustable	30A(0~80A) Adjustable
Max. PV power(Recommended)	4500W	6000W
Max. PV voltage	450V	
MPPT voltage range	120~430V	
Max PV charge current(Battery)	80A	100A
Weight	23kg	
Dimension [W x D x H]	620*365*171 mm	








Battery module		
Rated battery voltage	51.2V	
Battery voltage range	44.8~57.6V	
Capacity	5.12 kWh	
Max. charge and discharge rate	1C	
Battery type	Li-ion (LFP)	
Weight	46.6kg	
Dimension [W x D x H]	620*365*139 mm	

System Parameters							
System Structure							
Rated output power	3500/5000 W						
Number of battery	2	3	4	5	6	7	8
Battery capacity	10.24 kWh	15.36 kWh	20.48 kWh	25.6 kWh	30.72 kWh	35.84 kWh	40.96kWh
Operating temperature	0~50°C						
Storage temperature	-15~60°C						
Humidity	5%~95%						
Cooling strategy	Fan						
Enclosure protection rating	IP20						
Communication	WiFi/RS485						
Weight	121.6 kg	168.2 kg	214.8 kg	261.4 kg	308 kg	354.6 kg	401.2 kg
Dimension [W x D x H]	620*365*546 mm	620*365*685 mm	620*365*824 mm	620*365*963 mm	620*365*1102 mm	620*365*1241 mm	620*365*1380 mm

Certificate	
Certificate	CE,UN38.3,TUV mark

Model	T7000W	T10000W
Inverter		
Rated output power	7000W	10000W
Output surge power	14000W,5s	20000W,5s
Max. output current	32A	45.4A
Rated output voltage	220/230/240V	
Rated frequency	50/60Hz	
THDv	<3%	
Output wave	Pure Sine Wave	
Output type	Pluggable connector	
AC input voltage range	170~280V	
AC input frequency	50/60Hz	
AC charge current per inverter(Battery)	30A(0~60A) Adjustable	30A(0~80A) Adjustable
Max. PV power(Recommended)	4500W*2	6000W*2
Max. PV voltage	450V	
MPPT voltage range	120~430V	
Max PV charge current(Battery)	80A*2	100A*2
Weight	35kg	
Dimension [W x D x H]	620*365*256 mm	

Battery module		
Rated battery voltage	51.2V	
Battery voltage range	44.8~57.6V	
Capacity	5.12 kWh	
Max. charge and discharge rate	1C	
Battery type	Li-ion (LFP)	
Weight	46.6kg	
Dimension [W x D x H]	620*365*139mm	

System Parameters							
System Structure							
Rated output power	7000/10000 W						
Number of battery	2	3	4	5	6	7	8
Battery capacity	10.24 kWh	15.36 kWh	20.48 kWh	25.6 kWh	30.72 kWh	35.84 kWh	40.96 kWh
Operating temperature	0~50°C						
Storage temperature	-15~60°C						
Humidity	5%~95%						
Cooling strategy	Fan						
Enclosure protection rating	IP20						
Communication	WiFi/RS485						
Weight	133.6 kg	180.2 kg	226.8 kg	273.4 kg	320 kg	366.6 kg	413.2 kg
Dimension [W x D x H]	620*365*631 mm	620*365*770 mm	620*365*909 mm	620*365*1048 mm	620*365*1187 mm	620*365*1326 mm	620*365*1465 mm

Certificate	
Certificate	CE,UN38.3,TUV mark

Wall or Rack Mounted Batteries

Application: Family use, factory, supermarket, school, office, telecom system, etc.



Home energy storage series

Product Description

The TCS Home Energy Storage Series is a high-performance LiFePO4 battery system focused on small and medium-sized home energy storage applications. The system has obvious advantages in terms of safety, energy density, fast charging, temperature range, service life and environmental protection, and can be used seamlessly with grid-connected and off-grid energy storage inverter systems. With stable performance and beautiful design, this product is dedicated to providing a safe and stable green power supply service for every household.

Product Specification

Integrated structure for home energy storage, simple and beautiful, easy to install, easy to operate and maintain, easy to expand.



MODEL	TLB48-100B-HES		TLB48-200B-HES		TLB48-100A-HES		TLB48-150A-HES		TLB48-200A-HES	
Voltage	48V	51.2V	48V	51.2V	48V	51.2V	48V	51.2V	48V	51.2V
Nominal Capacity	100Ah	100Ah	200Ah	200Ah	100Ah	100Ah	150Ah	150Ah	200Ah	200Ah
Energy	4800wh	5120wh	9600wh	10240wh	4800wh	5120wh	7200wh	7680wh	9600wh	10240wh
Arrangement Method	15S1P	16S1P	15S1P	16S1P	15S1P	16S1P	15S1P	16S1P	15S1P	16S1P
Weight	41kg	44kg	76kg	84kg	43kg	45kg	67kg	70kg	80kg	84kg
Size (±2mm)	440*170*560		440*206*670		442*450*133		442*510*177		442*510*222	



Telecom series

Product Description

TCS Telecom Energy Storage Battery System is a high-performance LiFePO4 battery system focusing on the application of Telecom energy storage. It can provide photovoltaic complementary, scenery complementary, and micro-grid energy supply modes, as well as new energy supply system solutions for telecom base stations in alpine areas. We provide efficient, stable and reliable backup power for Telecom base stations, and provide power protection for base stations.

Product Specification

Supports parallel connection of battery cabinets with a voltage of 51.2V and a capacity of 200AH, supporting up to 10 parallel connections; Supports LCD screen customization.



Model	TLB48-100-CB		TLB48-150-CB		TLB48-200-CB	
Voltage	48V	51.2V	48V	51.2V	48V	51.2V
Nominal Capacity	100Ah	100Ah	150Ah	150Ah	200Ah	200Ah
Energy	4800wh	5120wh	7200wh	7680wh	9600wh	10240wh
Arrangement Method	15S1P	16S1P	15S1P	16S1P	15S1P	16S1P
Size (±2mm)	442*450*133	442*450*133	442*480*177	442*480*177	442*480*222	442*480*222
Weight	43kg	45kg	67kg	68kg	80kg	82kg



PORTABLE POWER

Application: Travel, outdoor activities, rescue and medical, photography.



Portable power

Product Description

TCS outdoor power supply based on scientific structural design to reduce the size of the product, 40~50% smaller than the competitors' products in the market, Providing a high quality experience for outdoor driving trips, camping, fishing, photography and aerial photography.

The product is made of built-in UL approved automotive grade lithium-ion battery, battery management system (BMS), charging management system, power management system, DC module and AC inverter module. It's an all in one portable power supplier.

The battery cell has passed UL, EU safety certification, and gets a IP52 protection level. Anti-sand and dust outdoor, zero noise for tent and house use. Also obtained international certifications such as CE/FCC/ROSH/PSE/UN38.3 and are safe and reliable.











Product Specification

Model	P300	P800	P1000	P2000
Battery Capacity	303Wh	607Wh	1016Wh	2008Wh
AC Output Rate	Rated 350W	Rated 800W	Rated 1000W	Rated 2000W
Output Waveform	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave
AC 220V Output Interfaces	2	2	2	3
USB Port	5V, 12W*3	5V, 12W*3	5V, 12W*3	5V, 12W*4
Fast Charge Type-C	PD3.0, 5-20V, 45W-100W (MAX)	PD3.0, 5-20V, 45W-100W (MAX)	PD3.0, 5-20V, 45W-100W (MAX)	PD3.0, 5-20V, 45W-100W (MAX)
DC Output	12V 6A	12V 6A	12V 6A	12V 6A
Car charging	100W Max	100W Max	100W Max	100W Max
PV charging	120W Max	160W Max	160W Max	1000W Max
Adapter	65W	145W	145W	1600W AC Charging
Product volume	140x175x118mm	267x175x118mm	294x175x118mm	355x216x258mm
Product weight(NW)	≈3.5 Kg	≈6.0 Kg	≈8.1 Kg	≈17.0 Kg
Warranty	12 Months	12 Months	12 Months	12 Months

Usage Time

P800

<p>5-7W Smartphone 70~90 Times</p> 	<p>5W LED Light ≈ 90hrs</p> 	<p>25W Outdoor Stereo ≈ 20hrs</p> 	<p>30W Electric Fan ≈ 16hrs</p> 
<p>50W Laptop ≈ 10hrs</p> 	<p>80W Mini Refrigerator ≈ 6.5hrs</p> 	<p>150W Desktop ≈ 3.5hrs</p> 	<p>300W Rice Cooker ≈ 1.8hrs</p> 

* The above data are for reference only, please refer to the actual object.

Portable Suitcase Energy Storage System



T3000-U/T5000-U series is a portable energy storage system, which can connect solar panel, grid (or generator) and load.

It has built-in LFP battery, off-grid inverter and battery management system (BMS). With the application scenario of outdoor adventures, family parties and emergency backup



Advanced Design

- Suitcase design, compact and elegant appearance.
- Easy to move for power supply.
- Both PV and grid charge, fast and convenient.



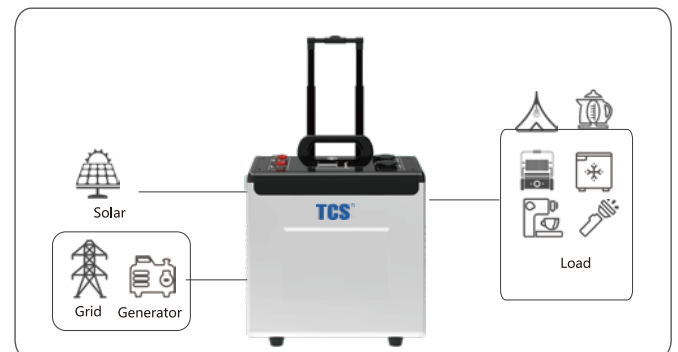
High Reliability

- Integrate Max. 5.12kWh battery, long time power supply.
- LFP battery cell technology, safe than ever.
- Multiple protections, safe and reliable.



User-Friendly

- Multi-purpose AC outlet, easy to use.
- Multiple work modes, meet lots of scenarios.



Model	T3000-U	T5000-U
Battery		
Rated voltage	51.2V	
Voltage range	44.8~57.6V	
Capacity	3.58kWh	5.12kWh
Max. discharge rate	1C	
Max. charge rate	1C	
Battery type	Li-ion (LFP)	
AC Output(Backup)		
Rated power	3000W	5000W
Surge power	6000W,5s	10000W,5s
Rated output voltage	220/230/240V	
Max. output current	13.7A	22.7A
Rated frequency	50/60Hz	
THDv	< 3%	
Output wave	Pure Sine Wave	
Output type	Multi-purpose AC Outlet×2	
AC Input		
AC input voltage range	170~280V	
AC input frequency	50/60Hz	
AC charge current(Battery)	15A(10/15A Adjustable)	30A(0~60A Adjustable)
PV Input		
Max. PV power(Recommended)	1800W	4500W
Max. PV voltage	145V	
MPPT voltage range	60~115V	
Max PV charge current(Battery)	30A	80A
General Data		
Operating temperature	0°C~50°C (Charge) / -10°C~50°C (Discharge)	
Storage temperature	-15°C~60°C	
Humidity	5%~95%	
Cooling strategy	Fan	
Weight	52kg	70kg
Dimension [W x H x D]	461 x 558 x 308 mm	531 x 608 x 308 mm
Enclosure protection rating	IP43	
Certificate	CE,UN38.3,TUV mark	

COMMERCIAL ESS

Application: Medium or Small commercial and industrial, factory, supermarket, etc.

Commercial ESS

Product Description

TCS industrial and commercial energy storage battery cabinets are high-performance LiFePO4 battery systems that focus on small and medium-sized industrial and commercial applications. The systems have obvious advantages in terms of safety, energy density, fast charging, applicable temperature range, service life and environmental protection, and can be used in conjunction with grid-connected and off-grid energy storage inverter systems.

Product Specification

FEATURES OF THE HIGH VOLTAGE BATTERY

- Safe and reliable, with perfect protection functions; BMS intelligent protection, new A-grade LiFePO4 batteries with excellent safety performance, metal shell, waterproof and explosion-proof.
- Modular stacking design, easy to expand, up to 8 battery packs can be connected in series.
- Flexible capacity options, 9.6kwh~38.4kwh available.
- Compatible with a wide range of energy storage inverters in the market.
- Supports UPS function, 24-hour uninterrupted power supply, full power continuous output guarantee, safe power usage.
- Energy saving and environmental protection, long life. Battery usage rate up to 95% or more; deep cycle, cycle times greater than 6000 times.
- Multifunctional design with LED display, beautiful appearance, ON/OFF switch to control output.
- Universal wheel design at the bottom, easy to install and place at will.



Parameter table	TLB30S100BL	TLB45S100BL	TLB60S100BL	TLB75S100BL	TLB90S100BL	TLB105S100BL	TLB120S100BL
Module display							
Voltage	96V	144V	192V	240V	288V	336V	384V
Number of modules	2	3	4	5	6	7	8
Capacity	100Ah	100Ah	100Ah	100Ah	100Ah	100Ah	100Ah
Energy	9.6KWh	14.4KWh	19.2KWh	24KWh	28.8KWh	33.6KWh	38.4KWh
Size (±2mm)	574×395×302mm	574×395×470mm	574×395×638mm	574×395×806mm	574×395×974mm	574×395×1142mm	574×395×1310mm
Weight	88kg	127kg	166kg	205kg	244kg	283kg	322kg
Standard charge/discharge current	100A	100A	100A	100A	100A	100A	100A



- Long cycle life
- High power
- Less weight
- No Spill
- Fast charging

START UP SERIES Motorcycle lithium start battery

The lithium iron phosphate starter battery is suitable for conventional motorcycle models in the market. Compared with traditional lead acid battery, it has less weight, smaller volume, stronger start-up performance, more energy and lower emission.

Less volume and weight:

1/3 of normal lead acid battery.

Long life span

At least twice life span than lead acid battery.
Normal use for 5-8 years determined by how it is used

High/Low-temperature start

Good performance at high & low temperatures.
(-20°C~50°C)

Save charging time

Support boost charging and discharging.

Non-spillable

Acid free, no electrolyte leakage problems.

Strong start power

Can provide a strong starting current for the vehicle to meet the needs of repeated start.

Excellent cycle life:

More than 2000 cycles
(lead acid battery only 300-400 cycles).

One year warranty





Model	Size(±2mm)			Volts(v)	Weight(±3%kg)	Capacity (Ah)	Polarity	Equal To Lead Battery Capacity(Ah)	Main Replacement Lead Acid Battery Model
	L	W	H						
TLB4A-MF	113	48	85	12.8	0.55	2	- +	2-3	YTR4A-BS
TLB4B-MF	113	38	85	12.8	0.55	2	- +	2-3	GT4B-5-BS
TLB4L-MF	113	70	85	12.8	0.60	2	- +	3-4	YT4L-BS/ YTZ5S-BS
TLB5L-MF	113	70	105	12.8	0.70	3	- +	4-6	YT5L-BS
TLB5-MF	120	60	130	12.8	0.70	3	- +	4-6	12N5-BS
TLB7S-MF	113	70	105	12.8	0.90	4	- +	4-8	YT5L-BS
TLB7L-MF	113	70	130	12.8	0.90	4	- +	4-8	12N7A-BS
TLB7B-MF	150	65	93	12.8	1.00	4	+ - + -	4-8	YT7B-BS
TLB7A-MF	150	87	93	12.8	1.00	4	- +	4-8	YT7-BS
TLB9-MF	150	87	105	12.8	1.10	5		5-10	YT9-BS
TLB9A-MF	150	69	105	12.8	1.10	5	+ -	5-10	YT9B-BS
TLB9B-MF	135	75	138	12.8	0.90	5	+ -	5-8	12N9-BS
TLB12A-MF	150	87	105	12.8	1.30	8	+ -	8-12	YT9-BS/YTZ12S-BS
TLB12AL-MF	135	80	160	12.8	1.40	8	+ -	8-12	12N14-BS/YB14-BS/YB14L-BS
TLB12-MF	150	87	130	12.8	1.30	8	+ -	8-12	12N12-BS
TLB12B-MF	150	69	130	12.8	1.40	8	+ -	8-12	YT12B-BS
TLB14S-MF	150	87	110	12.8	1.40	8	- +	8-12	YT9-BS/YTZ12S-BS
TLB14-MF	150	87	145	12.8	1.50	8	+ -	8-16	YT14B-BS/YTX16-BS
TLB14LA-MF	135	90	165	12.8	1.50	8	- +	8-16	12N14-BS/YB14-BS/YB14L-BS
TLB20L-MF	175	87	155	12.8	2.60	16	+ -	16-30	YTX20-BS/YTX20L-BS
TLB19BL-MF	182	78	171	12.8	2.60	16	- +	16-30	

* The above data are for reference only, please refer to the actual object.

TCS SINCE 1995



XIAMEN SONGLI GROUP LIMITED

XIAMEN SONGLI NEW ENERGY TECHNOLOGY CO.,LTD

XIAMEN SONGLI IMPORT AND EXPORT CO., LTD

SONGLI (JINJIANG) NEW ENERGY TECHNOLOGY CO., LTD

Add: 19/F, Fuguiniao Building, No.11 Nantou Road,Guanyinshan CBD, Siming Dist, Xiamen 361000, China
Http:// www.songligroup.com | E-mail: sales@songligroup.com | Tel: 86-592-3255666 | Fax: 86-592-3255606