Smart Energy Storage

Power The World

Product Brochure



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GUANGXI ARES ENERGY TECHNOLOGY CO., LTD

Integrated Energy Solution Provider



Established in 2020, Guangxi Ares Energy Technology Co., Ltd . is a subsidiary of Guangxi Zhuoneng New Energy Co., Ltd. As a national high-tech company ,Zhuoneng New Energy has been specializing in the R&D, production and sales of lithiumion battery and energy storage system for more than 13 years and is aimed at providing customers with good quality and competitive products and build a better life for the world.

Four product series

VRLA Replacement Battery(LiFePO4) Series

Smart Mobility Series: electric bike, electric tricycle shared swapping battery etc.

Backup Power Series: UPS backup power, telecom backup power etc.

Energy Storage Series: portable energy storage,household energy orage,container energy storage etc.

15G(h)

Annual production capacity

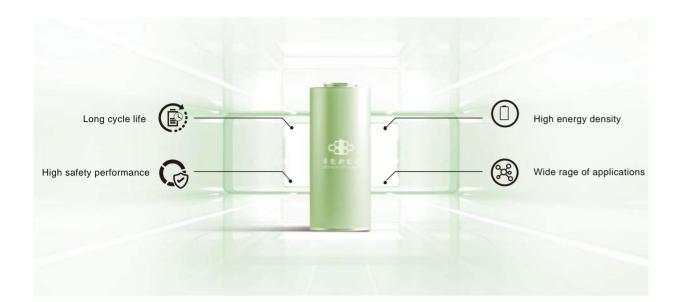
Hectared
Patents
107 Pragmatic Patents
112 Patent Authorization







Battery Cell



Prismatic Cel

Applications:

Widely used in exploration and mapping, medical equipment, portable testing equipment, energy storage products





Model	LFP50	LFP100	LFP280	LFP315
Material	LFP	LFP	LFP	LFP
Rated Capacity	50Ah	100Ah	280Ah	315Ah
Rated Voltage	3.2V	3.2V	3.2V	3.2V
Voltage Range	2.0V-3.65V	2.0V-3.65V	2.0V-3.65V	2.0V-3.65V
Cycle Life	3000	3500	8000	8000
Dimension (L*W*H)	39*148*95mm	50*160*116mm	72*174*204mm	72*174*204mm

Cylindrical Cell 18650

Model	MP2000	MP2500	MP2600
Material	LFP	NCM	NCM
Rated Capacity	2000mAh	2500mAh	2600mAh
Rated Voltage	3.2V	3.6V	3.6V
Max.Charge Voltage	3.65V	4.2V	4.2V
Discharge Cut-off Voltage	2.0V	2.75V	2.75V
Max. Charge Current	1C	1C	1C
Max. Discharge Current	4C/8A	3C/7.5A	3C/7.8A
Internal Resistance	≤25mΩ	≦25mΩ	<u>≦</u> 25mΩ
Weight	43.0±3.0g	45.0±2.0g	45.0±2.0g

Cylindrical Cell 26700		- Kitik uniteratively into	
Model	HP4000	HP4500	HP5000
Material	LFP	LFP	LMFP
Rated Capacity	4000mAh	4500mAh	5000mAh
Rated Voltage	3.2V	3.2V	3.7V
Max.Charge Voltage	3.65V	3.65V	4.2V
Discharge Cut-off Voltage	2.0V	2.0V	2.75V
Max. Charge Current	1C	1C	1C
Max. Discharge Current	3C/12A	3C/13.5A	3C/15A
Internal Resistance	≤20mΩ	≦20mΩ	≦20mΩ
Weight	<93g	<97g	<105g





Energy Storage Series



Wall-Mounted Energy Storage

- Support various communication protocols
- Long cycle life, up to 6000 cycles
- Compatible with multiple inverters
- Intelligent battery management system





All products can be customized

Support wall-mounted installation

Specially designed for household energy storage

Model AHW-5kW/5kWh AHW-5kW/7kWh 51.2V 51.2V Rated Voltage 100Ah 135Ah Rated Capacity 5.12kWh 6.91kWh Rated Energy 50A 60A Max. Charge Current 100A 100A Max. Dischage Current Support Max. 16 sets in parallel Expansion Capacity 0~+55℃ Charge Temperature -20~+60°C Discharge Temperature Communication Protocol RS485/CAN 6000Cycles/90%DOD 80%@25°C Cycle Life Installation Method Wall mounted installation Weight 45kg 60kg Cooling System Natural air cooling Protection Level IP54 Operating Temperature Range -20~+60°C 600*450*180mm Dimension (L*W*H) 1080*350*170mm

Stacked Energy Storage



Model
Rated Volta
Rated Cap
Rated Ene
Max. Charg
Max. Disch
Expansion
Charge Te
Discharge
Communic
Cycle Life
Installation
Weight
Cooling Sy
Protection
Operating -
Dimension





Support multiple communication protocols

Intelligent battery Long cycle life management system



Racked Energy Storage

Model	AHR-5kW/5kWh		
Rated Voltage	51.2V		
Rated Capacity	100Ah		
Rated Energy	5.12kWh		
Max. Charge Current	50A		
Max. Dischage Current	100A		
Expansion Capacity	Support Max. 16 sets in parallel		
Charge Temperature	0~+55℃		
Discharge Temperature	-20~+60°C		
Communication Protocol	RS485/CAN		
Cycle Life	6000Cycles/90%DOD 80%@25°C		
Installation Method	Plug-and-play		
Weight	≈ 42kg		
Cooling System	Natural air cooling		
Protection Level	IP54		
Operating Temperature Range	-20~+60℃		
Dimension (L*W*H)	483*480*133mm		

	AHS-5kW/5kWh
age	51.2V
acity	100Ah
gy	5.12kWh
je Current	50A
arge Current	100A
Capacity	Support Max. 16 sets in parallel
nperature	0~+55℃
Temperature	-20~+60°C
ation Protocol	RS485/CAN
	6000Cycles/90%DOD 80%@25°C
Method	Floor-mounted
	42kg
stem	Natural air cooling
_evel	IP54
emperature Range	-20~+60°C
(L*W*H)	600*394*162mm

Complete Household Electricity Solution

All products can be customized

Compatible with multiple inverters

Support Max.16 sets in parallel

All products can be customized

Energy Storage Series



Portable

UPS Supported

• All Products Can Be Customized

Model	ZC-5kW/5kWh
Battery Parameter	51.2V100Ah
Input Voltage	40-55V
Output Frequency	50/60Hz±5%
Output Voltage	220/230VAC±5%
Max. Continuous Output Power	5000W
Max. Instantaneous Output Power	10000W
Allowed PV Panel Access Voltage/Current	MPPT(120-450V)100A
Output Waveform	Pure sine wave
Max.Conversion Efficiency	94%
AC Charge Parameter	Input : AC95-285V
1、USB:5V/2.1 DC Output 2、DC:12V/4A* 3、TYPEC*2 (op	
Dimension (L*W*H)	476*380*690mm
Weight	55kg



Specification	1228.8V/280Ah/10Cluster	Output Voltage	690V/AC(3P4W+PE)
Rated Voltage	1228.8V	Storage Temperature Range	-30~+50°C
Cell Capacity	280Ah	Charge Temperature Range	0~+60°C
System Energy	3.44MWh	Discharge Temperature Range	-20~+60°C
Cell Module	10	Communication Protocol	RS485/CAN
Max. continuous charge and discharge rate	Charge:0.5C Discharge:0.5C	Protection Level	IP54
Dimension (L*W*H)	6060*2438*2896mm	Cooling System	Air Cooling/Liquid Cooling
Weight	36T	Off-grid Operation	Support

Energy Storage Series



Model	Z-50kW/100kWh	Z-ONE 100kW/ 215kWh	
Rated Energy	103.68kWh	215kWh	
Rated Capacity	150Ah	280Ah	
Rated Voltage	691.2V	768V	
Operating Voltage Range	540V-777.6V	600-864V	
Max. Charge Current	75A	140A	
Max. Discharge Current	100A	160A	
Rated Power	50kW	100kW	
Max. Output Power	50kW	110kW	
Rated AC Voltage	400Vac±10%	400Vac±10%	
AC Frequency Range	50Hz 50Hz		
Rated AC Current	76A	152A	
Output Efficiency	98.00%	98.00%	
Grid Connection	3P3L+N+PE/3P3L+PE	3P3L+N+PE/3P3L+PE	
Overload Capacity	Overload Alarm Shutdown	110% Continue	
Cooling System	Battery System Air Cooling Battery System Liquid C		
Protection Level	IP54 IP54		
Noise Level	<70dB	<70dB	

Applications:

Suitable for Substation voltage regulation, Capacity expansion, Peak shaving and Uninterrupted power supply.

- Large-size high energy consumption factory
- Energy investor
- Zero carbon emission trader
- Wind/Photovoltaic power station owner
- Industrial and commercial park owner
- Electricity reseller agent
- Energy aggregator
- Agriculture, forestry, animal husbandry etc.

Backup Power Series

Characteristics:

Multiple sizes , designed appearance , convenient installation , customized service , support parallel expansion, customized BMS, online communication protocol.

Applications:

Emergency power supply for backup power systems , data processing centers , house-hold backup power, hospitals, banks, small size companies, small base stations etc.



Model	AT-48100	AT-48150	AT-48200
Rated Voltage	51.2V	51.2V	51.2V
Rated Capacity	100Ah	150Ah	200Ah
Weight	44kg	65kg	84kg
Charge Current	0.2C Sta	andard Charging, 0.5C max. Cor	tinuous Charging
Charge Cut-off Voltage	57.6V(CELL/3.60V)		
Discharge Method	CC/CP/CV		
Discharge Current	0.5C Standard Discharging, 1C max. Continuous Discharging		
Display	LED/LCD(optional)		
Communication Protocol	RS485/CAN		
Operating Temperature Range	Charge: 0~ +50°C / Discharge: -20~ +66°C		
Storage Temperature	Short-term storage (<3 months) : $-10 \sim +45^{\circ}$ C (SOC:20% ~ +60%) Long-term storage (within 1 year) : $-10 \sim +40^{\circ}$ C (SOC:30% ~ 60%) Note: During storage, the battery must be charged every 3 months (charge time 1-3 hours).		
Storage Humidity		5%~95%(RH)	

Backup Power Series

UPS Backup Power

Characteristics:

- Ac self-start
- Lithium battery pre-charge function
- Compatible with a variety of inverters
- With high stability
- Intelligentbatterymanagementsystem

Applications:

Suitable for Substation voltage regulation, Widely used in uninterrupted power supply applications such as communication data centers, banking systems, traffic command systems, logistics systems, etc.

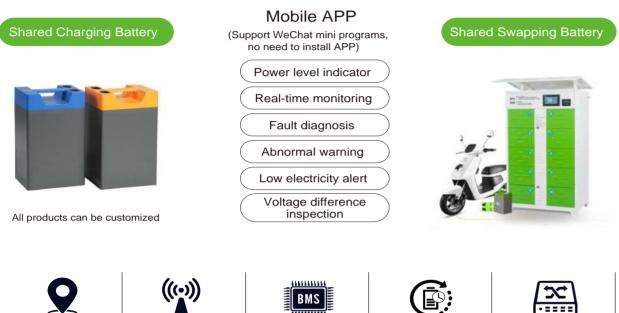
Model	AU-384V100Ah	
Battery Cell Type	LFP/3.2V/100Ah	
Rated Voltage	409V	
Operating Voltage Range	320V-460.8V	
Rated Energy	40.9kWh	
Depth of Discharge	90%	
Cycle Life	6000Cycles/90%DOD 80%@25°C	
Designed Cycle Life	10 years	
Connection Method	Three-phase three-wire /Three-phase four-wire	
Protection Level	IP54	
Cooling Method	Air Conditioner / Air Cooling	
Communication Protocol	RS458\CAN (optional)	
Operating Temperature Range	-20~+60°C	
Storage Temperature Range	-30~+60°C	
Weight	≈500kg	
Dimension (L*W*H)	600*800*2000mm	



(OEM product, image for reference only)

Smart Mobility Series

Self-developed system contains intelligent hardware, mobile APP and cloud service. It manages the battery pack through the Internet of Things, Edge AI Computing, Data Cloud and other internet technology, which makes the equi pment more efficient, more intelligent and safer.Applications: Intelligent charging station, battery swap cabinet, battery renting, shared electric bike, express delivery electric tricycle etc.



GPS/Beidou Positioning System

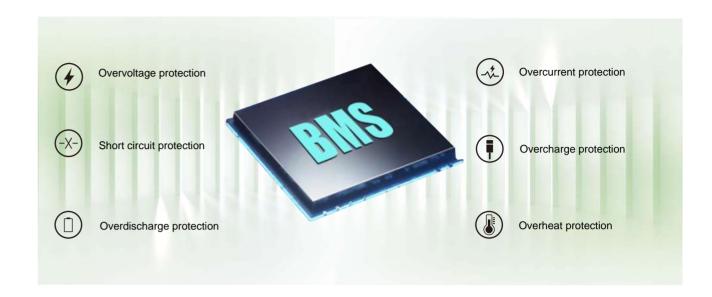
4G communication Intelligent BMS Long Life span



Data Storage

Model	AEH-4824	AEH-4830	AEH-6020	AEH-6030
Cell Material	LiFePO4			
Rated Voltage	51.2V	51.2V	64V	64V
Rated Capacity	24Ah	30Ah	20Ah	30Ah
Rated Energy	1228.8Wh	1536Wh	1280Wh	1920Wh
Operating Voltage Range	40V~58.4V	40V~58.4V	50V~73V	50V~73V
Max. Continuous Input Current	12A	15A	10A	15A
Max. Continuous Output Current	25A	35A	25A	35A
Max. Peak Discharge Current	50A	60A	50A	70A
Cycle Life	2000Cycles/90%DOD≥75%@25			
Dimension (L*W*H)	183*156*263mm	183*154*305mm	183*154*305mm	166*187*330mm
Weight	≈ 9.5kg	≈ 13.5kg	≈ 12.5kg	≈ 16.5kg
Communication Mode	RS485/ISDN(Supports Remote OTA Upgrades)			
Optional Interfaces	Pin Type Plug			

Smart Mobility Series



Power Battery

- High performance stable output
- Long cycle life
- Wide range of temperature applications
- Intelligent battery management system

Model	AE-4808	AE-4810	AE-4812	AE-4818				
Cell Material	NCM							
Rated Voltage	46.8V	46.8V	46.8V	46.8V				
Rated Capacity	7.5Ah	10Ah	12.5Ah	17.5Ah				
Rated Energy	351Wh	468Wh	585Wh	819Wh				
Charge cutoff voltage	54.6V	54.6V	54.6V	54.6V				
Discharge cutoff voltage	36.4V	36.4V	36.4V	36.4V				
Max Charge Current	5A	5A	5A	5A				
Max Discharge Current	25A	25A	30A	30A				
Cycle Life	800Cycles/90%DOD 80%@25°C							
Dimension (L*W*H)	368*90*138mm	368*90*138mm	347*112*148mm	347*112*148mm				
Weight	≈ 2.5g	≈ 3.1kg	≈ 3.7kg	≈ 5kg				

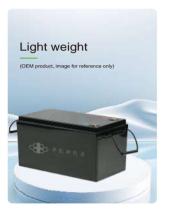


(OEM product, image for reference only)

VRLA Replacement Battery(LiFePO4) Series

Characteristics: light weight, high energy density, long cycle life, no memory effect, short charging time.

Applications: low-speed vehicles, two/three-wheelers, solar energy/windenergy storage system, UPS, backup power, telecommunication, medical equipment, lighting equipment etc.







Model	AQ-12.8V8Ah	AQ-12.8V50Ah	AQ-12.8V100Ah	AQ-12.8V300Ah	AQ-25.6V50Ah	AQ-25.6V100Ah		
Configuration	4S2P	4S12P	4S1P	4S1P	8S1P	8S1P		
Rated Voltage	12.8V	12.8V	12.8V	12.8V	25.6V	25.6V		
Operating Voltage Range	10-14.4V	10-14.4V	10-14.4V	10-14.4V	20-28.8V	20-28.8V		
Rated Capacity	8Ah	52.2Ah	100Ah	280Ah	50Ah	100Ah		
Rated Energy	102.4Wh	668.16Wh	1280Wh	3584Wh	1280Wh	2560Wh		
Max. Continuous Charge Current	4A	25A	50A	50A	25A	50A		
Max. Continuous Discharge Current	15A	50A	100A	150A	50A	100A		
Support Series Connection	4	4	4	4	2	2		
Cycle Life	2000	2000	3000	3000	2000	3000		
Protection Level	IP65							
Communication Protocol	Customizable, Bluetooth optional							
Weight	1kg	6kg	11kg	26kg	11kg	22kg		
Dimension (mm)	L:151 W:65 H:94	L:225 W:147 H:183	L:330 W:172 H:215	L:520 W:269 H:217	L:260 W:168 H:209	L:520 W:220 H:225		

Service Procedure

Steps: ① Sales team provides solitions and signs contract based on specific actual situations. (2) Pre-sales: Professional technicians provide detailed information on system design, site selection, grid-connected and other issues. ③ Installation: Remote installation guidance for integrated equipment by professional personnel. ④ After-sales: One-to-one service for providing technical guidance and troubleshooting support etc. ⑤ Maintenance: Professional team provides free service for maintaining, inspecting and training as needed. After-sales Within 24hs feedback: VIP : **Onsite Service** Systematic Professional training, remote instruction, maintenance empowerment service: and free inspection during warrnty period.

After-sales Service Network

Provide green energy for global customers

Ares Energy is committed to being customer-centric and market-driven, continuously invests in R&D, innovating in areas such as structures, marketing, management, and business models.

We collaborates with partners from various fields, leading the wayin the innovation and evelopment of lithium battery and energy storage technologies.

Our mission is to promote a low-carbon, green and sustainable high-quality industry and be a respected leading enterprise.

