
AESON
POWER
Provide Reliable
Reserve Power Solutions
www.aesonpower.com

ABOUT US

Company Profile

Aeson Power is an Australian leader of new energy innovative technologies, committed to providing diversified energy solutions and products for a variety of industries.

Our latest sodium innovation offers a more sustainable, lower-cost for multi-scenario application to meet the world’ s evolving demands for efficient, eco-friendly, safe and diverse energy storage and battery.

Manufacturing Capabilities

Our manufacturing capabilities blend flexibility and smart manufacturing with rigorous quality control, ensuring high production standards. This commitment results in a range of reliable batteries and energy storage system, delivered through its global network of advanced manufacturing centers.

- **Annual Production Capacity(GWh): 30GWh**
- **Manufacturing Centers: 7**
- **Area Covered: 1,100,000㎡+**
- **Production Lines: 90**

THE CATALOG OF UPS

01

Sodium Series

SIBPOM-6C/45 for Data Center
SIBPOM-4850 for Unstable Grid Telecom
SIBPOM-12100 for Unstable Grid Network Power

02

AGM Lead Acid Series

HR Series for Data Center
FAB Series for Stable Grid Telecom

03

Bipolar Series

TUS Series for Critical Mega UPS/EPS

SODIUM TECHNOLOGY

WHY SODIUM

Wide temp. Adaptability
-30 ~ 65°C

50% Lighter and 50% Smaller than Lead-acid
Compacted in Size, Easy Installation

Long Cycle Life for Unstable Grid
6000+ Cycles @80%DoD

Cost Controllable
Lithium-free chemistry enables ongoing cost reduction via growing production and technology

Eco-Friendly
Non-toxic

SIBPOM-6C/45

Features:

- Extreme High Rate Design, 70% Ah Capacity Saved
- 50% Capacity Saved & 50%+ Cooling Energy Saved
- NFPP Cells, High Safety
- -30°C～65°C Wide Operation Temp. Range

Application:

Data Center

Harsh Unstable Grid Telecom

UPS/EPS used at Unstable Grid Area

Technical Specifications

System	SIBPOM-6C/45
Rated Capacity	80Ah
Rated Power	45kWh
Nominal Voltage	571.2 V
Discharging Cut-off Voltage	306V
Charging Cut-off Voltage	744.6V
Discharge Ratio	6C
Max Output Power	274kW
Wiring Method	4P204S
Cell Type	NFPP
Standard Charging	Continuous Current: 160A Cut-off Voltage: 744.6V
Standard Discharging	Continuous Current: 480A Cut-off Voltage: 306V
Operating Temp. Range	Charging: -10~50°C Discharging: -45~65°C
Storage Temp. Range	25±3°C
Cooling method	Air cooling
Dimensions(W*D*H)	1074*1010*2177mm
Weight	1280kg
Color	Black
Feature	BMS

PACK	SIBPOM-4880
Rated Capacity	80Ah
Nominal Voltage	47.6 V
Discharging Cut-off Voltage	25.5V
Charging Cut-off Voltage	62.05V
Discharge Ratio	6C
Wiring Method	4P17S
Rated Capacity(Cell)	20Ah
Voltage range(Cell)	1.5~3.65
Dimensions(W*D*H)	446*950*178mm
Weight	70kg

SIBPOM 4850

Features:

- NFPP Cells, High Safety
- Long Cycle Life at High Temperature
- Space-Saving Design Compact & Scalable
- Eco-Friendly
- Saving Cooling Energy Consumption with Low Thermal Swing

Application:

5G Communication Base Station

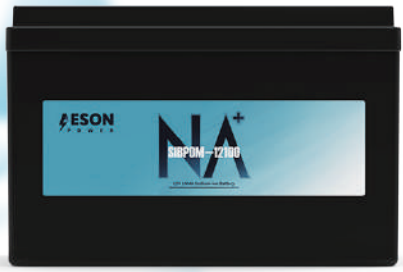
Satellite Ground Station

Microwave Communication Equipment

Technical Specifications

Item	SIBPOM-4850	SIBPOM-4850A	SIBPOM-4850B
Rated Capacity	50Ah		
Nominal Voltage	48.5V		
Discharging Cut-off Voltage	40V(25.5V)		
Charging Cut-off Voltage	56.1V		
Discharge Ratio	1C		
Wiring Method	1P17S		
Cell Type	NFPP		
Standard Charging	Continuous Current: 50A Cut-off Voltage: 56.1V		
Standard Discharging	Continuous Current: 50A Cut-off Voltage: 25.5V		
Operating Temp. Range	Charging: -10~50°C Discharging: -45～65°C		
Storage Temp. Range	25±3°C		
Dimensions(W*D*H)	486*563*133 mm		
Weight	38kg		
Color	Black	Black	White
Edition feature	/	Balancing Module	BMS

SIBPOM 12100



Features:

High Safety
- High Thermal Stability
- Over-charge & Over-discharge Tolerance

Storage & Float Charging
- Low Self-discharge
- Suitable for Float Charging

Lower Cost
- Abundant Resources
- Simpler Production Processes

High Energy Density
- Lighter Weight
- Ideal Replacement

Better Performance
- Higher Power Rate
- Wider Temp. Adaptability

Environment & Sustainability
- Eco-friendly
- Long Cycle Life

Application:

UPS

Electrical Power

Telecom

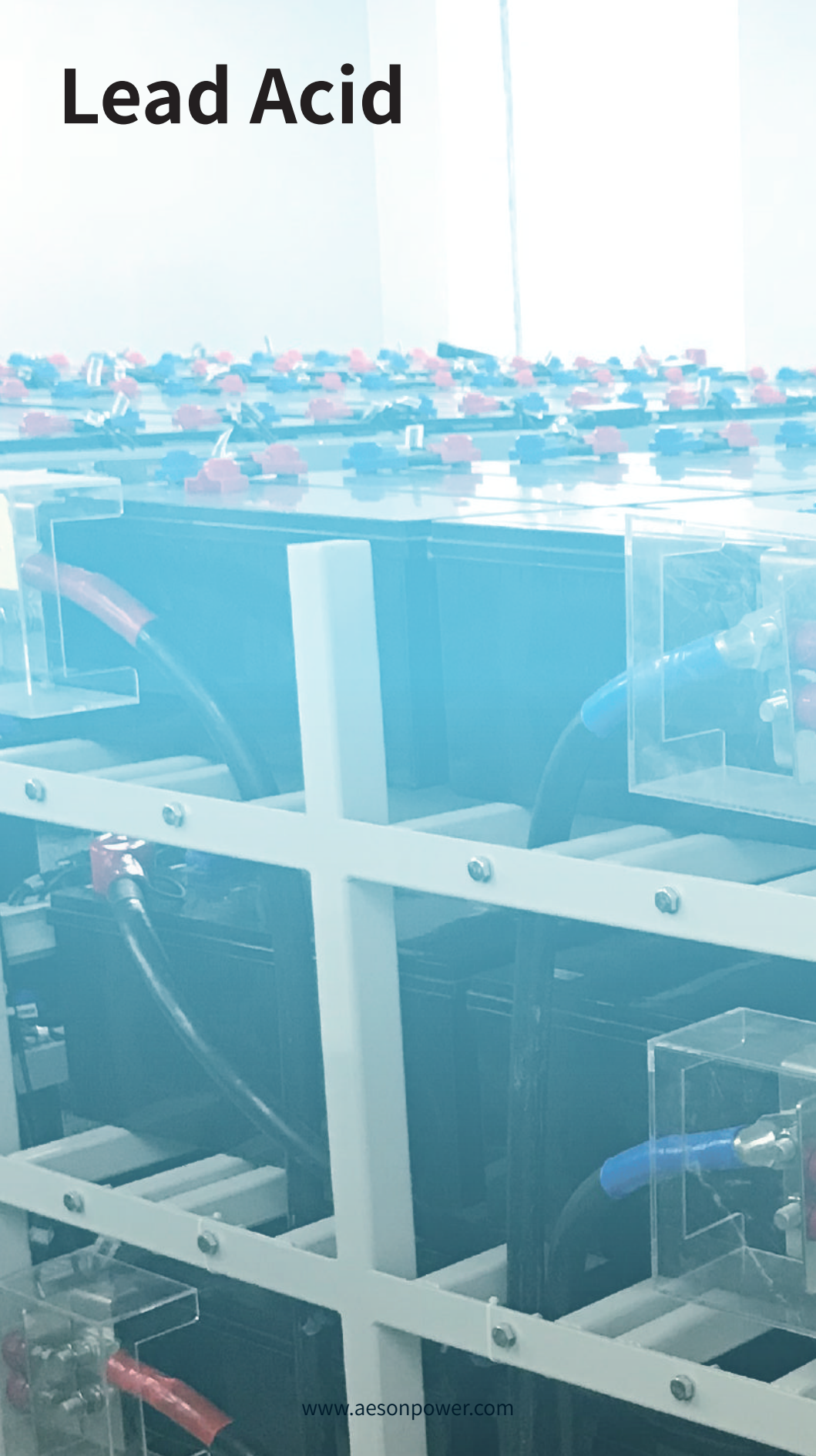
Technical Specifications

Item	SIBPOM-12100A
Rated Capacity	100Ah
Nominal Voltage	11.4V
Discharging Cut-off Voltage	6V
Charging Cut-off Voltage	13.2V
Standard Charging	Continuous Current: 100A Cut-off Voltage: 13.2V
Standard Discharging	Continuous Current: 100A Cut-off Voltage: 6V
Max Continuous Charging Current	100A
Max Continuous Discharging Current	100A
Operating Temp. Range	Charging: -10~50°C Discharging:-45~65°C
Storage Temp. Range	25±3°C
Dimensions	332 *172 *221(mm)
Weight	14kg
Shipped Product Charging	0% Power
Edition feature	Balancing Module

To integrate the cell and casing into a single unit for enhancing vibration resistance.

- PC+ABS casing
- High-temperature modified material
- Resistant to alternating high and low temperature
- Resistant to low-temperature shock and high-temperature deformation
- IP67 waterproof rating for preventing short-circuit

Lead Acid



AGM Lead Acid Battery

- 12+ Years Long-Life Design
- Continuous Casting & Punching, COS Technology
- High Rate Design

HR SERIES

The HR High-Rate Series uses multiple thin plates and a specialized high-rate formulation, delivering superior short-term high-power discharge.

Features:

12YEARS

12 Years Design Life

30%

High Power Density
Suitable for 5-30 mins Backup

Low Internal Resistance,
Faster Recharge

CCPP & COS,
Higher Consistency

Low Float Current

Application:

Data Center

Critical Network Power

HR SERIES

Product	Votage (V)	WPC @ 15mins	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	Weight (kg)	Terminal
HR12-370W	12	370W	330	174	215	220	30.5	M8 Fem
HR12-420W	12	420W	408	177	224	224	35.5	M8 Fem
HR12-605W	12	605W	532	207	220	225	53	M8 Fem
HRL12-620W	12	620W	532	207	220	225	56.8	M8 Fem
HR12-680W	12	680W	532	207	220	225	59.7	M8 Fem
HRL12-800W	12	800W	520	240	217	222	69.6	M8 Fem
HRL12-845W	12	845W	525	268	220	225	75.5	M8 Fem
HR12-870W	12	870W	525	268	220	225	75	M8 Fem
HRL12-890W	12	890W	525	268	220	225	78.5	M8 Fem

CHARGING PARAMETER SETTINGS

- Float charge voltage: 13.60Vpc @ 25°C
- Float voltage temperature compensation: -3mV/°C/cell
- Equalize charge voltage: 14.1 Vpc @25°C

Complied Standards

▪ IEC 60896-21/22 ▪ EUROBAT guide ▪ GB/T19638

FAB SERIES

The FAB series is specially engineered for telecommunications applications, offering a 12-year design life. Featuring a newly developed paste formula and advanced AGM structure, it delivers enhanced performance. The compact front-terminal design enables easy installation and maintenance.

Features:

12YEARS

12 Years Design Life

Thick Plate of High-Tin Alloy

-25°C to +60°C

Excellent Deep Discharge Recovery Capability

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19" and 23" ETSI Racks Adapt

Thick Container to Avoid Heat Bulge

Application:

Telecom with Stable Grid

Critical Network Power

FAB SERIES

Model	Votage (V)	Capacity (Ah)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	Weight (kg)	Terminal
FA6-200	6	200	250	125	362	365	31.5	M8 Fem
FAB12-55	12	55	277	105	222	222	17.9	M6 Fem
FAB12-100	12	100	395	110	287	287	32.35	M8 Fem
FA12-100H	12	100	291	125	367.5	370.5	33.45	M8 Fem
FAB12-125	12	125	558	112	295	295	42.5	M8 Fem
FA12-155	12	155	558	112	295	295	48.5	M8 Fem
FAB12-170	12	170	560	125	316	316	50.8	M8 Fem
FAB12-200	12	200	560	125	316	316	56.2	M8 Fem

CHARGING PARAMETER SETTINGS

- Float charge voltage: 13.50V @ 25°C
- Float voltage temperature compensation: -3mV/°C/cell
- Equalize charge voltage: 14.1 V @25°C
- Max. charge current allowable: 0.25C

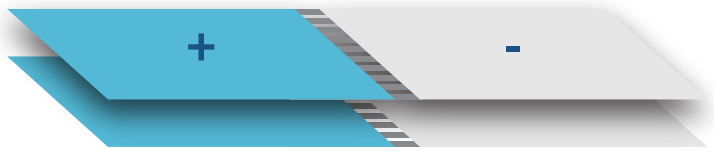
Complied Standards

- IEC 60896-21/22
- YD/T 799
- GB/T19638
- EUROBAT guide

BIPOLAR TECHNOLOGY INNOVATION

A bipolar battery features positive and negative electrodes integrated in one piece(not like a traditional unipolar battery with separated positive and negative), and used special 3D internal bipolar plates stacking instead of welding between cells connection to forming an 12V battery.

This innovative technology enables very low internal resistance, thus endow it with excellent ultra-high power output characteristics, fast recharging capability like a lithium batteries, and higher energy density. Meanwhile, its unique internal connection construction makes it reliable even under frequently high rate discharge scenarios.

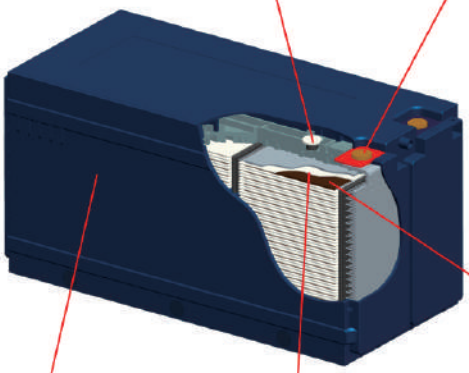


- **High Safety**

  No obvious temp. increasing @3C high rate discharge for 10 mins till 9.6V

- **Faster Recharge & Higher Cycle Life, Adapt Unstable Grid**

BIPOLAR CONSTRUCTION



Safety valve
- High release pressure, less water loss;
- Flame arrestor equipped.

Copper terminal
- High conduct area, Cast on Strap connection;
- Double epoxy sealing.

Bipolar plate
- Bipolar structure, high uniform current distribution, high utilization;
- Pure lead grid, high corrosion resistance;
- Bus-bar, plates lug, welding between cells saved.

ABS container
- High strength;
- Bottom reinforced, high vibration resistance.

AGM Separator
- Pancake stacking, no stratification;
- 60KPa pressure for deep cycling.

▪ Space-saving, Energy-saving

Up to 35% higher power watts at 5~15min

▪ High Reliability

Up to 0.9V per 12V higher discharge voltage platform

▪ Unique Bipolar Plates

High current distribution, high conduction sectional area, ultra-low internal resistance

TUS SERIES

TUS series battery has high power output characteristics which more than 30% higher than traditional High rate VRLA. It has very good cycle life and high energy density.
Faster recharge & high cycles also suitable for unstable grid critical reserve power.

Bipolar Technology

70% resistance decreased

High Discharge Voltage Platform

Around 0.9V per 12V Higher discharge platform

Up to 35% higher power watts output

Battery bank volume can decrease around 20%

High capacity at low temperature

95% @10°C & 75% at -18°C

Complied Standards

- IEC 60896-21/22
- EUROBAT guide

Application:

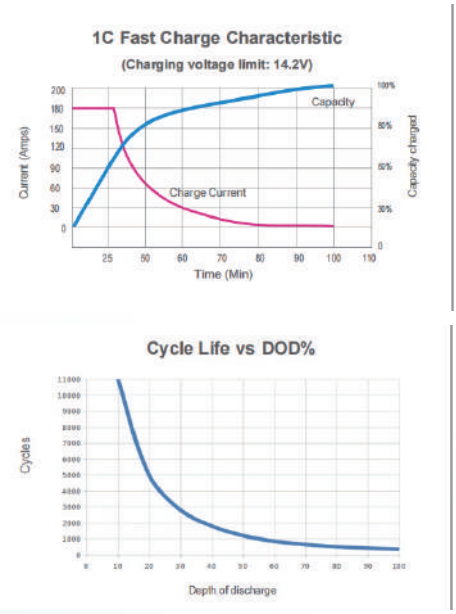
Data Center

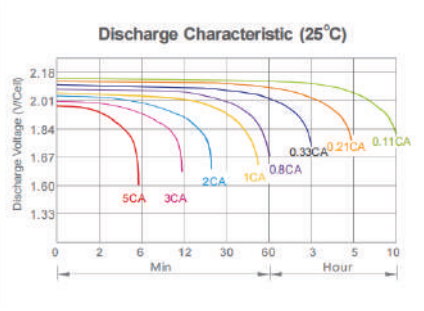
Critical Network Power

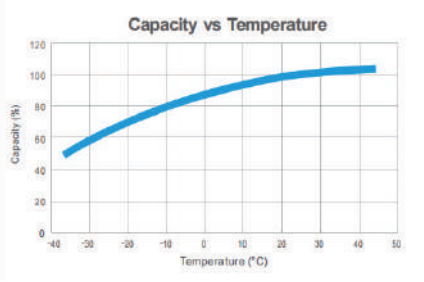
TUS SERIES

Product	Votage (V)	Watts @ 10mins to 1.67Vpc	Length (mm)	Width (mm)	Height (mm)	Weight (kg)	Terminal
TUS-12-420W	12	420	285	177	190	24.4	M8
TUS-12-600WS	12	600	394	177	190	32.5	M8
TUS-12-1125W	12	1125	510	225	212	60.5	M8

CHARACTERISTICS







CHARGING PARAMETER SETTINGS

- Float charge voltage: 13.50V @ 25°C
- Float voltage temperature compensation: -3mV/°C/cell
- Equalize charge voltage: 14.1 V @25°C
- Max. charge current allowable: 0.25C

NOTE

NOTE

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