

THUNDER SKY WINSTON WATER-BASED LITHIUM POWER BATTERY PERFORMANCE SPECIFICATION

FEATURES Winston Battery : the Safest Lithium Technology.
Integrated Battery Management System(BMS).

PERFORMANCE Long Cycle Life>11000cycles @60% DOD.
High Density, High Discharge Current, High Temperature Range.
Low Weight, Free Maintenance.
Fast Charging.
Environment Friendly.

HD12.8-100(12.8V100Ah)

BATTERY DATA SHEET

Electrical Parameters	
Nominal Voltage	12.8V
Rated Capacity	100Ah
Energy	1408Wh
Resistance	≤2.7mΩ
Efficiency	99%
Cycle Life	>11000cycles@0.5C,60% DOD
Self Discharge	1.5% per Month
Mechanical Parameters	
Dimension(L x W x H)	313 x 175 x 198 mm
	12.3 x 6.8 x 7.8 "
Weight	15.3kg
Terminal Type	M8
Battery Case	Metal/ABS
IP Grade	IP65
Cell chemistry	LiFeYPO4
Temperature Parameters	
Discharge Temperature	-20 to 60°C (-4 to 140°F)
Charge Temperature	0 to 45°C (32 to 113°F)
Storage Temperature	-20 to 60°C(-4 to 140°F)
BMS High Temperature Cut-off	80°C(176°F)

Discharge Parameters	
Continuous Discharge Current	100A
Pulse Discharge Current	750A(<6 seconds)
Recommended Volt. Disconnect	10V
BMS Discharge Cut-off Voltage	9.2V
Short Circuit Protection	200~600 us
Charge Parameters	
Charge Method	CC-CV
Charge Voltage	14.4 ± 0.2V
Recommended Float Voltage	13.8V
Recommended Charge Current	50A
Maximum Charge Current	100A
BMS Charge Cut-off Voltage	14.8V
Compliance Certificate	
Certifications	UL
	CE
	IEC
	IATF16949
Shipping Classification	BIS
	UN3480, Class 9, UN38.3

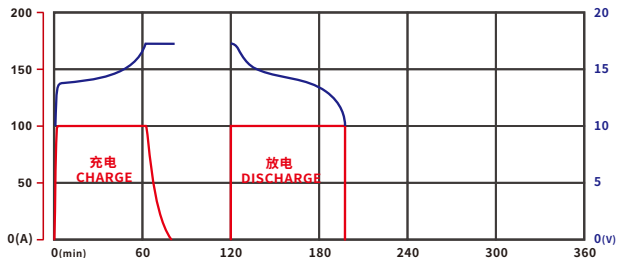




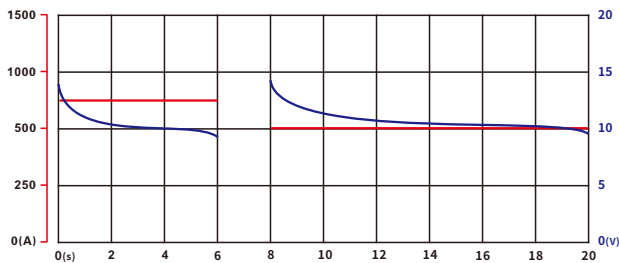
Thunder Sky Winston Battery

Performance Characteristics

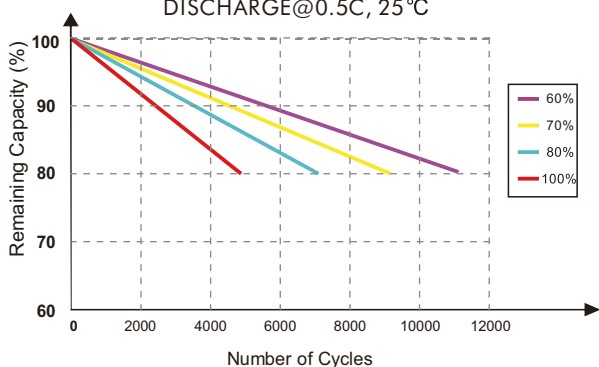
TSWB-LP12V100AH CHARGE AND DISCHARGE BY 100A AT TEMPERATURE OF 25°C



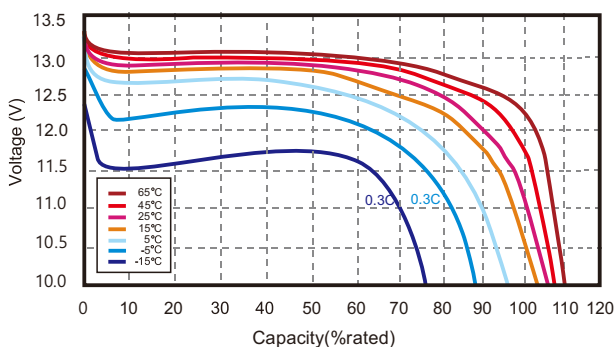
TSWB-LP12V100AH IMPULSE DISCHARGE AT AMBIENT TEMPERATURE



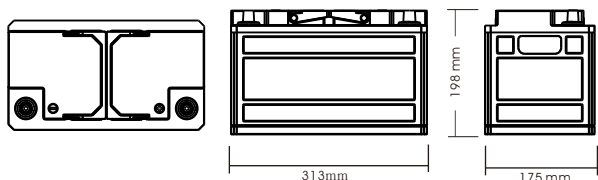
CYCLE LIFE vs. DEPTH OF DISCHARGE(DOD) DISCHARGE@0.5C, 25°C



DISCHARGE CAPACITY at VARIOUS TEMPERATURES DISCHARGE @0.3-0.5C



Battery Dimension



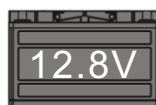
Battery Applications

- +Data Center UPS
- + Telecom Backup Power
- + Military Power Supply
- + Solar Energy Storage System
- + Floor Cleaning Machines
- + Electric Mobilities (E-scooters, Wheelchair)
- + Golf Trolley & Golf Carts
- + Electric Ships

BMS

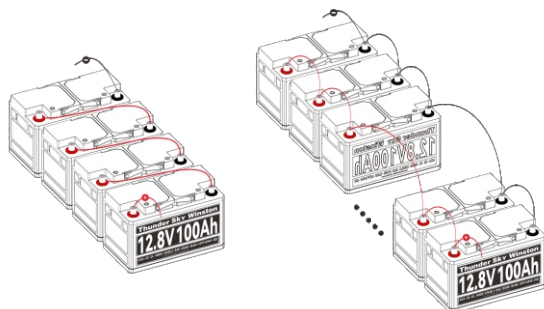
- +The BMS monitors and controls the individual cell of a battery and protects them from damage, such as overload and overvoltage

Battery Recycle



Series or parallel connection

up to 4 batteries can be connected in series or parallel to make a 48v battery pack



Parallel Connection
12V Voltage



Series Connection
48V Voltage

PRODUCTION BASE IN CHINA:

Oriental Smart Lion Energy Battery Limited

Address: No. 1056, Tangbian, Jishan Village, Xingtai Development

Zone, Changtai County, Zhangzhou City, Fujian Province 363900

TEL: 0596-8186789 Fax: 0596-8186678 Email: winston@winston-battery.com

www.thundersky-winston.com