



SUNBATTERY
AUSTRALIA

SB-LFP12.8-400

12.8V 5120Wh

LiFePO4
400Ah

- Long Cycle Life > 2000 cycles @ 100% DOD.
- High Density, High Discharge Current, High Temperature Range.
- Low Weight, Free Maintenance.
- Fast Charging.
- Environment Friendly.
- Lithium Iron Phosphate (**LiFePO4**).
- Integrated Battery Management System (BMS).

BATTERY DATA SHEET

Electrical Parameters	
Nominal Voltage	12.8V
Rated Capacity	400Ah
Energy	5120Wh
Resistance	≤ 30mΩ
Efficiency	99%
Cycle Life	> 2000 cycles @ 1C, 100% DOD > 4000 cycles @ 1C, 80% DOD > 6000 cycles @ 1C, 50% DOD
Self Discharge	2% per Month
Max. Battery connected in Series/Parallel	4 Series / 4 Parallel

Mechanical Parameters	
Dimension (L x W x H)	522x 268x 224 mm
	20.55 x 10.55 x 8.82"
Weight	36.5kg (80.5 lbs)
Terminal Type	M8
Battery Housing	ABS, UL-94 V-0
Housing Protection	IP65
Cell Type-Chemistry	LiFePO4 Cell
SOC Display (Optional)	None

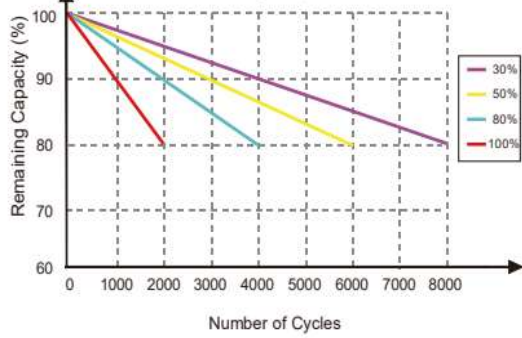
Discharge Parameters	
Continuous Discharge Current	150A
Pulse Discharge Current	300A (5 seconds)
Recommended Volt. Disconnect	10V
BMS Discharge Cut-off Voltage	8V
Reconnect Voltage	9.2V
Short Circuit Protection	200-600 us

Charge Parameters	
Charge Method	CC-CV
Charge Voltage	14.4-14.8V
Recommended Float Voltage	13.8V
Recommended Charge Current	≤ 100A
Maximum Charge Current	150A
BMS Charge Cut-off Voltage	15.6V

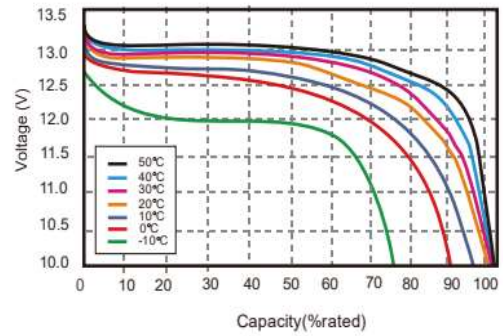
Compliance Certificate	
Certifications	UL1642 (cell)
	CE
	IEC62133 & CB
	KC
	BIS
Shipping Classification	UN3480, Class 9, UN38.3

Temperature Parameters	
Discharge Temperature	-30 to 60°C (-22 to 140°F)
Charge Temperature	0 to 45°C (32 to 113°F)
Storage Temperature	-40 to 60°C (-40 to 140°F)
BMS Low Temperature Cut-off	-10°C (14°F)
BMS Low Temperature Turn-On	0°C (32°F)
BMS High Temperature Cut-off	80°C (176°F)
BMS High Temperature Turn-On	70°C (158°F)

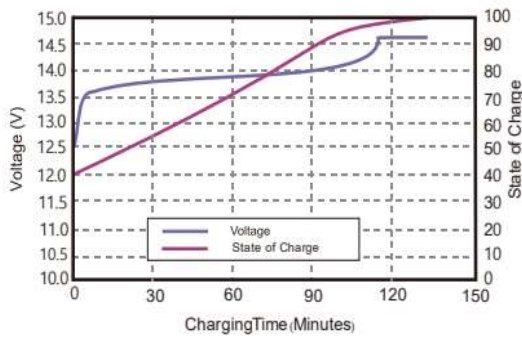
CYCLE LIFE vs. DEPTH OF DISCHARGE(DOD)
DISCHARGE@1C, 25°C



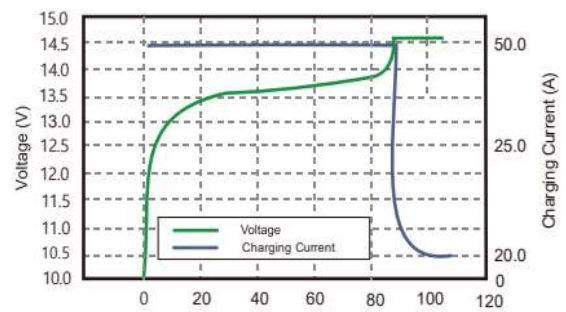
DISCHARGE CAPACITY at VARIOUS TEMPERATURES
DISCHARGE @1C



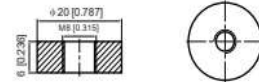
STATE OF CHARGE CURVE @1C, 25°C



CHARGING CHARACTERISTICS @1C, 25°C



M8 - 1.0x 8mm
Threaded Hole



- + Data Center UPS
- + Telecom Backup Power
- + Military Power Supply
- + Solar Energy Storage System
- + Solar Street LED Lightings
- + Autonomously Guided Vehicles (AGVs)
- + Industrial Robotics & Handling Equipment
- + Aerial Work Platform
- + Floor Cleaning Machines

- + Power Tools, Lawn Mower
- + Electric Bike & Motorcycles
- + Electric Mobilities (E-scooters, Wheelchair)
- + Golf Trolley & Golf Carts
- + Medical Devices
- + Electric Ships
- + Passenger Vehicles