### LiFePO<sub>4</sub> Smart Battery

## 12,8V 150Ah

**Bluetooth** 



### **VOLTIUMENERGY.COM**

APPLICATIONS



### **BATTERY FEATURES**

- Long lasting superpower, LiFePO4
  has up to 10 times more cycles
  than comparable lead acid
  batteries
- Lithium Iron Phosphate is the safest lithium technology on the market
- The intelligent Battery Management System (BMS) controls and balance the battery cells, protects the battery against over-charging, over-discharging and has temperature protection
- Double, triple or even quadruple the capacity or voltage through parallel or serial pairing
- Low self-discharge and the ability to charge quickly and efficiently

- ✓ Twice the usable capacity (100% DOD) than comparable lead acid batteries
- The battery can be mounted in any position and weighs only 40% of the weight of a comparable lead acid battery
- ✓ With our smart Bluetooth® app you can easily view and monitor all relevant data of your LiFePO4 battery
- The Battery has a pre-charge function which means the battery can handle high incoming currents from inverters. Thanks to this feature, the BMS and cells will not be damaged.





SPORT & RECREATION

MOBILITY





TRANSPORT

DATA CENTER





SOLAR

MEDICAL

CAL





UTILITY

WIN

### **CERTIFICATES**

- CE certificate
- ✓ UL 1642 cell certificate
- ✓ IEC 62133 cell certificate
- ✓ UN 38.3 certified
- ✓ ISO9001:2015 Quality management systems





# **DOWNLOAD THE APP**OF VOLTIUM ENERGY

With our Bluetooth® app, you can view and monitor the current status of your LiFePO4 battery!







### LiFePO<sub>4</sub> Smart Battery

## 12,8V 150Ah





**OVER CHARGE** 

Over-charge protection for each cell (delay time)

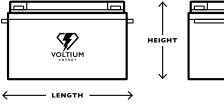
### **BATTERY SPECIFICATIONS**

GENERAL SPECIFICATIONS	
Nominal Voltage	12,8V (4S)
Rated Capacity (CC 0.2C to 10V)	I50Ah
Nominal Energy	1600Wh
Internal Resistance	≤20mΩ
Terminal type	TII
Cycle Life (@DOD 100% at IC and ±25°C)	>3000
Cycle Life (@DOD 100% at 0.2C and $\pm 25^{\circ}$ C)	6000
Connection options	4 in series OR 4 in parallel
Communication	Bluetooth®

MECHANICAL CHARACTERISTICS		
	Length 485±3mm	
Dimension	Width 170±3mm	
	Height 241±3mm	
Weight	Approx. 20.2Kg	
Housing material	ABS	

STORAGE SPECIFICATIONS	
Storage Temperature	0-25°C
Self-discharge rate	≤3% per month
Recommended storage SOC	50-70% SOC
Storage condition	See manual

### **DIMENSIONS**



L: 485mm (19.0")

**H:** 241mm (9.48")

Θ

A: 7mm (0.27") B: 8mm (0.31") C: 20mm (0.78")

**W:** 170mm (6.69")

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To ensure safe and efficient operation always refer to the latest edition of our Technical Datasheet, as published on our website.



#### CHARGE SPECIFICATIONS Battery operation temperature 0~45°C range @charging 14.6 ±0.1V Normal charge voltage 13.8 ±0.1V voltage (for Standby use) I50A at ±25°C Max charge current Recommended charge current 0.2C Charge Cut-off Voltage 15V ±0.2V

DISCHARGE SPECIFICATIONS	
Discharging temperature range	-20~60°C
Output Voltage Range	10.0~14.6V
Max discharge current	200A at ±25°C
Recommended discharge current	0.2C
Pulse discharge current	400A 3s
Discharge Cut-off voltage	10.0V
Discharge temperature characteristics	-20°C / 70% capacity
	0°C / 90% capacity
	25°C / 100% capacity
	60°C / 102% capacity

### Over-charge release for each cell (delay time) 3.6V ±0.05V (3s) When voltage is under Over-charge release method release voltage

OVER DISCHARGE	
Over-discharge protection for each cell (delay time)	2.5V ±0.05V (3s)
Over-discharge release for each cell (delay time)	2.8V ±0.05V (3s)
Over-discharge release method	Charging recover

**BMS TECHNICAL SPECIFICATIONS** 

3.75V ±0.05V (3s)

ľ	OVER CURRENT CHARGE	
	Charge over-current protection (delay time)	1st protection / 160A ±5A (3s) 2nd protection / N/A
	Over-current release method (delay time)	Discharge or auto release (60s)
OVER CURRENT DISCHARGE		

OVER CORRENT DISCHARGE	
Discharge over-current protection (delay time)	400A ±20A (3s)
Over-current release method (delay time)	Charge or auto release (60s)

BATTERY TEMPERATURI	E CHARGING
Temperature protection	Over / 60°C ±5°C (2s) Low / 0°C ±2°C (2s)
Release temperature	Over / 45°C ±2°C (2s) Low / 2°C ±2°C (2s)
Release method (delay time)	When temperature is on release

BATTERY TEMPERATURI	EDISCHARGING
Over-temperature protection Battery	Over / 65°C ±5°C (2s) Low / -20°C ±2°C (2s)
Release temperature Battery	Over / 55°C ±5°C (2s) Low / -18°C ±2°C (2s)
Over-temperature protection Circuit	Over / 85°C ±5°C (2s)
Release temperature Circuit	Over / 70°C ±5°C (2s)
Release method (delay time)	When temperature is on release

SHORT CIRCUIT PROTECTION	
Function condition	External short circuit
Short circuit delay time	250-500 ms
Release mehod (delay time)	Remove load for the short circuit protection to release (0s)

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