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

# 25,6V 50Ah

Bluetooth



## **VOLTIUMENERGY.COM**



#### **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 through parallel 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

# APPLICATIONS





SPORT & RECREATION

MOBILITY





TRANSPORT

DATA CENTER





MEDICAL







UTILITY

### **CERTIFICATES**

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











Bluetooth

## **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

# 25,6V 50Ah





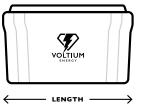
#### **BATTERY SPECIFICATIONS**

GENERAL SPECIFICATIONS	
Nominal Voltage	25,6V (8S)
Rated Capacity (CC 0.2C to 10V)	50Ah
Nominal Energy	1280Wh
Internal Resistance	≤20mΩ
Terminal type	M8
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 parallel NOT in serie
Communication	Bluetooth®

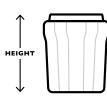
MECHANICAL CHARACTERISTICS		
	Length 318±2mm	
Dimension	Width 165±2mm	
	Height 215±2mm	
Weight	Approx. 12.0Kg	
Housing material	ABS	

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

## **DIMENSIONS**

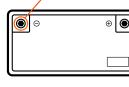












CHARGE SPECIFICATIONS Battery operation temperature

range @charging

Normal charge voltage

voltage (for Standby use) Max charge current

Charge Cut-off Voltage

Output Voltage Range

Max discharge current

Pulse discharge current Discharge Cut-off voltage

Discharge temperature characteristics

Recommended discharge current

Recommended charge current

DISCHARGE SPECIFICATIONS Discharging temperature range

0~45°C

29.2 ±0.1V

27.6 ±0.1V

0.2C

30V ±0.4V

-20~60°C

20.0~29.2V

50A at ±25°C

-20°C / 70% capacity 0°C / 90% capacity

25°C / 100% capacity 60°C / 102% capacity

**A:** 6mm (0.23") **B:** 6mm (0.23") C: 20mm (0.78")

180A 3s

L: 318mm (12.5")

**H:** 215mm (8.46")

**W:** 165mm (6.49")

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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.



### **BMS TECHNICAL SPECIFICATIONS**

OVER CHARGE	
Over-charge protection for each cell (delay time)	3.75V ±0.05V (2s)
Over-charge release for each cell (delay time)	3.6V ±0.05V (2s)
Over-charge release method	When voltage is under release voltage
OVER DISCHARGE	
Over-discharge protection for each cell (delay time)	2.5V ±0.05V (2s)
Over-discharge release for each cell (delay time)	2.8V ±0.05V (2s)
Over-discharge release method	Charging recover

OVER CURRENT DISCHARGE	
Discharge over-current protection (delay time)	180A ±20A (3s)
Over-current release method (delay time)	Charge or auto release (60s)

	BATTERY TEMPERATURE 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 TEMPERATURE DISCHARGING	
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 (30s)

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