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

## 12,8V 9Ah

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 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

## APPLICATIONS





SPORT & RECREATION

MOBILITY





TRANSPORT

DATA CENTER





MEDICAL

SOLAR





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

# 12,8V 9Ah





OVER CHARGE

#### **BATTERY SPECIFICATIONS**

GENERAL SPECIFICATIONS	
Nominal Voltage	12,8V (4S)
Rated Capacity (CC 0.2C to 10V)	9Ah
Nominal Energy	115.2Wh
Internal Resistance	≤20mΩ
Terminal type	F2 faston
Cycle Life (@DOD 100% at IC and ±25°C)	>3000
Cycle Life (@DOD 100% at 0.2C and ±25°C)	6000
Connection options	4 in series OR 4 in parallel
Communication	Bluetooth®

MECHANICAL CHARACTERISTICS		
Dimension	Length I5I±2mm	
	Width 65±2mm	
	Height 95±2mm	
Weight	Approx. I.15Kg	
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**











W: 65mm (2.55")

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**L:** 151mm (5.94")

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 range @charging	0~45°C
Normal charge voltage	14.6 ±0.1V
Recommended float charge voltage (for Standby use)	13.8 ±0.1V
Max charge current	9A at ±25°C
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	100A at ±25°C
	Recommended discharge current	0.2C
	Pulse discharge current	35A withstand 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

## **A:** 7.95mm (0.31") **B:** 3.4mm (0.13")

## C: 6.35mm (0.25")

### **D:** 0.8mm (0.03")

Release temperature

Release method (delay time)

Over-charge protection for each cell (delay time)		3.75V ±0.05V (2s)
Over-charge release for each (delay time)	n cell	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 e cell (delay time)	ach	2.8V ±0.05V (2s)
Over-discharge release method		Charging recover
OVER CURRENT CHARGE		
Charge over-current protection (delay time)	Ist protection / 20A ±5A (I0s) 2nd protection / 25A ±5A (Is)	
Over-current release method (delay time)	Discha	rge or auto release (60s)
OVER CURRENT DISC	HARG	E
Discharge over-current		
protection (delay time)	42A ±5	oA (3s)
Over-current release method (delay time)	Charge	e or auto release (60s)
BATTERY TEMPERATURE CHARGING		
Temperature protection		Over / 60°C ±5°C (2s) ow / 0°C ±2°C (2s)

**BMS TECHNICAL SPECIFICATIONS** 

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

Over / 45°C ±2°C (2s) Low / 2°C ±2°C (2s)

When temperature is on

SHORT CIRCUIT PROTECTION		
Function condition	External short circuit	
Short circuit delay time	250-500 ms	
Release method (delay time)	Remove load for the short circuit protection to release (30s)	