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

# 12,8V 75Ah

**₿ Bluetooth**\*



#### **VOLTIUMENERGY.COM**

# OLTIUM 12.8V 75Ah

#### **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





SOLAR

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

# 12,8V 75Ah





#### **BATTERY SPECIFICATIONS**

GENERAL SPECIFICATIONS	
Nominal Voltage	12,8V (4S)
Rated Capacity (CC 0.2C to 10V)	75Ah
Nominal Energy	960Wh
Internal Resistance	≤30mΩ
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		
Dimension	Length 260±3mm	
	Width 213±3mm	
	Height 168±3mm	
Weight	Approx. 9.0Kg	
Housing material	ABS	

STORAGE SPECIFICATIONS	
0-25°C	
≤3% per month	
50-70% SOC	
See manual	

# CHARGE SPECIFICATIONS Battery operation temperature range @charging Normal charge voltage 14.6 ±0.1V Recommended float charge voltage (for Standby use) 13.8 ±0.1V Max charge current 75A at ±25°C Recommended charge current 0.2C Charge Cut-off Voltage 15V ±0.2V

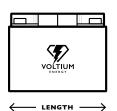
DISCHARGE SPECIFICATION	vs
Discharging temperature range	-20~60°C
Output Voltage Range	10.0~14.6V
Max discharge current	75A at ±25°C
Recommended discharge current	0.2C
Pulse discharge current	155A withstand 3s
Discharge Cut-off voltage	10.0V
Discharge temperature characteristics	-20°C / 70% capacity
	0°C / 90% capacity
	25°C / 100% capacity
	60°C / 102% capacity

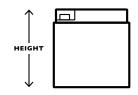
**A:** 7mm (0.27'')

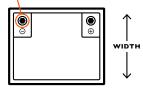
**B:** 8mm (0.31")

**C:** 20mm (0.78")

#### **DIMENSIONS**







**L:** 260mm (10.2")

**H:** 168mm (6.61")

**W:** 213mm (8.38")

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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 e	3.75V ±0.05V (2)
Over-charge release for each (delay time)	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 eacell (delay time)	2.8V ±0.05V (2s)
Over-discharge release meth	od Charging recover
OVER CURRENT CHA	RGE
Charge over-current	Ist protection / 90A +5A (10s)

OVER CURRENT DISCHARGE	
Over-current release method (delay time)	Discharge or auto release (60s)
Charge over-current protection (delay time)	Ist protection / 90A ±5A (I0s) 2nd protection / I20A ±5A (3s)

ı		
	Discharge over-current protection (delay time)	160A ±10A (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 TEMPERATURI	E 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)