



# FUSION BATTERY

LITHIUM CORE

## LFPC36-50

Bluetooth

LITHIUM IRON PHOSPHATE BATTERY

### PERFORMANCE

- Long Cycle Life >2000 cycles @ 100% DOD.
- High Density, High Discharge Current, High Temperature Range.
- Low Weight, Free Maintenance.
- Fast Charging.
- Environment Friendly.

### FEATURES

- Lithium Iron Phosphate Battery (LiFePO4).
- Integrated Battery Management System (BMS).
- BMS with Intelligent Cell Balancing
- Sealed ABS Plastic Housing
- Bluetooth

### BATTERY DATA SHEET

#### Electrical Parameters

Nominal Voltage	36V
Rated Capacity	50Ah
Energy	1880Wh
Resistance	≤30mΩ
Efficiency	99%
Cycle Life	>2000 cycles @ 1C, 100% DOD
Self Discharge	2% per Month
Max. Battery connected in Series	4PCS
Max. Battery connected in Parallel	20PCS

#### Discharge Parameters

Continuous Discharge Current	100A
Peak Discharge Current	300A (10 seconds)
Recommended Volt. Disconnect	30V
BMS Discharge Cut-off Voltage	24V
Reconnect Voltage	27.6V
Short Circuit Protection	200~600 us

#### Compliance Certificate

Certifications	UL1642, UL2054
	CE
	IEC62133 & CB
	KC
	BIS
Shipping Classification	UN3480, Class 9, UN38.3

#### Mechanical Parameters

Dimension (L x W x H)	330 x 173 x 212mm
	13.0 x 6.8 x 8.3"
Weight	13.6kg (29.92lbs)
Terminal Type	M8
Battery Housing	ABS, UL-94 V-0
Housing Protection	IP65
Cell Type-Chemistry	LiFePO4 Cylindrical Cell
SOC Display (Optional)	None

#### Charge Parameters

Charge Method	CC-CV
Charge Voltage	43.2~44.4V
Recommended Float Voltage	41.4V
Recommended Charge Current	50A
Maximum Charge Current	100A
BMS Charge Cut-off Voltage	46.8V

#### Temperature Parameters

Discharge Temperature	-20 to 60°C (-4 to 140°F)
Charge Temperature	0 to 45°C (32 to 113°F)
Storage Temperature	-25 to 60°C (-13 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	65°C (176°F)
BMS High Temperature Turn-On	55°C (131°F)

#### HEAD OFFICE

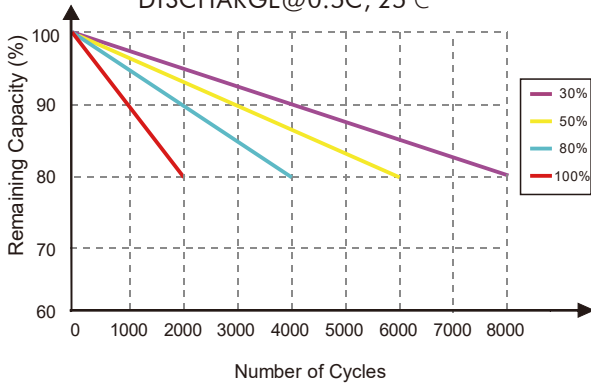
Unit 30 76 Hume Highway LANSVALE NSW 2166

Tel: +(02) 9755 7851 Fax: +(02) 9755 7852

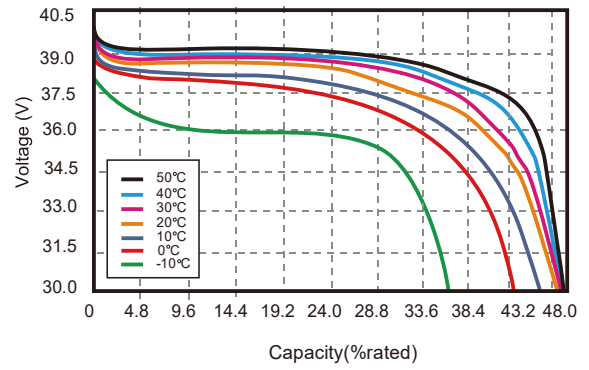
Email: batteries@superstart.com.au

# Performance Characteristics

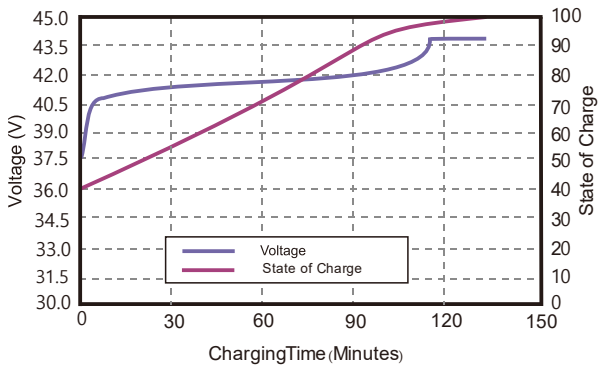
CYCLE LIFE vs. DEPTH OF DISCHARGE(DOD)  
DISCHARGE@0.5C, 25°C



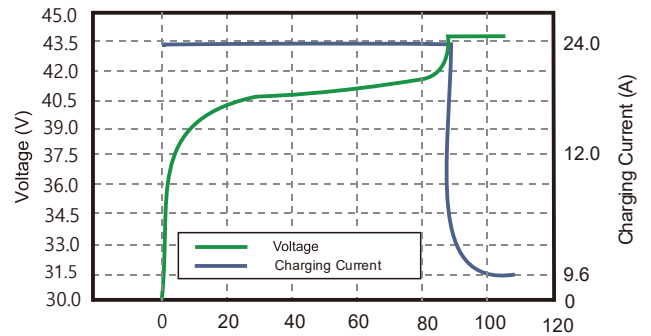
DISCHARGE CAPACITY at VARIOUS TEMPERATURES  
DISCHARGE @0.5C, 25°C



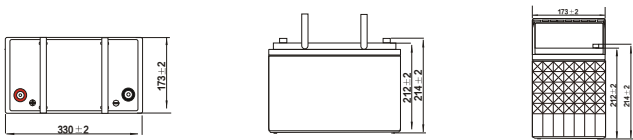
STATE OF CHARGE CURVE @0.5C, 25°C



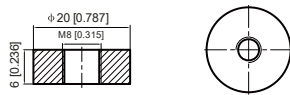
CHARGING CHARACTERISTICS @0.5C, 25°C



## Battery Dimension



M8 - 1.0x 8mm  
Threaded Hole

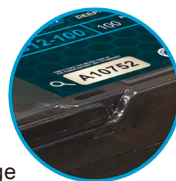


## Battery Applications

- + Marine (House Batteries)
- + RV / Camping (Automotive)
- + 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
- + Floor Cleaning Machines
- + Power Tools, Lawn Mower
- + Electric Bike & Motorcycles
- + Electric Mobilities (E-scooters, Wheelchair)
- + Golf Trolley & Golf Carts
- + Medical Devices
- + Electric Boats
- + Electric Fences

View live data with the intelligent Fusion Lithium Bluetooth 4.0 BLE technology.

Find the identification code on top of Fusion Lithium battery. Open the Fusion Lithium App and click relevant code to connect.



- Access your BMS independently with multiple batteries
- Monitor the status of your lithium battery: State Of Charge (SOC), Temperature, charging or discharging current, etc
- Track the Cycle Life of your Lithium Battery
- Assess what protections have been triggered



**NOTE:**

Do Not Mix With Sealed Lead Acid Batteries When Recycling.  
See FUSION User's Manual for Proper Operation.  
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