

# LiFePO4 battery Datasheet

**LiFePO4 battery - 51.2V 400Ah**

**LFR-51.2-400NP**

## Dimension (with case)

Length	1060mm
Width	255mm
Height	270mm
Weight	approx 128kg



## Mechanical Specifications

Nominal voltage	51.2V
Nominal capacity	400Ah
Energy	20.48KWh
Resistance	≤ 100mΩ
Self discharge	<3% / month
Efficiency	> 90%

## Electrical Specification

Terminal type	M8
Enclosure protection	IP56
Case material	Metal
Cell type	Prismatic

## Charge Specifications

Recommend charge current	50~70A
Max. charge	80A
BMS charge voltage cut-off	59.5V
Reconnect	58.0 - 58.4V
Balancing current	20mA
Balancing voltage	3,5V

## Discharge Specifications

max. cont discharge	100A
peak discharge current 1 sec.	200A
BMS discharge	100A
recommend cut-off voltage	40~42V
BMS discharge cut-	38.5V
short circuit protection	200-600 μs

## Temperature Specifications

Discharge temperature	-20 ~ 60°C
Charge temperature	0-45°C
Storage temperature	-20 to 40°C
BMS high temperature	80°C
Reconnect temperature	50°C

## Connection information

max. modules in series	1
max. modules parallel	No Limit

## Features & Benefits

\* High cycle life: >4000 times @ 80% DOD for effectively lower cost of

\* Built-in SMART BMS Protection:

Battery Management System are incorporated to protect battery from over charging / over discharging / short circuit

\* Light weight:

Dry power lithium batteries has higher energy density wh/kg also being up to 1/3 of SLA battery

\* Wide operating temp. range

Suitable for users in a wider range of application where ambient temperature is unusually high: up to +60°C

### **Suitable applications**

\* Lithium ion battery can be used in any application that would normally use Lead Acid, GEL or AGM type batteries.

\* Lead acid or gel batteries can be easily replaced by Lithium ion batteries. Lithium ion 16S = 48 V is close to lead-acid equivalents.

\* Suitable applications included caravan, marine, golf carts, solar storage, remote monitoring, switching applications

### **Performance characteristics**

#### **Cautions**

Do NOT expose the battery to water

Do NOT expose the battery to fire & high temperature Do NOT short circuit, crush or disassemble

Only use LiFePO4 charger

Store at 50% capacity, recharge every 3 months.

The storage area should be clean, cool, dry and ventilated