# Wall Mounted LiFePO<sub>4</sub> Battery LFP-W51.2-100 Lithium Battery



 $\label{thm:cycle} \textbf{High Cycle Life} \\ 6000\ \text{cycles @} 80\% \text{DOD,} 25^{\circ}\text{C for effectively lower cost total of ownership} \\$ 



**Longer Service Life**Low maintenance batteries with stable chemistry.



#### **Built In Circuit Protection**

Battery Management System (BMS) is incorporated against abuse.



**Better Storage**Up to 6 months thanks to its extremely low self discharge (LSD) rate and no



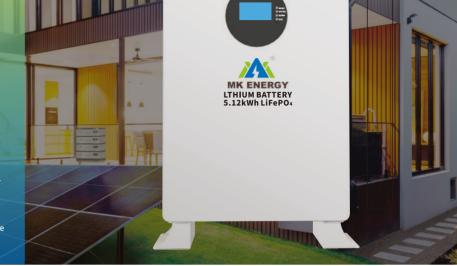
#### **Quickly Recharge**

Save time and increase productivity with less down time thanks to superior charge/discharge efficiency.

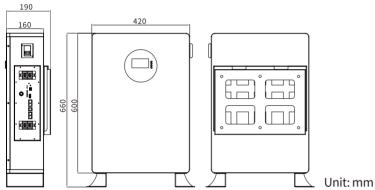


#### Extreme Heat Tolerance

Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +60  $^{\circ}\text{C}$ 



#### **Product Dimension Diagram**



## **Application**

- Electric vehicles.
- Solar/wind energy storage system.
- UPS, backup power.
- Telecommunication
- Medical equipment
- Lighting

## F© IEC (€ UN38.3 MSDS

Electrical Characteristics	
Nominal Voltage	51.2V
Nominal Capacity	100Ah (Cs,25°C)
Energy	5120Wh
Internal Resistance	≤10mΩ@50%SOC
Cycle Life	>6000 cycles
Months Self Discharge	<3%
Efficiency of Charge	100%@0.5C
Efficiency of Discharge	96~99%@0.5C
Standard Charge	
Charge Mode	0.2C to 58.4V, then 58.4V, charge to current till 0.02C(CC/CV)
Continuous Current	50A
Recom. Charge Current	20A
Max. Charge Current	100A
Charge Cut-off Voltage	58.4V±0.2V
Standard Discharge	
Continuous Current	50A
Recom. Discharge Current	20A
Max. Discharge Current	100A
Discharge Cut-off Voltage	43.2V
Environmental	
Charge Temperature	0 °C to 45 °C(32 °F to 113 °F) @60 $\pm$ 25% Relative Humidity
Discharge Temperature	-20 °C to 60 °C (-4°F to 140°F) @60:±25% Relative Humidity
Storage Temperature	0 °C to 40 °C (32 °F to 104°F) @60 ± 25% Relative Humidity
IP Grade	IP20
Mechanical	
Cell & Method	3.2V100AH-16S1P
Metal Case	Metal
Dimensions (mm.)	600x420x160(Package:710x495x341)
Weight (kg.)	N.W.:47Kg/G.W.: 59Kg
Terminal	100A Connector
Communicition	RS485/RS232/CAN
BMS	16S100A
Parallel	Up to 16 units



## Wall Mounted LiFePO<sub>4</sub> Battery

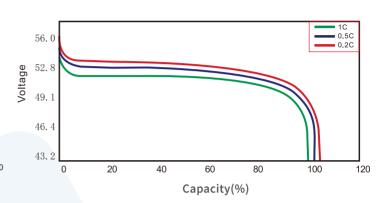
## LFP-W51.2-100 Lithium Battery

#### **>> Model Performance Diagrams**

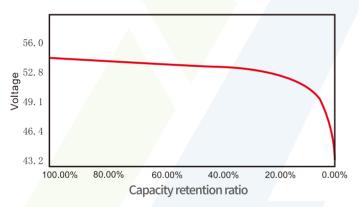
#### Number of Cycles Vs. DOD

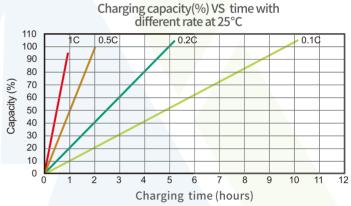
#### Cycle life with DOD at 25°C, 0.5C 110 100 Capacity(%) 80 50%DOD 80%000 60 2000 9000 12000 1000 4000 5000 0 Number of cycle(cycles)

### Discharge Performance at R.T.

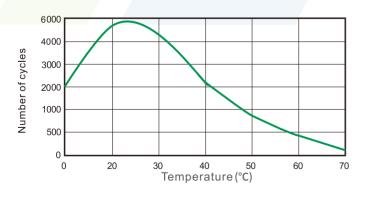


#### Battery Capacity (C) VS. Open Circuit Voltage (OCV) Battery Capacity Vs. Charging Time SOC Vs OCV

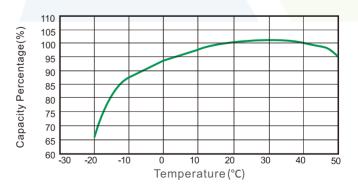




### Cycle Life in Relation to Temperature



### Temperature Effects on Capacity



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