# **Tricycle & Four-Wheeled Vehicle LiFePO4 Battery** LFP-W51.2-105 Lithium Battery



**High Cycle Life** 6000 cycles @80%DOD,25°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



 $\label{eq:Better Storage} \textbf{Up to 6} months thanks to its extremely low self discharge (LSD) rate and no risk of sulphation.$ 



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

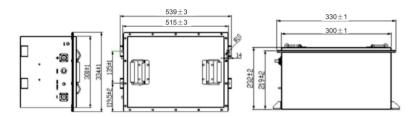


### **Extreme Heat Tolerance**

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

# **Product Dimension Diagram**

515x330x232mm



# **Application**

- Three-wheeled vehicle
- Four-wheeled vehicle
- Golf cart

Unit: mm

# F© IEC (€ UN38.3 MSDS

Electrical Characteristics	Chemistry	LiFePO4
	Nominal Voltage	51.2V
	Nominal Capacity	105Ah (C5,25°C)
	Energy	5376Wh
	Internal Resistance	<10 mΩ
	Cycle Life	>3500 cycles @1C 70%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100%@0.5C
Standard Charge Standard Discharge	Efficiency of Discharge	96-99%@1C
	Charge Voltage	58.4±0.2V
	Charge Mode	0.2C to 58.4V, then 58.4V charge current to 0.02C(CC/CV)
	Charger Current	50A
	Max. Charge Current	100A
	Charge Cut-off Voltage	58.4V±0.2V
	Rated Discharge Current	50A
	Max Discharge Current	100A
	Max. Pulse Current	300A(<3s)
	Discharge Cut-off Voltage	40V
	Charge Temperature	0 C to 45 C(32Fto 113F)@60±25% Relative Humidity
	Discharge Temperature	-20 C to 60 C(-4F to 140F) @60±25% Relative Humidity
	Storage Temperature	0 C to 40 C(32Fto 104F) @60±25% Relative Humidity
	Water Dust Resistance	IP65
Mechanical	BMS	4P / Pre-heat
	Communication function	LCD display
	Plastic Case	SPCC metal case
	Dimensions (in./mm.)	515x330x232mm
	Weight (lbs./kg.)	45.35kg(84.44lbs)
	Terminal	M8*18



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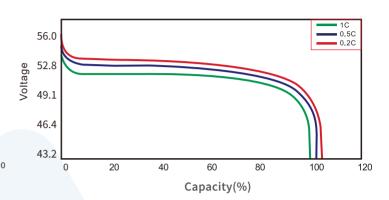
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## **>> Model Performance Diagrams**

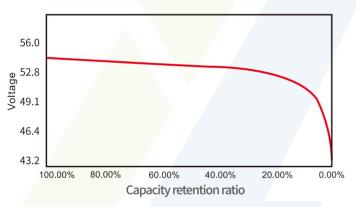
## Number of Cycles Vs. DOD

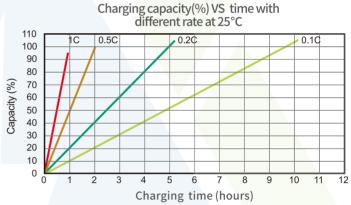
### Cycle life with DOD at 25°C, 0.5C 110 100 Capacity(%) 80 50%DOD 80%000 60 9000 12000 1000 2000 4000 5000 Number of cycle(cycles)

## Discharge Performance at R.T.

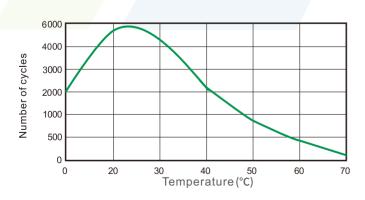


### Battery Capacity (C) VS. Open Circuit Voltage (OCV) Battery Capacity Vs. Charging Time SOC Vs OCV

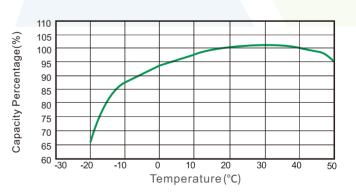




# Cycle Life in Relation to Temperature



# Temperature Effects on Capacity



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