

## S12-100LFP LiFePO<sub>4</sub> BATTERY

### Safety

- Prismatic LiFePO<sub>4</sub> cells offer longer cycle life & added safety
- IEC62133, UL, UN38.3 cell certification
- UN38.3, CE system certification IP65

### Design

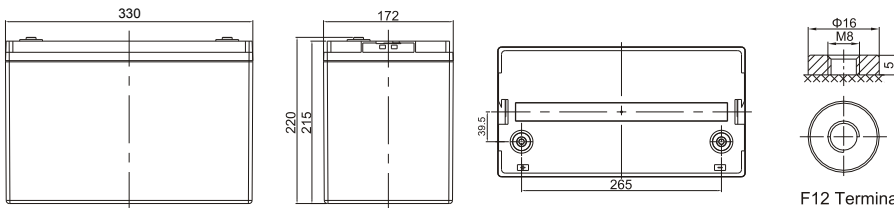
- standard-size (BCI) ABS container for easy VRLA
- replacement Fast charge/discharge performance
- Maintenance-free operation

### Battery Management System (bms)

- Integrated hardware BMS inside.
- Independent charge & discharge protection
- Over-Voltage Protection (OVP), Low-Voltage Protection (LVP)  
Over-Current Protection (OCP), Over-Temperature Protection (OTP)



Rolls long-life, high performance Lithium-Iron-Phosphate LiFePO<sub>4</sub> battery with exceptional cycle life and is up to 50% lighter than equivalent lead-acid battery models.



### SPECIFICATIONS

### S12-100LFP

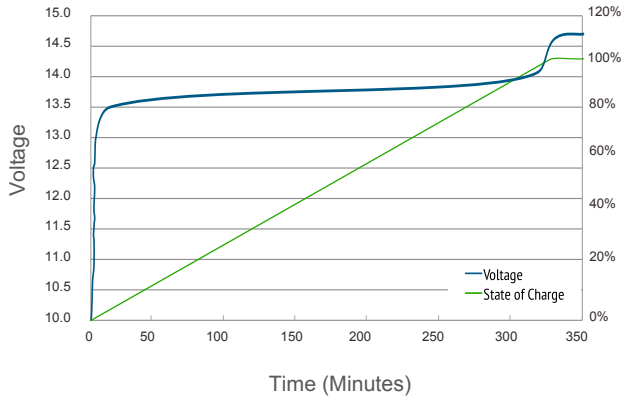
PRODUCT DIMENSIONS: (LxWxH incl terminal)	330mm (13") x 172mm (6.77") x 220mm (8.66")
PRODUCT WEIGHT:	13 Kg / 28.5 Lbs
NOMINAL VOLTAGE: (V)	12.8V
NOMINAL CAPACITY: (AH)	100 AH
TOTAL ENERGY: (KWh)	1.28 KWh
END OF DISCHARGE VOLTAGE: (V)	10.0V
TERMINAL:	F12 (M8)
CYCLE LIFE:	>3500 @ 100% DOD
SERIES CONNECTION:	4 UNITS MAX
PARALLEL CONNECTION:	2 UNITS MAX

### CHARGING

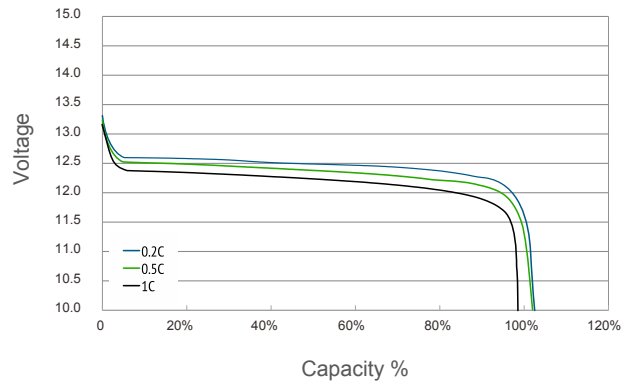
CHARGE VOLTAGE RANGE: (V)	14.0 - 14.6V	*DO NOT USE TEMPERATURE COMPENSATION (BTS)
RECOMMENDED CHARGE VOLTAGE: (V)	14.6 V	
RECOMMENDED CHARGE CURRENT: (AMPS)		
0~5°C (32~41°F)	≤0.1C	10 A
5~10°C (41~50°F)	≤0.2C	20 A
10~35°C (50~95°F)	≤0.5C	50 A
35~50°C (95~122°F)	≤0.2C	20 A
CHARGE MODE:	CHARGE AT RECOMMENDED VOLTAGE & CURRENT BY TEMPERATURE UNTIL CHARGE CURRENT DROPS TO ≤ 0.05C (CC, CV)	
MAX CHARGE CURRENT	100 A	
MAX DISCHARGE CURRENT	100 A	
CHARGE TEMPERATURE RANGE:	0°C~50°C (32~122°F)	
DISCHARGE TEMPERATURE RANGE:	-20°~55°C (-4~131°F)	
STORAGE TEMPERATURE RANGE:	-20°~60°C (-4~140°F)	

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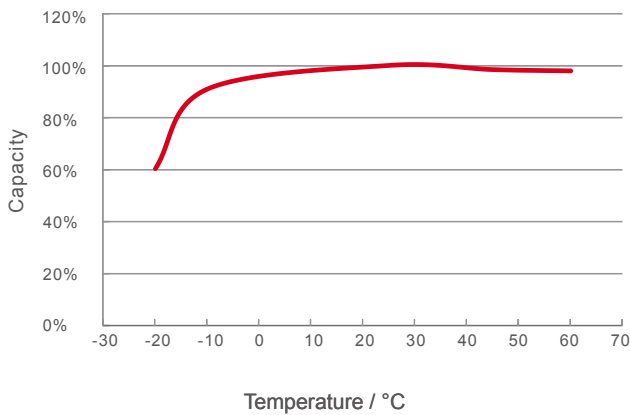
**Charging Characteristics (0.5C @ 25°C)**



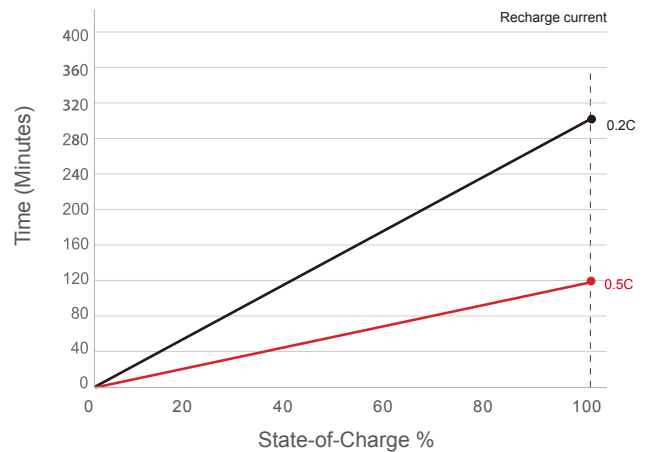
**Discharge Characteristics (0.2C, 0.5C, 1C @ 25°C)**



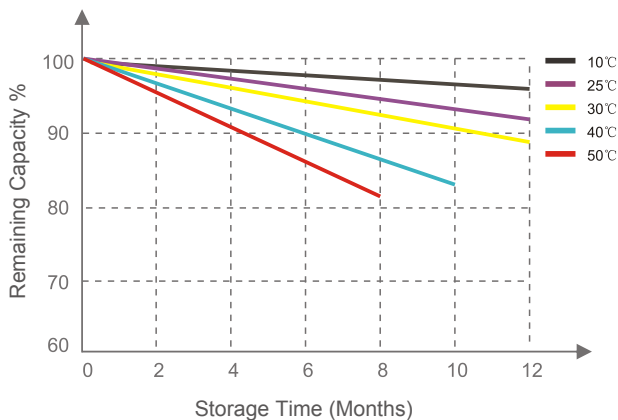
**Temperature vs Capacity**



**Typical Charge Time**



**Self-Discharge by Temperature**



**Cycle Life vs Depth of Discharge (DOD)**

