

S12-100LFP LiFePO₄ BATTERY

Safety

- Prismatic LiFePO₄ cells offer longer cycle life & added safety
- IEC62133, UL, UN38.3 cell certification
- UN38.3, CE system certification IP65

Design

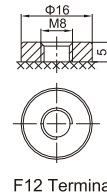
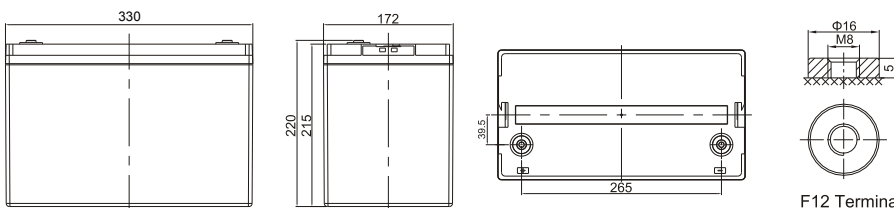
- standard-size (BCI) ABS container for easy VRLA
- replacement Fast charge/discharge performance
- Maintenance-free operation

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)
Low-Temperature Protection (LTP)



Rolls long-life, high performance Lithium-Iron-Phosphate LiFePO₄ battery with exceptional cycle life and is up to 50% lighter than equivalent lead-acid battery models.



SPECIFICATIONS

S12-100LFP

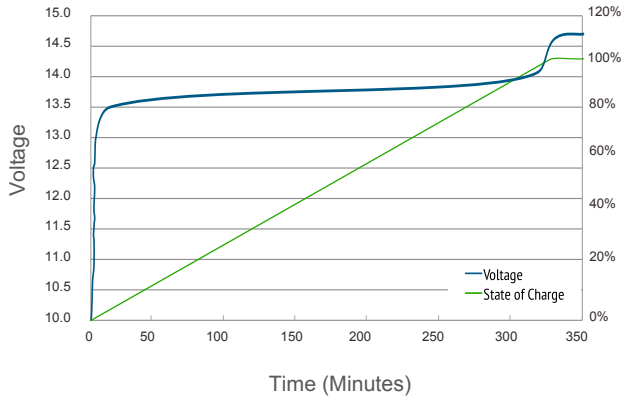
PRODUCT DIMENSIONS: (LxWxH incl terminal)	330mm (13") x 172mm (6.77") x 220mm (8.66")
PRODUCT WEIGHT:	13.5 Kg / 30 Lbs
NOMINAL VOLTAGE: (V)	12.8V
NOMINAL CAPACITY: (AH)	100 AH
TOTAL ENERGY: (KWh)	1.28 KWh
END OF DISCHARGE VOLTAGE: (V)	10.0V
TERMINAL:	F12 (M8)
CYCLE LIFE:	>3500 @ 100% DOD
SERIES CONNECTION:	4 UNITS MAX
PARALLEL CONNECTION:	2 UNITS MAX

CHARGING

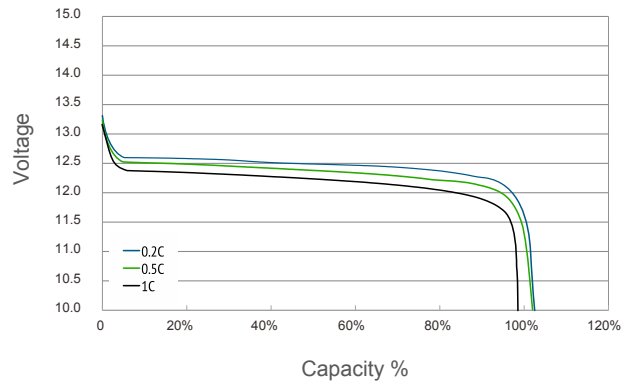
CHARGE VOLTAGE RANGE: (V)	14.0 - 14.6V	*DO NOT USE TEMPERATURE COMPENSATION (BTS)
RECOMMENDED CHARGE VOLTAGE: (V)	14.6 V	
RECOMMENDED CHARGE CURRENT: (AMPS)		
0~5°C (32~41°F)	≤0.1C	10 A
5~10°C (41~50°F)	≤0.2C	20 A
10~35°C (50~95°F)	≤0.5C	50 A
35~50°C (95~122°F)	≤0.2C	20 A
CHARGE MODE:	CHARGE AT RECOMMENDED 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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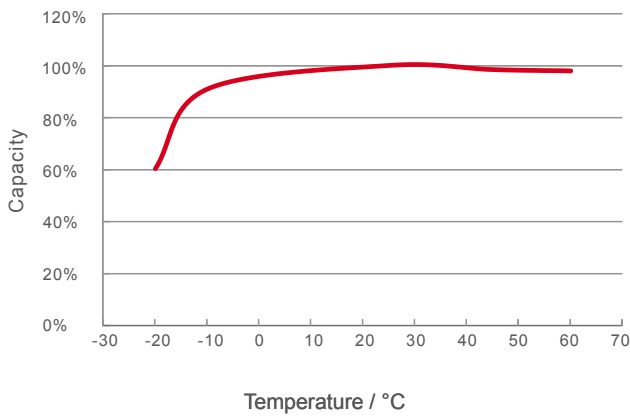
Charging Characteristics (0.5C @ 25°C)



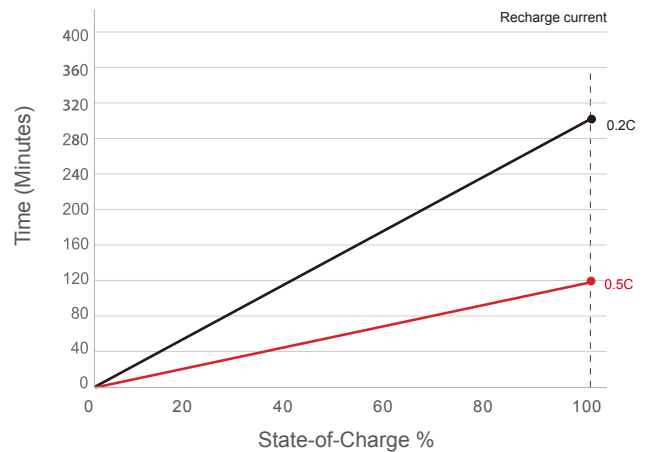
Discharge Characteristics (0.2C, 0.5C, 1C @ 25°C)



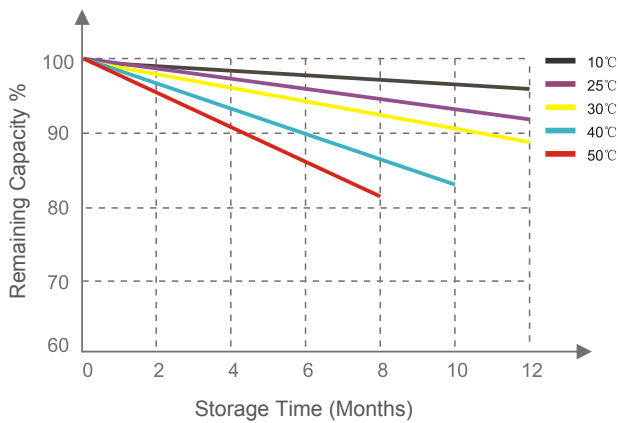
Temperature vs Capacity



Typical Charge Time



Self-Discharge by Temperature



Cycle Life vs Depth of Discharge (DOD)

