

LiFe 30-24

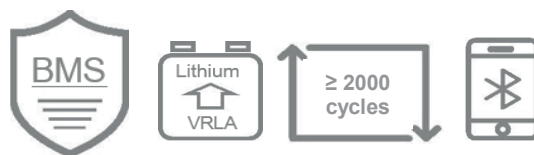
24V / 30Ah

Lithium - Iron Phosphate



Features

High energy density
Automatic protection with battery management system (internal)
Low self-discharge
Long cycle life
Excellent performance in all operating temperatures
Cost effective
Fast charge
Drop-in replacement
Guaranteed Safety



Nominal characteristics

Nominal Voltage	: 25.6V
Nominal capacity	: 30Ah
Energy	: 768Wh
IR	: $\geq 30\text{m}\Omega$ @100% SOC
Efficiency	: $\geq 99.5\%$
Maximum Modules in Series	: 1 (Single Use)

Mechanical characteristics

Case Material	: ABS
Dimensions (LxWxH)	: 229x138x213 mm
Weight	: 9.4kg $\pm 3\%$
Terminal Type	: F11 (M6)
BCI Group No.	: 22
Cell Type-Chemistry	: Prismatic LiFePO ₄

Charge & discharge characteristics

Voltage Window	: 21.6 - 29.2V
Max. Continuous Charge	: 30A
Max. Continuous Discharge	: 30A
Peak Discharge Current	: 70A ($\geq 10\text{s}$)
Recomm. Charge Current	: 15A
Recomm. Discharge Current	: 15A

Operating Conditions

Cycle Life	: ≥ 2000
Operating Temperature	: Charge 10°C ~ 45°C Discharge -20°C ~ 55°C
Storage Temperature	: 20°C ~ 30°C
Storage Duration	: 12 months at 25°C

BMS characteristics

Primary Charging Protection	: Current	30~45A
	: Delaytime	30 $\pm$ 2s
Secondary Charging Protection	: Current	$\geq 45\text{A}$
	: Delaytime	2 $\pm$ 1s
Primary Discharging Protection	: Current	35~70A
	: Delaytime	15 $\pm$ s
Secondary Discharging Protection	: Current	70~150A
	: Delaytime	2 $\pm$ 1s
Over-charge Voltage Protection	: Voltage	$\geq 30.8\text{V}$
	: Delaytime	1~2s
Over-discharge Voltage Protection	: Voltage	$\geq 18.4\text{V}$
	: Delaytime	1~2s
Temperature Protection	: PCB Temp.	$\geq 80^\circ\text{C}$
	: Recover	$\leq 65^\circ\text{C}$

Constant Current Discharge Data (Amp @25°C)

	1h	2h	3h	5h	10h
Cut-off voltage (21.6V)	30A	15A	10A	6A	3A

Constant Power Discharge Data (Watt @25°C)

	1h	2h	3h	5h	10h
Cut-off voltage (21.6V)	690W	348W	233W	140.4W	70.8W

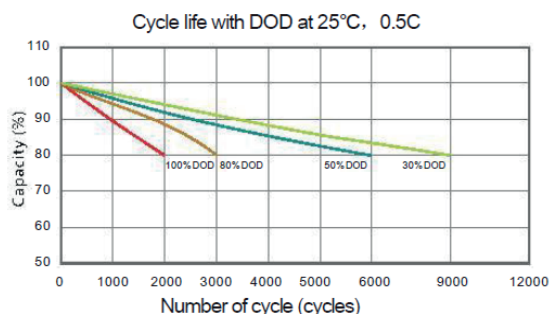
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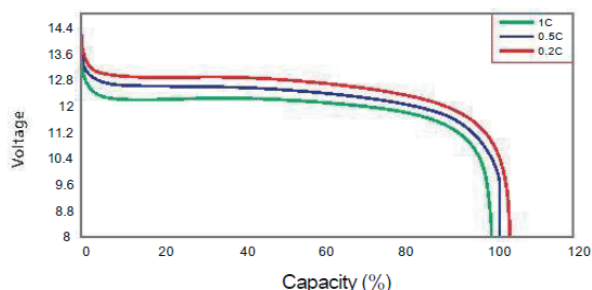
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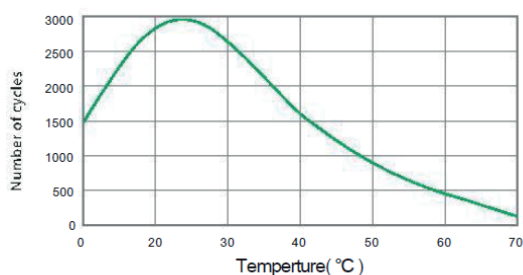
Number of Cycles Vs. DOD



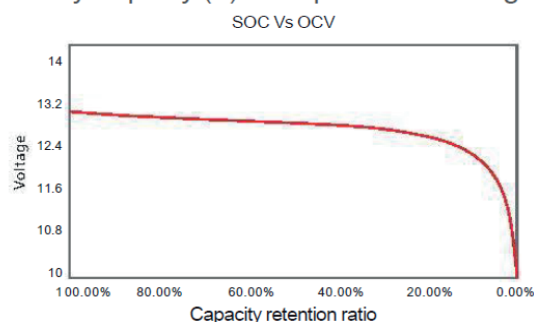
Discharge Performance at R.T.



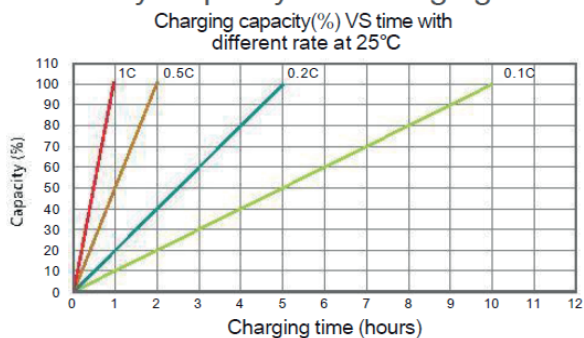
Cycle Life in Relation to Temperature



Battery Capacity (C) Vs. Open Circuit Voltage (OCV)



Battery Capacity Vs. Charging Time



Temperature Effects on Capacity

