LiFe 80-12

12V / 80Ah

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	:	12.8V
Nominal capacity	:	80Ah
Energy	:	1024Wh
IR	:	≥15mΩ @100% SOC
Efficiency	:	≥99.5%
Maximum Modules in Series	:	2 (Single Use)

Mechanical characteristics

Case Material	:	ABS
Dimensions (LxWxH)	:	258x166x215 mm
Weight	:	9.68kg ±3%
Terminal Type	:	F12 (M8)
BCI Group	:	24
Cell Type-Chemistry	:	Prismatic $LiFePO_4$

Charge & discharge characteristics

Voltage Window	:	10.8-14.6V
Max. Continuous Charge	:	80A
Max. Continuous Discharge	:	80A
Peak Discharge Current	:	200A (10s ±1s)
Recomm. Charge Current	:	40A
Recomm. Discharge Current	:	40A

BMS characteristics

Primary Charging Protection	:	Current	>105 ±2.5A
		Delaytime	15 ±2s
Secondary Charging Protection	:	Current	>120 ±2.5A
		Delaytime	2 ±1s
Primary Discharging Protection	:	Current	>105 ±2.5A
		Delaytime	20 ±1s
Secondary Discharging Protection	:	Current	>210 ±2.5A
		Delaytime	1 ±1s
Over-charge Voltage Protection	:	Voltage	>14.8 ±0.2V
	:	Delaytime	2 ±0.5s
Over-discharge Voltage Protection	:	Voltage	<9.6 ±0.2V
	:	Delaytime	2 ±0.5s
Temperature Protection (±2s)	:	PCB Temp.	≥95°C
		Recover	≤75°C

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

Constant Current Discharge Data (Amp @25°C)

	1h	2h	3h	5h	10h
Cut-off voltage (10.8V)	80A	40A	27A	16A	8A

Constant Power Discharge Data (Watt @25°C)

	1h	2h	3h	5h	10h
Cut-off voltage (10.8V)	922W	470W	321W	192W	101W

rev. 03/20

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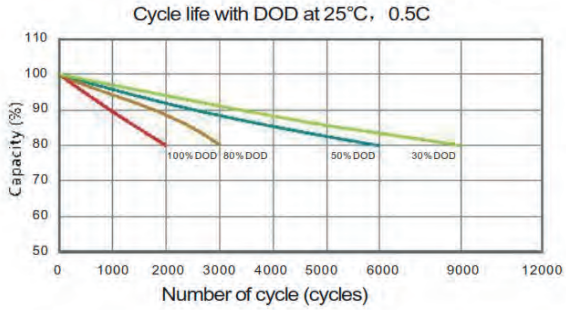
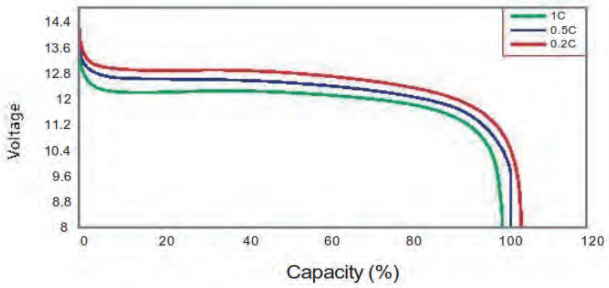
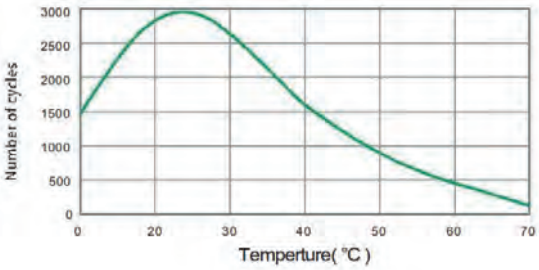
Number of Cycles Vs. DOD



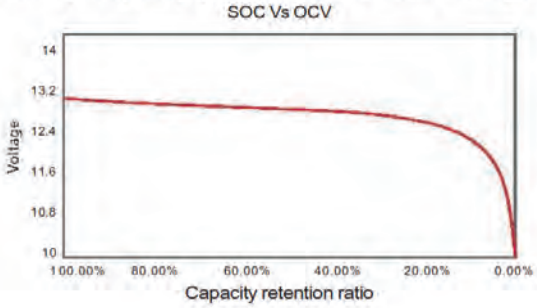
Discharge Performance at R.T.



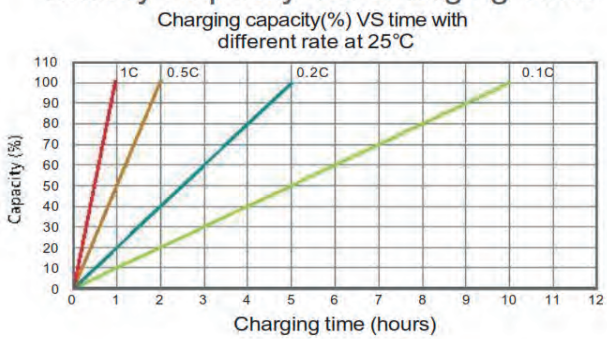
Cycle Life in Relation to Temperature



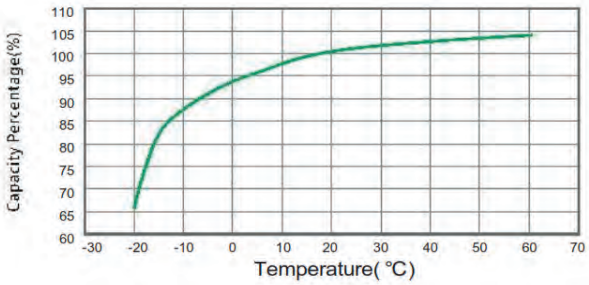
Battery Capacity (C) Vs. Open Circuit Voltage (OCV)



Battery Capacity Vs. Charging Time



Temperature Effects on Capacity



rev. 03/20