

EXPION360 LITHIUM IRON PHOSPHATE BATTERY

FEATURES

Lithium Iron Phosphate (LiFePO₄): the Safest Lithium Technology.
Integrated Battery Management System (BMS).

PERFORMANCE

Long Cycle Life > 2000 cycles at 100% DOD.
High Density, High Discharge Current, High Temperature Range.
Low Weight, Maintenance Free.
Fast Charging.
Environmentally Friendly.



EX-80C-24 (12.8V/80Ah)

BATTERY DATA SHEET

Electrical Parameters

Nominal Voltage	12.8V
Rated Capacity	80Ah
Energy	1024Wh
Resistance	≤50mΩ
Efficiency	99%
Cycle Life	>2000cycles at 1C,100% DOD
Self Discharge	<2% per Month
Cells in Series/Parallel	4S/24P

Discharge Parameters

Continuous Discharge Current	60A
Max. Discharge Current	80A
Pulse Discharge Current	100A (1 Sec.)
Recommended Volt. Disconnect	10.5V
BMS Discharge Cut-off Voltage	9.2V
Short Circuit Protection	200~600 μs

Compliance

Certifications	UL1642 For Cells, File #MH64383
	UN3480, Class 9, UN38.3

Mechanical Parameters

Dimension (L x W x H)	10.24 x 6.81 x 8.59 in
	260 x 173 x 218.3 mm
Weight	23.15lbs (10.5kg)
Terminal Type	M8-1.25
Battery Housing	ABS Plastic Case
Housing Protection	IP66
Housing Flammability Rating	UL-94 V0
Cell Type-Chemistry	LiFePO ₄

Charge Parameters

Charge Method	CC-CV
Charge Voltage	14.4V~14.6V
Recommended Float Voltage	13.8V
Recommended Charge Current	20A
Maximum Charge Current	40A
BMS Charge Cut-off Voltage	14.6V

Temperature Parameters

Discharge Temperature	-4°F to 132°F (-20°C to 56°C)
Charge Temperature	32°F to 132°F (0°C to 56°C)
Storage Temperature	-4°F to 113°F (-20°C to 45°C)
BMS High Temperature Cut-off	149°F (65°C)



NOTE: Do Not Mix With Sealed Lead Acid Batteries When Recycling.
See EXPION360 User's Manual for Proper Operation.
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