

Matrix-12-100 LITHIUM DEEP-CYCLE BATTERY

FEATURES: Lithium Iron Phosphate (LiFePO₄):the Safest Lithium Technology.
 Integrated Battery Management System(BMS).
 Support 6 x Batteries in Series and 6 x Batteries in Parallel.
 LED Display for Battery Capacity, Voltage and Internal Temperature

PERFORMANCE Long Cycle Life: 4000cycles.
 High Density,High Discharge Current,High Temperature Range.
 Low Weight,Free Maintenance.
 Fast Charging.
 Environment Friendly.



Matrix-12-100 (12.8V100Ah)

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BATTERY DATA SHEET

Electrical Parameters	
Nominal Voltage	12.8V
Rated Capacity	100Ah
Energy	1280Wh
Resistance	≤50mΩ
Efficiency	0.99
Cycle Life	>4000@80%DOD
Self Discharge	2% per Month
Max. Modules in Series/Parallel	6S/6P

Mechanical Parameters	
Dimension(L×W×H)	260x170x210mm
	10.2 x 6.6x 8.2"
Weight	12.8kg
Terminal Type	M8
Battery Housing	ABS, LG121
Housing Protection	IP67
Cell Type-Chemistry	LiFePO ₄ Cell
SOC Display(Optional)	/

Discharge Parameters	
Standard Discharge Current	50A
Pulse Discharge Current	150A (<10S)
Recommended Volt.	>10V
BMS Discharge Cut-off Voltage	8.8~10V
Reconnect Voltage	10.8V
Short Circuit Protection	100-400us

Charge Parameters	
Charge Method	CC-CV
Charge Voltage	14.4~14.8V
Recommended Float Voltage	13.8V
Standard Charge Current	50A
Maximum Charge Current	100A
BMS Charge Cut-off Voltage	15V

Temperature Parameters	
Discharge Temperature	-20 to 60 °C (-4 to 140 °F)
Charge Temperature	0 to 60 °C (32 to 140 °F)
Storage Temperature	-40 to 70 °C (-40 to 158 °F)
BMS High Temperature Cut-off	78 °C (172.4 °F)

