

LFP 7-Xtreme

12.8V - 7.0Ah Lithium LiFePO4 Battery

XTREME Series Lithium Iron Phosphate batteries are powerful LiFePO4 products that have the highest capacity in standard casings available on the market. The highly sophisticated and integrated BMS with very low self-consumption brings safety, functionality and ease of use together in a lightweight and robust casing. The batteries have been specifically designed to provide energy for RV (Recreational Vehicles), marine, solar and backup power systems. Bluetooth and LED indicators, LCD screen, self-heated functions could be optional.

Benefits of Lithium

- · High capacity, low weight, Increased energy in given space
- Fast charging •
- High operational reliability •
- Safest lithium technology •
- Excellent life cycles ٠
- Built-in intelligent BMS to protect the battery pack and • prolong its service life
- Maintenance free •

Certifications and standards

a.Products

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UL1642(cells) • FCC

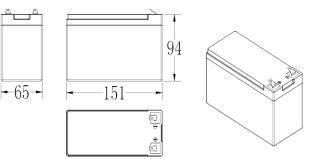
- **b.MS** certifications
- ISO9001
- ISO14001
- OHSAS 18001 .

UN38.3 IEC62619 •

Specifications

Battery model TP 1207LFP Nominal voltage 12.8V Typical capacity 7.0Ah(25°C,0.2C) Typical energy 89.6Wh Cells type/chemistry 95.4Wh/Kg Calls type/chemistry 95.4Wh/Kg Dimensions Length 94mm 65mm 151mm Reference Weight 0.94Kg Case Material 0.94Kg Case Material ABS Cycle life 9400 Electrical Characteristics Charge method CC/CV Charge voltage Range 14.3~14.6V Max.continuous Discharge Current 10 Max.continuous Charge Current (10 sec) 200A Elect of Discharge Voltage 10V Charge Turperature 00°-55°C Discharge Temperature 200C Storage Temperature 200C Storage Temperature 200C Charge T			
Nominal voltage 12.8V Typical capacity 7.0Ah(25°C,0.2C) Typical capacity 89.6Wh Cells type/chemistry Prismatic-LiFePQ, Gravimetic Energy density 95.4Wh/Kg Dimensions Length Width Height Dimensions Length Width Height Reference Weight 0.94Kg Case Material ABS Cycle life >2000 cycles (100% DoD) Electrical Characteristics 2000 cycles (100% DoD) Electrical Characteristics CC/CV Charge method CC/CV Charge routage Range 14.3~14.6V Max.continuous Discharge Current 10A Max.continuous Charge Current 7A Discharge Voltage 10V Operation Environment 10V Charge Temperature 0°C~55°C Discharge Temperature -20°C ~60°C Storage Temperature -20°C ~60°C	Nominal Characteristics		
Typical capacity7.0Ah(25°C,0.2C)Typical energy89.6WhCells type/chemistryPrismatic-LiFePO,Gravimetic Energy density95.4Wh/KgDimensionsLength Width 65mm Height94mm 65mm 151mmReference Weight0.94KgCase Material0.94KgCycle life>2000 cycles (100% DoD)Electrical Characteristics2000 cycles (100% DoD)Electrical CharacteristicsCC/CVCharge woltage Range14.3~14.6VMax.continuous Discharge Current7ADischarge Pulse Current (10 sec)20AElot of Discharge Voltage10VOperation Environment0°C~55°CDischarge Temperature-20°C~60°CStorage Temperature-20°C~60°C	Battery model		TP1207LFP
Typical energy 89.6Wh Cells type/chemistry Prismatic-LiFePO, Gravimetic Energy density 95.4Wh/Kg Dimensions Length Width Height Dimensions 0.94Kg Case Material 0.94Kg Case Material 0.94Kg Cycle life >2000 cycles (100% DoD) Electrical Characteristics 2000 cycles (100% DoD) Charge method CC/CV Charge voltage Range 14.3~14.6V Max.continuous Discharge Current 10A Max.continuous Charge Current 7A Discharge Pulse Current (10 sec) 20A End of Discharge Voltage 10V Operation Environment 0°C~55°C Charge Temperature 0°C~55°C Discharge Temperature -20°C~60°C	Nominal voltage		12.8V
Cells type/chemistry Prismatic-LiFePO, Gravimetic Energy density 95.4Wh/Kg Dimensions Length Width 65mm Dimensions Length 151mm Reference Weight 0.94Kg Case Material 0.94Kg Cycle life >2000 cycles (100% DoD) Electrical Characteristics 2000 cycles (100% DoD) Electrical Characteristics CC/CV Charge method CC/CV Charge voltage Range 10A Max.continuous Discharge Current 10A Max.continuous Charge Current 200A Discharge Pulse Current (10 sec) 20A End of Discharge Voltage 0°C ~55°C Discharge Temperature 20°C ~60°C Storage Temperature -20°C ~60°C	Typical capacity		7.0Ah(25°C,0.2C)
Gravimetic Energy density 95.4Wh/Kg Dimensions Length Width Height 94mm 65mm 151mm Reference Weight 0.94Kg Case Material 0.94Kg Cycle life >2000 cycles (100% DoD) Electrical Characteristics 2000 cycles (100% DoD) Electrical Characteristics CC/CV Charge method CC/CV Charge voltage Range 14.3~14.6V Max.continuous Discharge Current 10A Max.continuous Charge Current 7A Discharge Pulse Current (10 sec) 20A End of Discharge Voltage 10V Operation Environment 0°C~55°C Discharge Temperature 0°C~60°C Storage Temperature -20°C~60°C	Typical energy		89.6Wh
Length Width Height94mm 65mm 151mmReference Weight0.94KgCase Material0.94KgCase MaterialABSCycle life>2000 cycles (100% DoD)Electrical CharacteristicsCharge methodCC/CVCharge nethodCC/CVCharge voltage Range14.3~14.6VMax.continuous Discharge Current10AMax.continuous Charge Current7ADischarge Pulse Current (10 sec)20AEnd of Discharge Voltage10VOperation Environment0°C~55°CDischarge Temperature0°C~60°CStorage Temperature-20°C~60°C	Cells type/chemistry		Prismatic-LiFePO ₄
DimensionsWidth Height65mm 151mmReference Weight0.94KgCase MaterialABSCycle life>2000 cycles (100% DoD)Electrical CharacteristicsCharge methodCC/CVCharge methodCC/CVCharge voltage Range14.3~14.6VMax.continuous Discharge Current7ADischarge Pulse Current (10 sec)200AEnd of Discharge Voltage10VOperation Environment0°C~55°CDischarge Temperature-20°C~60°CStorage Temperature-20°C~60°C	Gravimetic Energy density		95.4Wh/Kg
Case MaterialABSCycle life>2000 cycles (100% DoD)Electrical CharacteristicsCC/CVCharge methodCC/CVCharge voltage Range14.3~14.6VMax.continuous Discharge Current10AMax.continuous Charge Current (10 sec)20ADischarge Voltage10VOperation Environment0°C~55°CDischarge Temperature-20°C~60°CStorage Temperature-20°C~60°C	Dimensions	Width	65mm
Cycle life>2000 cycles (100% DoD)Electrical CharacteristicsCC/CVCharge methodCC/CVCharge voltage Range14.3~14.6VMax.continuous Discharge Current10AMax.continuous Charge Current7ADischarge Pulse Current (10 sec)20AEnd of Discharge Voltage10VOperation EnvironmentCharge Temperature0°C~55°CDischarge Temperature-20°C~60°CStorage Temperature-20°C~60°C	Reference Weight		0.94Kg
Electrical CharacteristicsCharge methodCC/CVCharge voltage Range14.3~14.6VMax.continuous Discharge Current10AMax.continuous Charge Current7ADischarge Pulse Current (10 sec)20AEnd of Discharge Voltage10VOperation EnvironmentCharge Temperature0°C~55°CDischarge Temperature-20°C~60°CStorage Temperature-20°C~60°C	Case Material		ABS
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Max.continuous Charge Current7ADischarge Pulse Current (10 sec)20AEnd of Discharge Voltage10VOperation Environment0°C~55°CCharge Temperature0°C~55°CDischarge Temperature-20°C~60°CStorage Temperature-20°C~60°C	Charge voltage Range		14.3~14.6V
Discharge Pulse Current (10 sec) 20A End of Discharge Voltage 10V Operation Environment Charge Temperature 0°C~55°C Discharge Temperature -20°C~60°C Storage Temperature -20°C~60°C	Max.continuous Discharge Current		10A
End of Discharge Voltage 10V Operation Environment 0°C~55°C Discharge Temperature 0°C~60°C Storage Temperature -20°C~60°C	Max.continuous Charge Current		7A
Operation Environment Charge Temperature 0°C~55°C Discharge Temperature -20°C~60°C Storage Temperature -20°C~60°C	Discharge Pulse Current (10 sec)		20A
Charge Temperature0°C~55°CDischarge Temperature-20°C~60°CStorage Temperature-20°C~60°C	End of Discharge Voltage		10V
Discharge Temperature -20°C~60°C Storage Temperature -20°C~60°C	Operation Environment		
Storage Temperature -20°C~60°C	Charge Temperature		0°C~55°C
	Discharge Temperature		-20° ℃ ~60° ℃
Protection Class IP56	Storage Temperature		
	Protection Class		IP56









BMS specifications

ITEM	CONTENT	CRITERION
Voltage	Charging voltage Balance voltage	3.65V/cell 3.45V/cell
Current	Max continues charge current Max continues discharge current	7A 10A
Over charge Protection	Over charge detection voltage Over charge detection delay time Over charge release voltage	3.75±0.05V 1~3S 3.6±0.05V
Over discharge Protection	Over discharge detection voltage Over discharge detection delay time Over discharge release voltage	2.5±0.05V 1~3S 2.70±0.10V
Over current protection	Over discharge current protection Detection delay time1 Over charge current detection current Detection delay time	33A 50~150mS 14A 300~800mS
Short Circuit Protection	Short Circuit Protection Current Detection delay time Release condition	130A,External short circuit 400uS Cut load and charging
Battery temperature	Over-temperature protection Release temperature	65±5℃ 50±5℃

Performance curve

