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TP12100LFP lithium LiFePO₄ battery pack

TOPAK TP series lithium ion battery is a powerful LiFePO, battery product, has the highest capacity in a standard casing 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 has been especially designed to provide energy for RV(Recreational Vehicles), Marine, Energy storage, etc. 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 long life times
- Built-in intelligent BMS to protect the battery pack at any time and prolong its service life
- Maintenance free

Certifications and standards

a.Products

• UL1642(cells)

IEC62619

- FCC
- UN38.3

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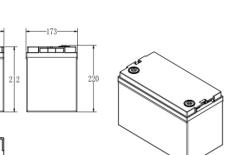
b.MS certifications

- ISO9001
- ISO14001
- OHSAS 18001

Specifications

Nominal Characteristic		
Battery model		TP12100LFP
Nominal voltage		12.8V
Typical capacity		100Ah(25°C,0.2C)
Typical energy		1280Wh
Cells type/chemistry		Prismatic-LiFePO₄
Gravimetic Energy density		116Wh/Kg
Dimensions	Length Width Height	330mm 173mm 220mm
Reference Weight		11Kg
Case Material		ABS
Cycle life		>2000 cycles(100% DoD)
Electric Characristics		
Charge method		CC/CV
Charge voltage Range		14.3~14.6V
Max.continuous Discharge Current		100A
Max.continuous Charge Current		80A
Discharge Pulse Current (10 sec)		200A
End of Discharge Voltage		10V
Operation Environment		
Charge Temperature		0°C~55°C
Discharge Temperature		-20℃~60℃
Storage Temperature		-20℃~60℃
Protection Class		IP65







TP12100LFP

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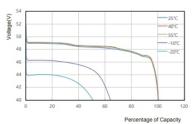


TP12100LFP

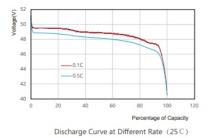
BMS specifications

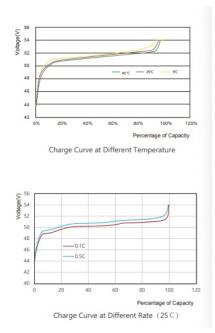
ITEM	CONTENT	CRITERION
Voltage	Charging voltage Balance voltage	3.65V/cell 3.45V/cell
Current	Max continues charge current Max continues discharge current	80A 100A
Over charge Protection	Over charge detection voltage Over charge detection delay time Over charge release voltage	3.75±0.05V 1~3S 3.6±0.05V
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	325A 50~150mS 130A 300~800mS
Short Circuit Protection	Short Circuit Protection Current Detection delay time Release condition	1300A,External short circuit 400uS Cut load and charging
Battery temperature	Over-temperature protection Release temperature	65±5℃ 50±5℃

Performance curve



Discharge Curve at Different Temperature





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TOPAK reserves the right to change specifications or design without notice, please keep in touch with us for the latest information

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