BATWISE®
Smart Energy Smart Solutions

Lithium (LiFePO4) DC GF12-16

Specification

Item		Specifications	
Min capacity		16Ah 0.2C Discharge	
Initial Impedance		≤100mΩ	
Weight Approx.:		2.25KG	
Nominal voltage Fully charge voltage (FC) Fully discharge voltage (FD)		12.8V 14.6V Defined in this DOC: FC = 14.6V 8V Defined in this DOC: FD = 8V	
Standard charge current		0.2C	
Standard charging method		0.2C CC （ constant current ） charge to FC, then CV (constant voltage FC) charge till charge current decline to ≤0. 01C	
Charging time		Standard Charging approx. 8 hours	
Max. Charge current		Constant Current 0.2C Constant Voltage FC 0.01 C cut-off	
Max. Discharge current		Constant current 0.5C end voltage FD	
Standard Discharge Current		Constant current 0.2 C end voltage FD	
Charge cut-off voltage		Ref. 14.6 VDET4	
Discharge cut-off Voltage		Ref. 8 VDET4	
Storage temperature	-10℃~60℃	≤1 month	Percentage of recoverable capacity no less than 80% of the initial capacities
	-10℃~45℃	≤3 month	
	-10℃~28℃	≤1 year	
Recoverable capacity		Constant current 0.2C charge to FC, then constant voltage FC charge to current declines to 0.01C, rest for 10min， constant current 0.2C discharge to FD， rest for 10min. Repeat above steps 3 times, recording the maximum capacity.	
Storage Humidity		≤75% RH	
Appearance		Without distortion and leakage	
Standard testing condition		Temperature： 23±5℃ Humidity：≤75%RH Atmospheric Pressure： 86-106 K pa	

Operating temperature: charging 0℃~45℃；Discharging：-10℃~60℃
If the working condition is out of Standard testing condition, the performance will be some shift.

General Performance

Item	Test Methods and Condition	Criteria
0.2C Capacity	At standard testing condition，after standard charging, rest battery for 10min, then discharging at 0.2C to voltage FD, recording the discharging time.	≥300min
0.3C Capacity	At standard testing condition，after standard charging, rest battery for 10min, then discharging at 0.3C to voltage FD, recording the discharging Capacity	≥175min
Cycle Life	At standard testing condition，constant current 0.2C charge to FC, then constant voltage charge to current declines to 0.01C, rest 10min，constant current 0.2C discharge to FD，rest 10min. Repeat above steps till continuously discharging capacity Higher than 80% of the Initial Capacities of the Cells	≥2000 times
Capability of keeping electricity	At standard testing condition，After standard charging, no outer loading circuit, rest the pack 28days, discharging at 0.2C to voltage FD, recording the discharging time.	≥240min