



Lithium Battery Series

BK LFP12-150(12.8V150Ah)



Baykee lithium series batteries provide superior performance, capacities and reliability. Using state of high power cell technology, the lithium series is designed for environmentally sensitive areas that require enhanced cycle life capabilities in commercial.

Baykee lithium batteries are widely used in industrial, residential, commercial and private applications. The maintenance free construction and advanced design features makes the lithium series the definitive choice for a wide variety of markets. Like solar and renewable energy storage, electric vehicle, golf cart and industrial equipment, floor machines, forklifts, aerial lifts, and robotics; marine, RV, and no-idle solution; Mobility and Medical Equipment; Telecom, Broadband and Cable TV; UPS systems

Applications



BATTERY SPECIFICATIONS

Battery type-Chemistry	LiFePO4
Nominal Voltage	12.8 V
Nominal Capacity	150 Ah
Energy Density	1920 Wh
Dimensions(LxWxH)	483*170*240 mm
Weight	16.8 KGS
Terminal Type	M8
Terminal Torque	12.4 NM
Case Material	ABS
BMS build-in	Yes
Internal Resistance	<25 mΩ
Efficiency – round trip	>99.5 %
Self Discharge per Month	<3 %
Cycle life (0.2C, 25°C@100% DOD)	6000 Cycles
Discharge Temperature	(- 20 to 60) °C
Charge Temperature	(0 to 45) °C
Storage Temperature	(- 10 to 30) °C
Bluetooth(App)	Optional
LCD Screen	Optional
Heating function	Lowest Cell temp < -5 °C and AC power in open heat function

Voltage Window	10.8-14.6 V
Recommend Charge Voltage	14.6 ±0.20V
Max Charge Voltage	14.6 ±0.20V
Recommend Charge current	30 A
Max Continuous Current	75 A
Recommend Discharge voltage	11.2 ±0.20V
Max Discharging Voltage	10.8 ±0.20V
Max Continuous Discharge current	150 A
Peak Discharge Current	250 A(5S±3S)

BMS CHARACTERISTICS

Single charge current	Current :160A	Delay Time: 1000ms
Secondary charge current	Current :230A	Delay Time: 500ms
Single discharge current	Current :250A	Delay Time: 5s ±3s
Secondary discharge current	Current :250A	Delay Time: 3s ±2s
Over charge Voltage protection (cell)	Voltage :3.75V	Delay Time: 500ms
Over Discharge Voltage protection (cell)	Voltage :2.2V	Delay Time: 500ms
Temperature Protection	PCB temperature ≥95 °C	Recover ≤85 °C
The maximum number of strings supported by the battery pack	≤4PCS	
The maximum number of battery packs supported in parallel	Increase capacity without increasing current	

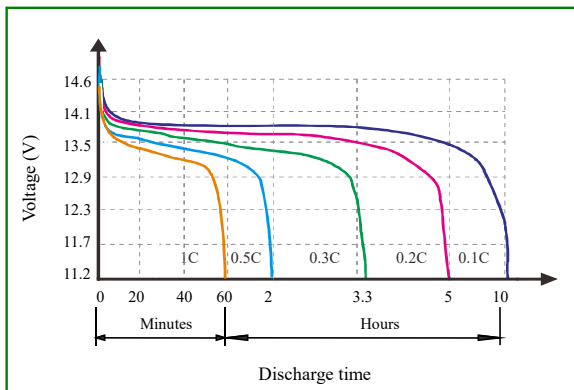
Constant Current Discharge Data (Amperes @ 25°C)

Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (10.8V)	150A	75A	50A	37.5A	30A	15A	7.5A

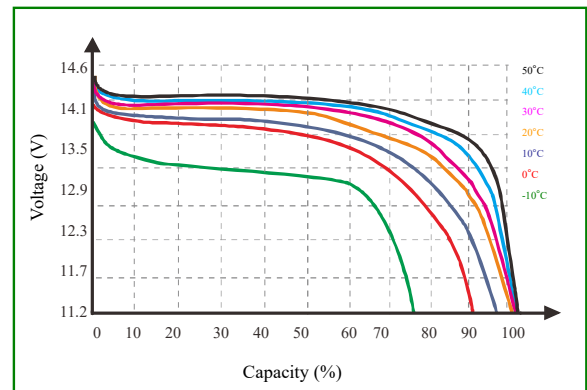
Constant Power Discharge Data (Watts @ 25°C)

Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (10.8V)	1920	960W	640W	480W	384W	192W	96W

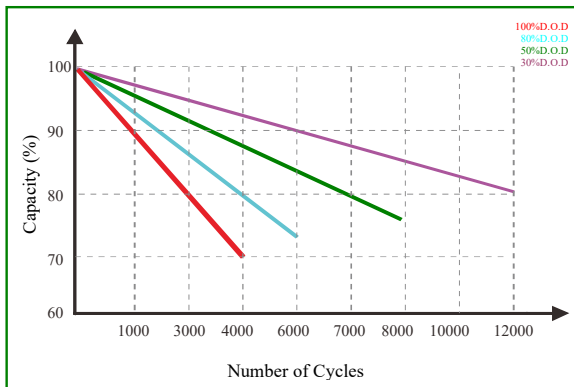
Discharge characteristics (25°C)



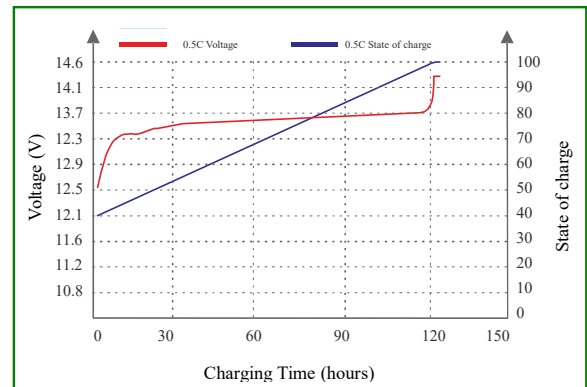
State of Charge Curve (0.5C, 25°C)



Different DOD Discharge cycle life Curve 0.2C 25°C



Different Temperature Discharge Curve (0.5C)



Note 1: Please always refer to the latest edition of our technical manual that published on our website to ensure safe and efficient operation.

Note 2: When make parallel connection, please full discharge batteries, then recharge after parallel connected; when series connect, please keep batteries with same remain capacity/

Note 3: Parallel connection is only for longer backup time, not for larger output power.