

BK-BFP Series

Lithium-ion battery pack for communication backup system and UPS system



Main Features

- High energy density, small size, light weight, excellent safety performance and high reliability, long calendar life, with intelligent management system, green energy.
- Short-term backup application can be configured.
- Less 1 hours backup time can be configured.
- Super low temperature charge and discharge performance, can achieve ultra low temperature charging.
- Long cycle life (see technical data sheet).
- Battery Management System (BMS) with multiple protection functions, protection, high temperature protection, short circuit protection, built-in fuses, etc.)
- Communication between lithium battery pack and equipment (CAN communication interface).
- Battery system operation alarm, alarm local display and reporting function.
- Battery management system with self-diagnostics.
- Feasible storage records 30 days of historical data.
- Can be in parallel to expand capacity.
- LCD display is optional.

Application Area

- UPS/ Inverter power
- Center room
- High-voltage DC backup power supply
- Communication indoor and outdoor base station
- Other communication backup power areas

Lithium Battery Pack Technical Parameters

Battery Module Specification		
Lithium Battery Module Model	MFP48100-F	MFP9643-F
Cell Specification	50Ah	43Ah
Nominal Capacity (C)	100Ah	43Ah
Dimension(L*W*H)MM/Weight	444*430*131mm/45Kg	444*430*131mm/45Kg
Standard Charge Current	0.5C	1C
Maximum Continuous Charge Current	1C	2C
Standard Discharge Current	1C	2C
Absolute Charging Temperature	0~60°C	-30°C~60°C
Absolute Discharge Temperature	-20°C~60°C	-35°C~60°C
Storage Temperature	-40°C~60°C	-40°C~60°C
Storage Humidity	RH 0%~90%, Non-condensing	
Cycle Service Life	≥2000 cycles, According to the standard charge and discharge cycle (25°C environment, 1C/1C), the capacity is attenuated to 80% of the nominal capacity.	≥4500 cycles, According to the standard charge and discharge cycle (25°C environment, 1C/1C), the capacity is attenuated to 80% of the nominal capacity.

High Voltage Control Unit					
Nominal Voltage	CFP19243-T	CFP192100-T	CFP240100-T	CFP38443-T	CFP384100-T
Charge Cut-off Voltage	192V	192V	240V	384V	384V
Discharge Cut-off Voltage	219V	219V	273.75V	438V	438V
Charging Current Limiting	168V	168V	210V	336V	336V
High Voltage Control Unit	43A	50A	50A	43A	50A

BMS (Lithium Battery Manage System) Function	Protection: Total voltage overvoltage protection, Single cell voltage overvoltage protection, Total voltage undervoltage protection, Single cell voltage undervoltage protection, Charging overcurrent protection, Discharge overcurrent protection, Over temperature protection.
	Monitoring: 1.Detection of single cell voltage; 2.Detection of battery cell temperature; 3.Detection of total current of battery pack; 4.Detection of total battery voltage; 5.Insulation monitoring; 6.SOC, SOH estimation.
	Control: 1.Digital output expansion, digital input detection (provide 6 lines of dry contact control, 2 lines of OC output control, 4 lines of DI signal detection); 2.Equalization control (passive equalization, equalization current > 50mA).
	Storage: Information storage (SOC, SOH, fault code, single cellcollected data, temperature collected data, total voltage, total current and so on real-time data, andhistorical alarms and critical faults information).
	Feedback: Diagnose and alarm for the battery faults such as overvoltage, undervoltage, overcurrent, overtemperature, SOC too low or too high, and consistency faults.

BMS (Lithium Battery Manage System) Function	Application: Can be single cluster use, or multi-clusters of battery packs in parallel use,and can realize 8 clustersin parallelconnected(multiple clusters are recommended to increase PCS)
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Lithium Battery Pack General Specifcation						
Model	BFP48100-FT	BFP19243-FT	BFP192100-FT	BFP240100-FT	BFP38443-FT	BFP384100-FT
Configuration Module	NO	MFP9643-F*2	MFP48100-F*4	MFP48100-F*5	MFP9643-F*4	MFP48100-F*8
Configuration High Voltage Control Unit	NO	CFP19243-T	CFP192100-T	CFP240100-T	CFP38443-T	CFP384100-T
Weight (Kg)	45Kg	110Kg	200Kg	250Kg	200Kg	380Kg
Network Cabinet Size (mm)(optional)	444*430*131	600*600*1000		600*600*1200		600*600*1800