## FlexCombi LiBatt 48V80Ah

Rating: 48 V

Capacity: 80AH

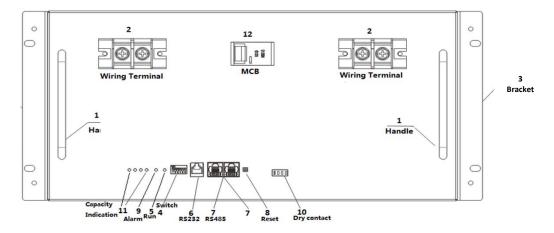
**Configuration:** Rackmount

PowerHub FlexCombi LiBatt 48V80Ah is a lithium-iron phosphate (LiFePO) battery unit with battery management system (BMS) that is used in conjunction with an external inverter or rectifier. The battery unit can be connected in parallel for up to 40 kWh per battery cabinet (where applicable). This battery can be used as an off grid solution but also in a grid tied solution for energy storage or self consumption.



## **General Features:**

- RS485/RS232 Communication Output for monitoring
- Built-in BMS/PCM with charging current limitation
- Built-in automatic protection for over-charge, over-discharge and over temperature conditions
- Internal cell balancing
- Compatible with standard telecom rectifiers and Energy storage system
- Battery capacity indication



Item	Name	Description
1	Handle	For handling during installation
2	Wiring terminal	Output Terminals
3	Bracket	For mounting on the 19 inch rack
4	Switch	Assigning address when battery packs are connected
		in parallel (For communication purpose)
5	Run	LED Status
6	RS232	System communication RS232 interface
7	RS485	System communication RS485 interface
8	Reset	Restore default settings
9	Alarm	Alarm indication when system is abnormal
10	Dry Contact	For dry contact alarms
11	Capacity Indication	Battery capacity estimation
12	MCB	Short Circuit Protection

General Info	Specifications	Remarks
Rated Capacity	80Ah	
Rated Voltage	51.2V	
Rated Power	4096Wh	
Max Charge voltage	56.8V	Constant Current Charging to Constant Voltage Charging Voltage
Min Discharge voltage	44.0V	
Standard charge current	15A	
Standard Discharge current	15A	
Maximum continuous charging	204	
current	39A	
Maximum continuous discharge	39A	
current	JAA	
Cycle life	>2000 times	80%DOD@ 0.2C
Weight	38Kg	
Dimension	483(L)×421(W)×192(H) mm	
Morking tomporative	Charge 0°C ~ 45°C	
Working temperature	Discharge, -10°C ~ 55°C	
	-20 ~ 45℃	≤1 month
Storage temperature	-20 ~ 35℃	≤ 3 month
Storage temperature	-20 ~ 25℃	≤ 12 month
	0~25℃	>12 month

PCM Parameter(s)	Details	Reference value
	Units over-charge alarm voltage	3.60±0.02V
Over charge Protection	System over-charge alarm voltage	57.6±0.5V
over charge rrocection	Units over-charge detection voltage	3.65±0.02V
	System over-charge detection voltage	58.4±0.5V
	Units over dis-charge alarm voltage	2.70±0.02V
Over discharge protection	System over dis-charge alarm voltage	43.5±0.5V
Over discharge protection	Units over dis-charge detection voltage	2.5±0.02V
	System over dis-charge detection voltage	30.0±0.5V
	Charging Over-current Alarm Current	40A±0.5A
	Discharge Over current Alarm Current	40A±0.5A
	Discharge Over current Protection Current	55A±0.5A
	Discharge over current detection delay time	1S
Over Current protection	Discharge Over current Protection release	Delayed recovery
	Conditions	Delayed recovery
	Charging Over current Protection Current	48A±0.5A
	Charging Over current Detection Delay Time	1S
	Charging Over current Protection release Conditions	Delayed recovery
	Short protection condition	Outer Circuit Short Circuit
	Detection delay time	≤1mS
		Load disconnection;
Short protection	Resume Condition	If the short circuit is triggered many times,
		it is locked in a protective state. need the
		user to check the external circuit, reset the
		BMS and Resume it.
	Charging High Temperature Protection Temperature	65°C±5°C
	Charging low Temperature Protection Temperature	-15°C±5°C
Temperature protection	Dis-Charging High Temperature Protection	65°C±5°C
	Temperature	65 C±5 C
	Dis-Charging low Temperature Protection	-20°C±5°C
	Temperature	-20 C±3 C
	Open Voltage voltage	$3.40 V \pm 0.02 V$
Balanced	Open Voltage voltage difference	50mV
	Balance current	85mA $\pm$ 20mA
Continuous through surrent	Maximum Continuous Charging and Discharging	204
Continuous through current	Current	39A
Charging current limiting	Need Turn on when parallel use	10A±1A
	RS232	Default baud rate 9600bit/S
Communication	RS485	Default baud rate 9600bit/S
	Working mode	≤50mA
Power consumption	Sleep mode	≤300µA
* Specifications are subject to change without p	· · · · · · · · · · · · · · · · · · ·	_556μ1

<sup>\*</sup> Specifications are subject to change without prior notice

