

# Energy Storage 48V50Ah(3U)

## SCIFP4850 lithium-ion battery system

SCIFP4850, a powerful 48V LiFePO<sub>4</sub> battery product, has been especially designed to provide power backup for off-grid, on-grid and household usage energy storage systems. Its modular design enables parallel installation meeting also the needs for larger power back up.



### Benefits

- Super cycle life time for energy storage application
- Compatible with multiple inverters
- Increased energy in given space
- Easy installation and upscaling
- High operational reliability
- Optimized supervision strategy through remote control/diagnostic
- Built-in intelligent BMS to protect the battery pack at any time and prolong its service life

### Standards

#### a. Product

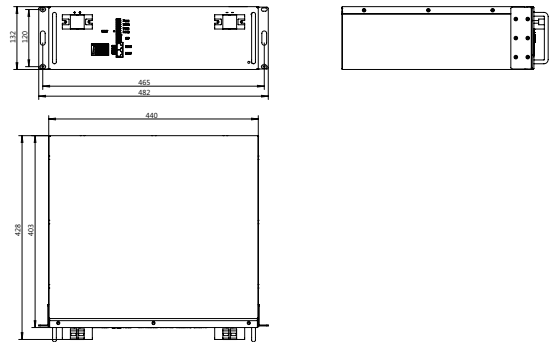
- IEC 60950
- IEC 62321
- IEC 62133
- UN 38.3
- UL 1642
- UL 1973

#### b. MS certification

- ISO 9001
- ISO 14001
- OHSAS 18001

### Specifications

### Drawing

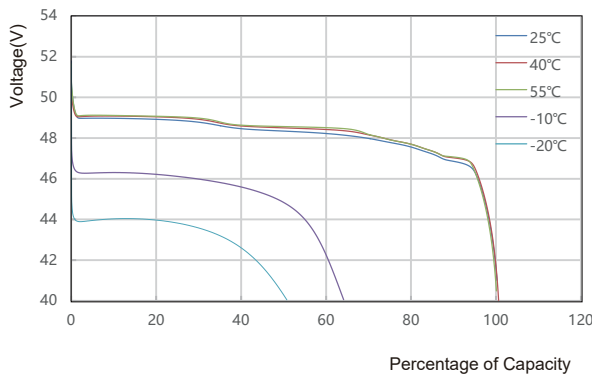


Nominal Characteristics		
Battery Model	SCIFP4850	
Nominal Voltage	48V	
Typical Capacity	50Ah(25 °C,0.2C)	
Typical Energy	2400 Wh	
Volumetric Energy Density	102.5 Wh/dm <sup>3</sup>	
Gravimetric Energy Density	90.6 Wh/kg	
Dimensions	Width	440mm
	Height	132mm(3U)
	Depth	403mm
Reference Weight	26.5Kg	
Electrical Characteristics		
Voltage Window	40.5~54.0V	
Charge Voltage Range	52.5~54.0V	
Max. Permanent Discharge Current	50A	
Max. Permanent Charge Current	50A	
Faradic Charge Efficiency	99% (+20°C)	
Energy Charge Efficiency	94% (+20°C)	
Communication Interface (optional feature)	Modbus/SNMP/TACP	
Additional Features (optional feature)	LCD Display	
Operation Environment		
Charge Temperature	0°C to +55°C	
Discharge Temperature	-20°C to +60°C	
Storage Temperature	-20°C to +60°C	
Protection Class	IP20	

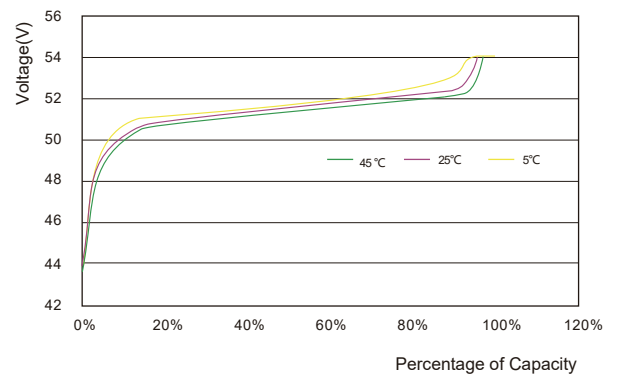
## Discharge Data

Constant Current Discharge Data(25°C)												
Voltage/V	Current/A		0.1C	0.2C	0.3C	0.4C	0.5C	0.6C	0.7C	0.8C	0.9C	1.0C
	Time/h											
45.0			9.560	4.902	3.283	2.442	1.943	1.601	1.369	1.191	1.050	0.950
43.5			10.017	4.993	3.339	2.475	1.978	1.634	1.399	1.210	1.080	0.970
42.0			10.094	5.041	3.374	2.517	2.008	1.654	1.409	1.232	1.090	0.980
40.5			10.201	5.090	3.390	2.533	2.021	1.674	1.420	1.240	1.099	0.989

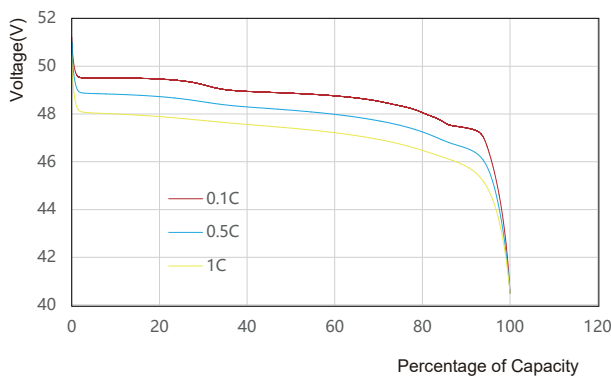
## Performance Curve



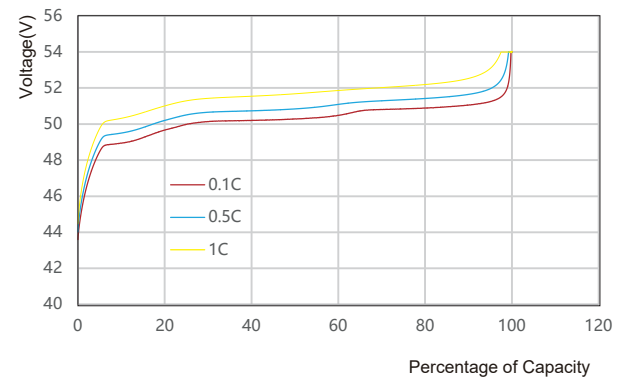
Discharge Curve at Different Temperature



Charge Curve at Different Temperature



Discharge Curve at Different Rate (25°C)



Charge Curve at Different Rate (25°C)

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