



Li-ion Series SCIFP4850(3U) (48V50Ah)

SCIFP4850, a powerful 48V LiFePO₄ battery product, has been especially designed to provide power backup for remote or outdoor telecom sites. Its modular design enables parallel installation meeting also the needs for larger power back up.



Benefits

- Increased energy in given space
- Easy installation and upscaling
- High operational reliability
- Optimized supervision strategy through remote control/diagnostic
- Excellent long life
- 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

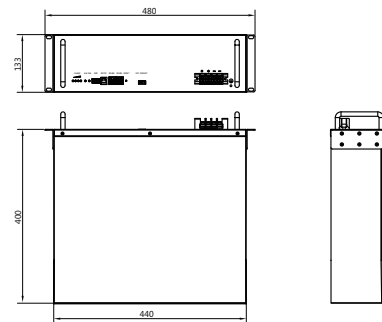
- ISO 9001
- ISO 14001
- OHSAS 18001

Specifications

Applications

- Telecommunications
- UPS
- Off grid storage
- BES systems

Drawing

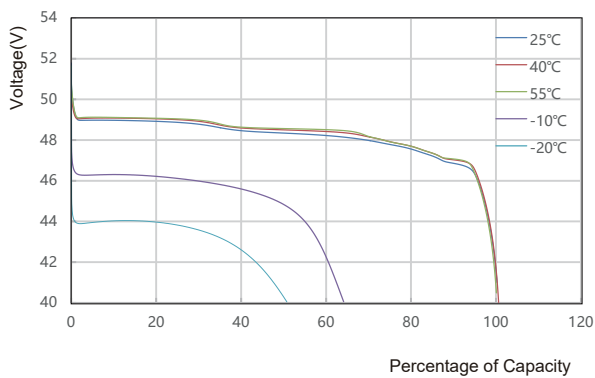


Nominal Characteristics		
Battery Model	SCIFP4850	
Nominal Voltage	48V	
Typical Capacity	50Ah(25°C,0.2C)	
Typical Energy	2400 Wh	
Volumetric Energy Density	102.5 Wh/dm ³	
Gravimetric Energy Density	88.2 Wh/kg	
Dimensions	Width	440mm
	Height	133mm(3U)
	Depth	400mm
Reference Weight	27.2Kg	
Electrical Characteristics		
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	

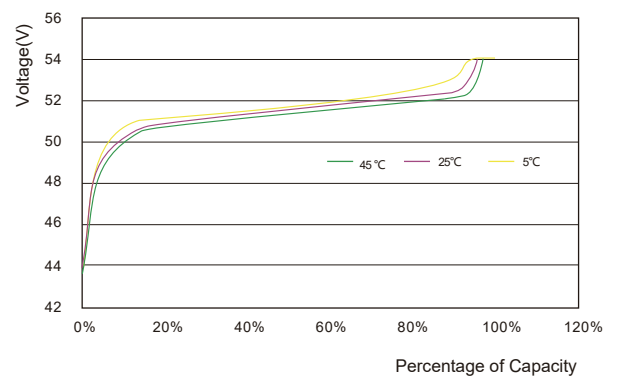
Discharge Data

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

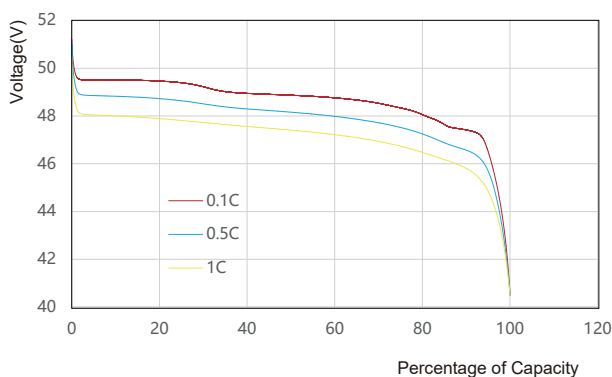
Performance Curve



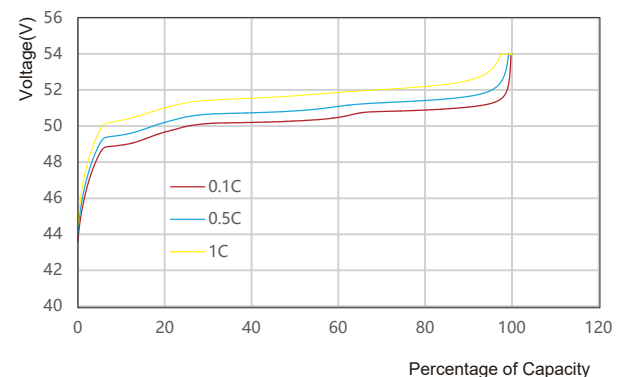
Discharge Curve at Different Temperature



Charge Curve at Different Temperature



Discharge Curve at Different Rate (25°C)



Charge Curve at Different Rate (25°C)

Disclaimer: The manufacturer reserves the right to amend and/or vary the specifications and parameters of the product and apply updates accordingly at any time. It is the sole responsibility of the buyer and user of the product to ensure all applicable product specifications referred to are valid, applicable and up to date at all times. All product specifications are available upon written request to Alpha House Ltd. All batteries must be installed, used and maintained at all times in accordance with standard BS EN IEC 62485-5:2021, and specifically installed, used and maintained at all times in accordance with manufacturer's guidelines and product specification documentation. (All top terminal, front terminal and top vented batteries must be positioned horizontally, plumb and level at all times unless specified otherwise by the manufacturer. Further details are available upon written request to Alpha House Ltd.)