

SmartPower 48V100Ah(3U)

SCIFP48100 lithium-ion battery system

SCIFP48100, a powerful 48V LiFePO₄ battery product, has been especially designed to provide power backup for remote or outdoor telecom sites, 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

- Increased energy in given space
- Easy installation and upscaling
- High operational reliability
- Optimized supervision strategy through remote control/diagnostic
- Excellent long life time
- Built-in intelligent BMS to protect the battery pack at any time and prolong its service life

Standards

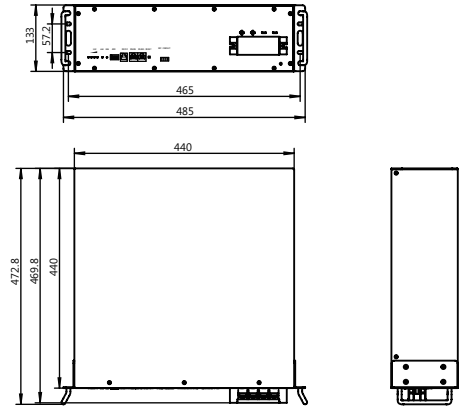
a. Product

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

b. MS certification

- ISO 9001
- ISO 14001
- OHSAS 18001

Drawing



Specifications

Nominal Characteristics

Battery Model	SCIFP48100	
Nominal Voltage	48V	
Typical Capacity	100Ah(25°C,0.2C)	
Typical Energy	4800 Wh	
Volumetric Energy Density	186.4 Wh/dm ³	
Gravimetric Energy Density	118.2 Wh/kg	
Dimensions	Width	440mm
	Height	133mm(3U)
	Depth	440mm
Reference Weight	40.6Kg	

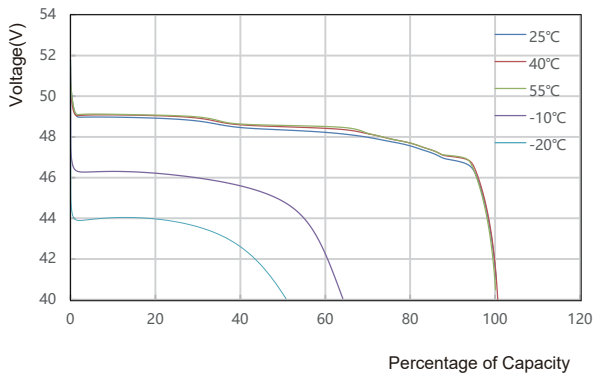
Electrical Characteristics

Voltage Window	40.5~54.0V
Charge Voltage Range	52.5~54.0V
Max. Permanent Discharge Current	100A
Max. Permanent Charge Current	100A
Faradic Charge Efficiency	99% (+20°C)
Energy Charge Efficiency	94% (+20°C)

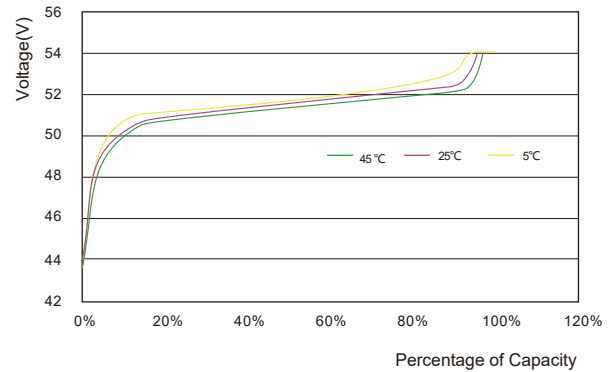
Discharge Data

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

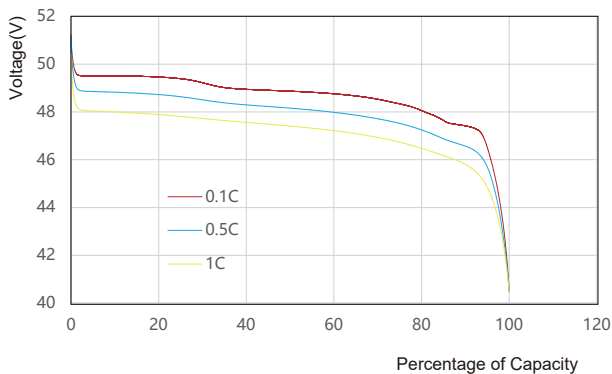
Performance Curve



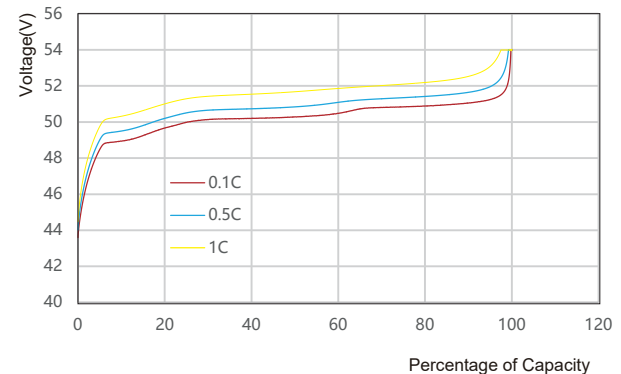
Discharge Curve at Different Temperature



Charge Curve at Different Temperature



Discharge Curve at Different Rate (25°C)



Charge Curve at Different Rate (25°C)