

51V - 4U rack-mount lithium-ion battery system

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

b. MS certification

ISO 9001
ISO 14001



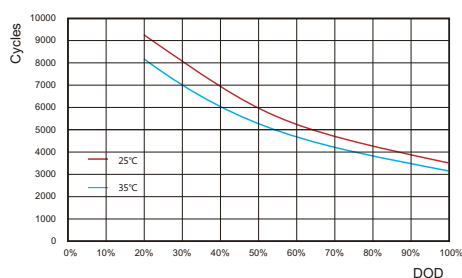
Specifications

Nominal Characteristics		LI-48-100 (51V -100)
Nominal Voltage		51.2V
Typical Capacity		100Ah(25°C)
Typical Energy		5120 Wh
Volumetric Energy Density		122.3 Wh/dm ³
Gravimetric Energy Density		102.1 Wh/kg
Dimensions	Width	442mm
	Height	177mm(4U)
	Depth	490mm
Typical Weight		43Kg
Electrical Characteristics		
Discharge Voltage Range		43.2~46.4V
Charge Voltage Range		56.8~58.4V
Max. Permanent Discharge Current		100A
Max. Permanent Charge Current		100A
Faradic Charge Efficiency		99% (+20°C)
Energy Charge Efficiency		94% (+20°C)
Communication Interface (optional feature)		Can2.0/RS232/RS485
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

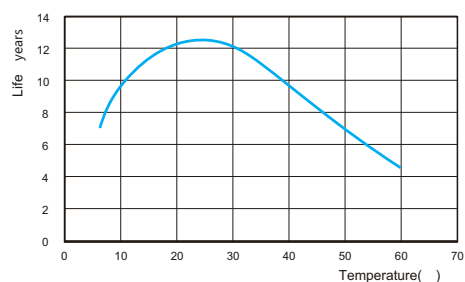
Discharge Data

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		8.333	4.033	2.600	1.908	1.417	1.033	0.754	0.550	0.402	0.293
43.5		9.450	4.658	3.083	2.333	1.842	1.542	1.258	0.967	0.883	0.750
42.0		10.137	5.078	3.377	2.605	2.092	1.700	1.492	1.292	1.150	1.033
40.5		10.183	5.092	3.400	2.625	2.100	1.717	1.500	1.300	1.175	1.042

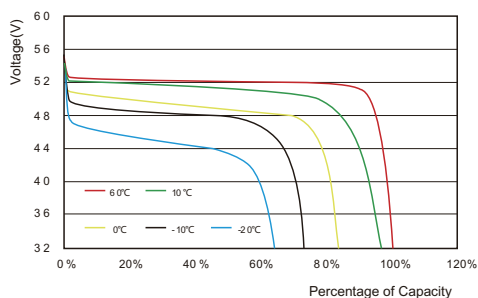
Performance Curve



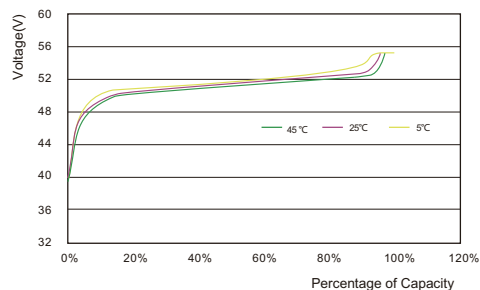
Cycle Life vs. Depth of Discharge (DOD)



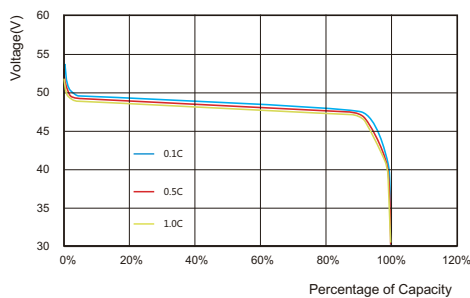
Calendar Life at Different Temperature



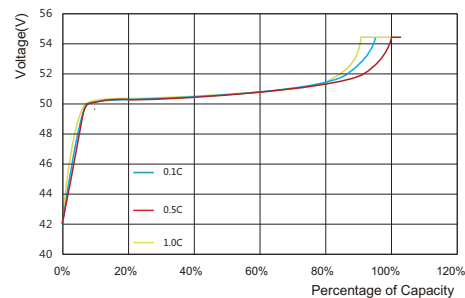
Discharge Curve at Different Temperature



Charge Curve at Different Temperature



Discharge Curve at Different Rate 25



Charge Curve at Different Rate 25