

JLS-LFP4850 48V50Ah

(3U -4850LFP)



Shenzhen GenixGreen Technology Co.,Ltd (Short for GenixGreen) delivers safe lithium iron phosphate (LifePo4) batteries solutions for Telecom Base Application.

Overview

The JLS-LFP 48V50Ah back-up lithium iron phosphate battery system is developed for backup of Telecom equipment.

Under normal condition, grid AC power supply to rectifier module and the Telecom loads and charge battery pack.

When the AC power is off, rectifier module stop power supply and the battery serve for Telecom equipment.

To ensure the Telecom equipment runs normally, when the AC power is switched on again. Power rectifier module

Work for Telecom equipment while charge the battery pack.

Features

- 485/232 communication output for monitoring
- Built-in BMS with Charging current limitation
- Built-in automatic protection for over-charge, over-discharge and over-temperature conditions
- State of charge (SOC)and state of health (SOH)indication
- Built-in battery control for efficient operation
- Internal cell balancing Integrated Smart IC
- Compatible with standard Telecom rectifiers
- 5years Maintenance free

Specification

Specifications		JLS-LFP4850
Voltage		48 V
Nominal Capacity (40°C , 0.5C)		50 Ah
Weight (Approximate)		31.0 ±0.3Kg
Energy	Normal energy (40°C , 0.5C)	2500 Wh
	Volumetric energy density	95Wh/L
	Gravimetric energy density	80Wh/kg
Dimensions (W*D*H)	Width*Depth* Height	483mm*440mm*134.5mm
Standard Discharge 25°C	Max. constant current	50A
	Cut-off voltage	42V
Standard charge 25°C	Charge Voltage	53.5V~54V
	Max. constant current	50A
	Recommended charging current and time	20A(0.4C) for 3 hours
Round trip efficiency(%)		> 98%
Calendar life	25°C	> 5 years
Cycle life (0.5C, 25°C)		60% DOD 4000 cycles
Operating temperature		Charging: 0°C~55°C
		Discharging: -20°C~65°C
Storage temperature		Recommended range: -20°C~55°C

BMS Parameters

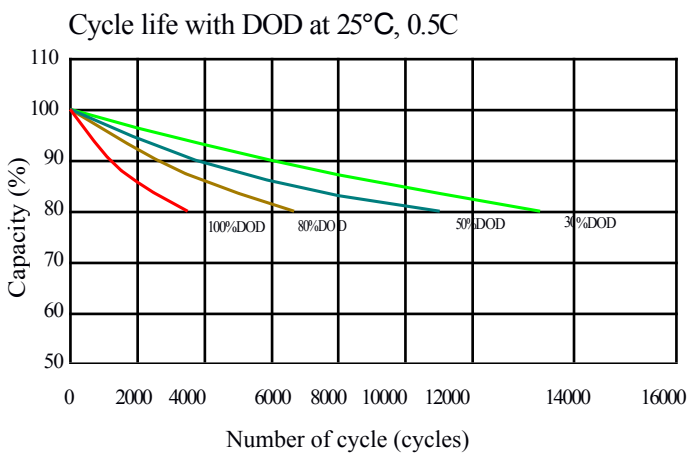
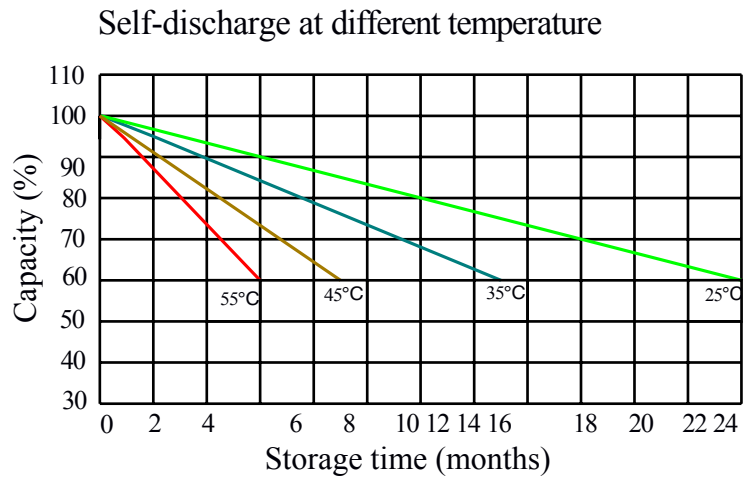
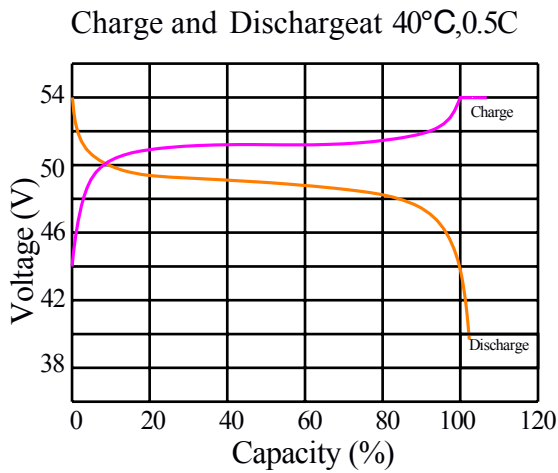
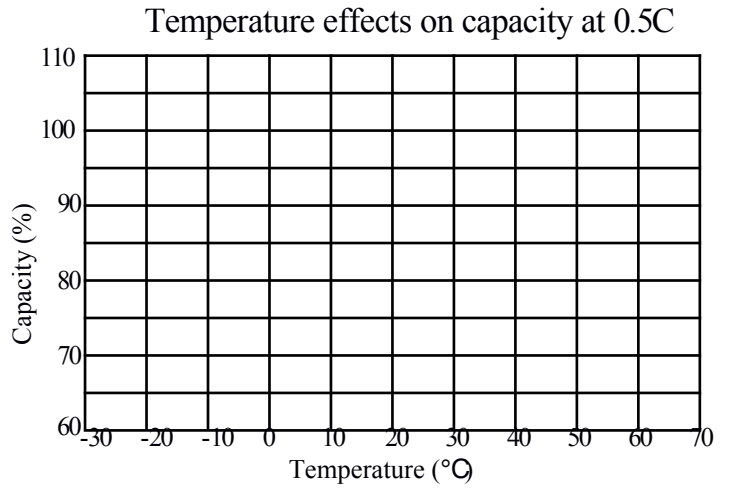
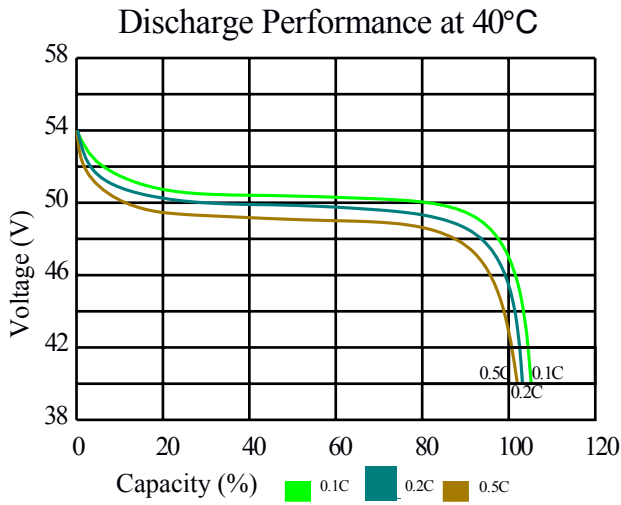
NO.	Type		Function	Criteria	Remarks
				JLS-LFP4850 48V50Ah	
1	Voltage	Charge	Cell Voltage Protection	3.90V Protection	Recover at 3.6V
2			Total Voltage Protection	56.0V Warning/ 57.0V Protection	Recover at 54.0V
3		Discharge	Cell Voltage Protection	2.0V Protection	Recover at 3.1V
4			Total Voltage Protection	43.2V Warning / 42V Protection	Recover at 46.5V
5	Current	Charge	Normal charge current	≤50A	
6		Discharge	Normal discharge current	≤50A	
7			Over Current Protection 1	> 50A and < 100A	Delay 30s ,recovery in every 1min
8			Over Current Protection 2	> 100A and < 200A	Delay 3s ,recovery in every 1min
9			Short Circuit Protection	≥200A	Delay 1mS
10	Temp	Cell Temp 1	Low temp protection	Charging < 0°C Discharging < - 20°C	Delay 1~2S
11		Cell Temp 2	High temp protection	Charging ≥70°C Discharging ≥75°C	Delay 1~2S

12		PCB	Range	$\geq 95^{\circ}\text{C}$	Recovery at 75°C
13	Cell Balance	Balance	Make all cells be balance during charging process. Current: 150mA	$V_{\text{Max.}} \geq 3.40\text{V}$ $V_{\text{Max.}} - V_{\text{Min}} \geq 40\text{mV}$, Start balance	All cell voltages $\leq 3.65\text{V}$ and $V_{\text{Max.}} - V_{\text{Min}} \leq 40\text{mV}$, Stop balance

Battery Status.

- 1. Stop/Transport Mode** - In working mode, press Start/Stop button, battery will go to STOP mode with low self-discharge. At STOP mode, charging MOS and discharging MOS are open. Battery cannot charge, discharge and communicate.
- 2. Working Mode** - At STOP mode, connect the battery to SMPS and press Start/Stop button. Battery will go to working mode. At working mode, BMS will monitor battery voltage, current, temp, and communication and function is available. Charging MOS and discharging MOS are closed, Battery will operate as the settings.
- 3. Sleep Mode** - If the battery voltage below lower than voltage protection after turn on the battery, BMS will go to SLEEP mode in 1 minute. In SLEEP mode, the charging MOS and discharging MOS are closed, BMS will detect the current in every 1 min. If there is charging current connecting, battery will turn to working mode.
- 4. Error Mode** - At working mode, if there is: ①. Battery cells, $\Delta U > 2.5\text{V}$, or ②. Any cell voltage $> 4.1\text{V}$ or $< 0.5\text{V}$, or ③. Battery temp is $< -30^{\circ}\text{C}$ or $+100^{\circ}\text{C}$. BMS will go to error mode. ALM will be bright and other LED will shut down. And go to STOP mode, charging MOS and discharging MOS are open. Need to make troubleshoot.

Performance Curve.



Performance may vary depending on, but not limited to cell usage and application. If cell is used outside specifications, performance will diminish. All specifications are subject to change without notice. All information provided herein is believed, but not guaranteed, to be current and accurate.