BMS Parameters.

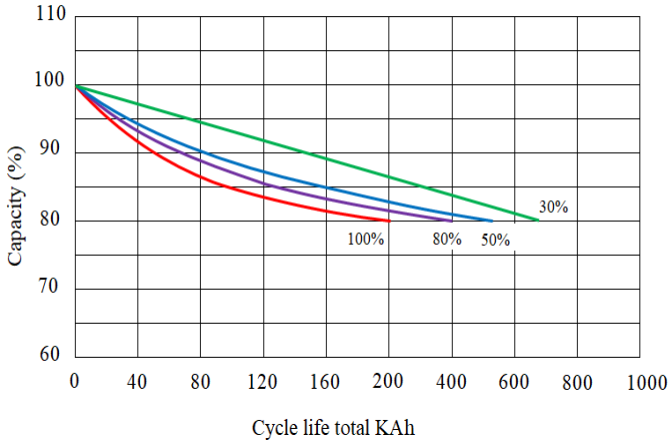
NO.	Type		Function	Setting Value V-LFP48100	Remarks
1	Voltage	Charge	Cell Voltage Protection	3.7V Alarm/3.8V Protection	Recover at 3.6V
2			Total Voltage Protection	56V Alarm/57V Protection	Recover at 54V
3		Discharge	Cell Voltage Protection	2.9V Alarm/2.8V Protection	Recover at 3.1V
4			Total Voltage Protection	43.2V Alarm/42V Protection	Recover at 45V
5	Current	Charge	Normal	≤100A	
6		Discharge	Normal	≤100A	
7			Over Current Protection 1	Alarm＞101A / Protection＞120A	Delay 20s ,recovery in every 1min
			Over Current Protection 2	＞150A and ＜300A	Delay 3s ,recovery in every 1min
8			Short Circuit Protection	≥300A	Delay 300uS
9	Temp	Cell Temp	Low temp protection	Charging ＜ -10℃ Discharging ＜ - 20℃	Delay 1~2S
10			High temp protection	Charging: Alarm＞65℃ /70℃ Protection Discharging: Alarm＞70℃ /75℃Protection	Delay 1~2S
11		PCB	High temp protection	Alarm＞90℃/＞ 115℃Protection	Recovery at 85℃
12	Cell Balance	Balance	Make all cells be balance during charging process. Current: 150mA	$V_{Max.}$≥3.40V and $V_{Max.}$ - V_{Min}≥40mV, Start balance	All cell voltages＜3.4V or $V_{Max.}$ - V_{Min}≤40mV, or discharge Stop balance

Battery Status.

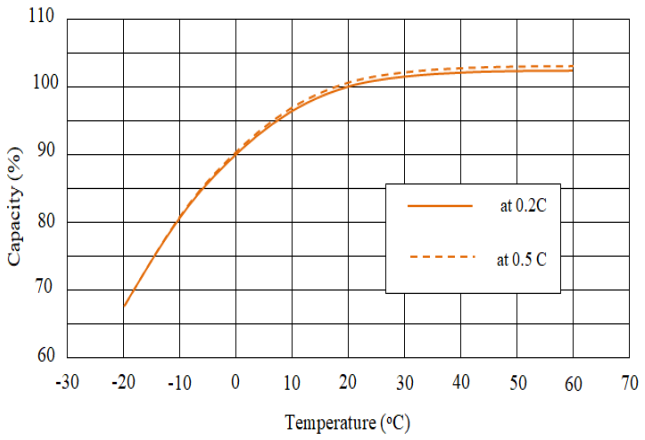
1. **Stop/Transport Mode**. In working mode, press Start/Stop button, Battery will go to STOP mode with low self-discharge. In STOP mode, charging MOS and discharging MOS are open, battery cannot charge, discharge or communicate.
2. **Working Mode**. In STOP mode, connect the battery to SMPS, press Start/Stop button, battery will go to working mode. In working mode, BMS will monitor battery voltage, current, and temp, and communication is available, charging MOS and discharging MOS are closed, Battery will operate as the settings.
3. **Sleep Mode**. After turn on the battery, if the battery voltage below low voltage protection, BMS will go to sleep mode in 1 minute. In sleep mode, charging MOS and discharging MOS are closed, BMS will check the current in every 1 min, if there is charging current connecting, battery will turn to working mode.
4. **Error Mode**. In working mode, if there is: ①.Battery cells, ΔU>1V, or ②.Any cell voltage＞3.9V or ＜2.3V, or ③. Battery temp is ＜-20℃ or +75℃. BMS will go to error mode, ALM will 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.

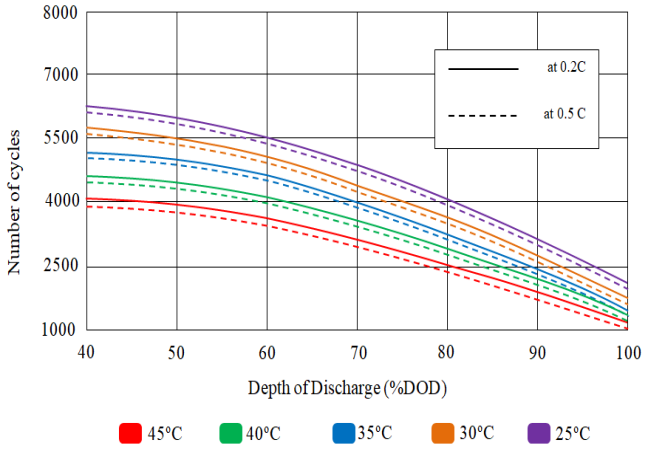
Cycle life total capacity with DOD at 25°C



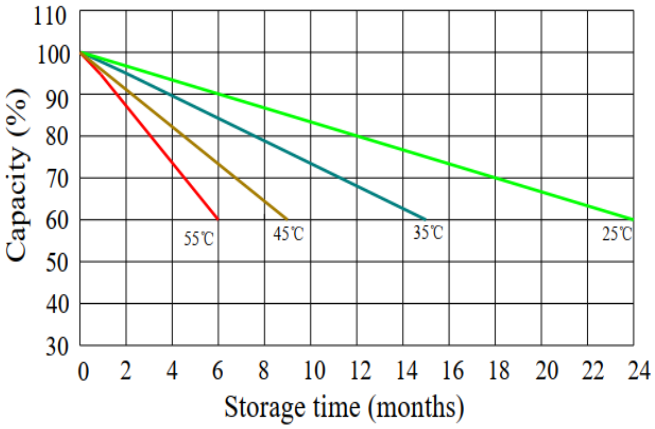
Temperature effects on capacity



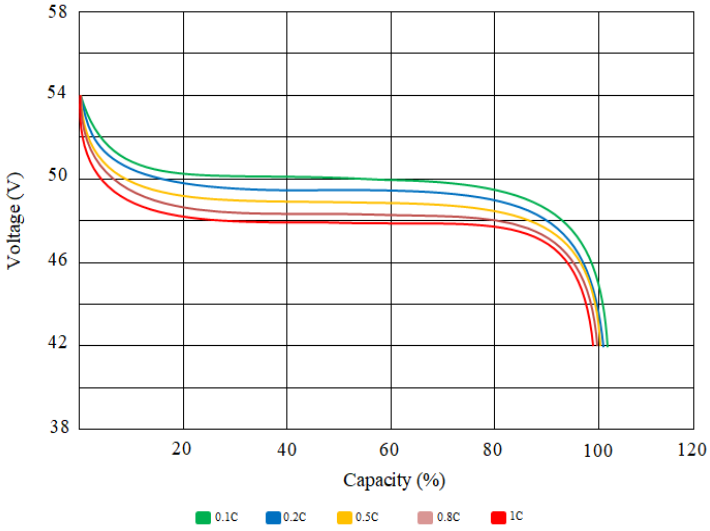
Cycle life versus depth of discharge and temperature



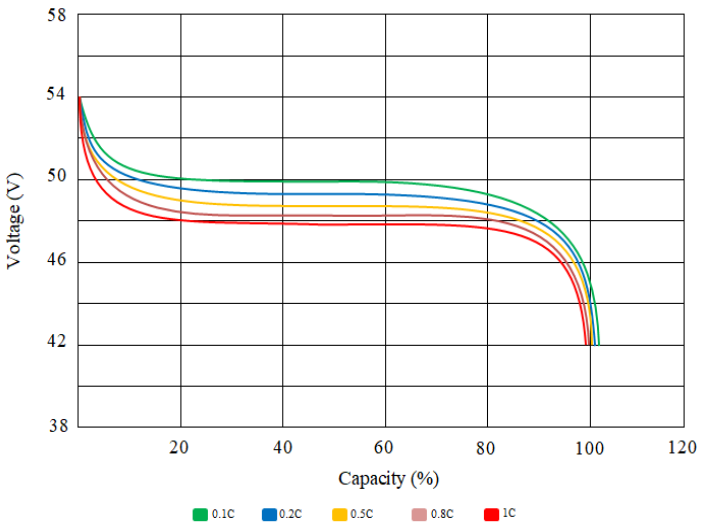
Self-discharge at different temperature



Discharge Performance at 25°C



Discharge Performance at 45°C



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.