

SLPO48-200(LiFePO₄ 48V200AH Battery)

General Information

SLPO series is a LiFePO₄(lithium iron phosphate)battery pack for communications standby application. The battery pack adopts the advanced LiFePO₄ battery technology with the advantages of long cycle life, small size, lightweight, safety and environmental protection, and also has a strong environmental adaptability. It is ideal for harsh outdoor environments.

The battery pack integrates a smart battery management and monitoring module, support for remote centralized monitoring and remote battery management and maintenance, to satisfy the demands of unattended. Therefore, the SLPO series can fully meet the backup power supply requirements of the access network equipment, mobile communication equipment, transmission equipment, micro base station, and microwave communication equipment.



Key Features

※ **Super long cycle life**

Over 4000 cycle at 80% DOD at 25°C can be circularly used.

※ **Communication port**

Many different communication interfaces including 3 of dry contacts, RS232 and RS485, which can meet requirement of several packages to connect in parallel.

※ **Fast charge capability**

Very fast charging capability up to 50A.

※ **Low self discharge**

<1% per month @ 20°C.

※ **Long Life**

12 years design life @ 40°C.

※ **Completely maintenance-free**

Completely Maintenance-free throughout battery lifetime saves OPEX for the users.

※ **High safety & stable performance**

No explosion and no fire under collision. No risk of leakage.

※ **Intelligent Integrated Battery Manage System(BMS)**

Built-in BMS automatically monitors and equalizes internal cells, protects the cells from over-charge, over-discharge, over-temperature, short-circuit, etc, which ensures safety and reliability and prolongs the service life. The data collected by the BMS such as SOC, voltage, current, temperatures and alarms (if any) can be displayed on the LCD screen.

※ **LCD display status and alarm indication**

※ **In compliance with standard**

UN38.3, CE, IEC.

※ **Green environmental material**

Eco-friendly and nonpolluting, no acids or no hazardous and noxious substances (including lead, cadmium, mercury).

※ **Designed to be convenient for various installation scenarios**

The battery shell is equipped with feets and movable hanging ears. Clients can place the battery vertically to look down on the display screen, or use the hanging ears to install the battery on the battery rack.

Application

§ UPS and Backup System
§ Telecommunication Base Station
§ Marine Transport and Fishing

§ Transmission and Distribution Backup
§ Wind Generator and Solar Power Energy Storage

§ Military Equipment
§ Electric Vehicles

Battery Group Specification

Cell	Model	50160118
	Capacity (0.5C)	100Ah
	Rated Voltage	3.2V
	Typical Impedance	≤0.5mΩ
	Battery Material	LiFePO4
BMS	Single Cell Over-charge Cut-off Voltage	3.75V
	Over-charge Release Voltage	3.45V
	Single Cell Under-discharge Cut-off Voltage	2.5V
	Discharge Release Voltage	2.8V
	Over-discharge Cut-off Current	>105A
	Over-discharge Cut-off Current Delay	3S
	Short-circuit Protection	>200A
	Condition for the Recovery of Over-current and Short-circuit	<1mS Delay 5S recovery
	Balance Current	100mA
	Balance Condition	Single cell voltage is higher than 3.5V and the voltage difference between each cell is higher than 50mV.
	Communication Procotol	RS485/CAN/RS232
	Combination Method	15S2P
	Nominal Capacity	200Ah
Pack	Nominal Voltage	48V
	Max. Charge Voltage	54V
	Discharge Cut-off voltage	37.5V
	Max. Charge Current	100A
	Max. Discharge Current	100A
	Standard Charging Current	50A
	Standard Discharge Current	50A
	Pack Impedance Standard	<100mΩ
	Weight (Approx.)	85Kg
	Max.Dimension (L*W*H)	620*440(483)*220mm
	Cycle Life	4000 time at 80% Capacity at 25°C
	Operating temperature	Charge temperature 0~55°C
		Discharge temperature -20~60°C
		Storage temperature -20~45°C

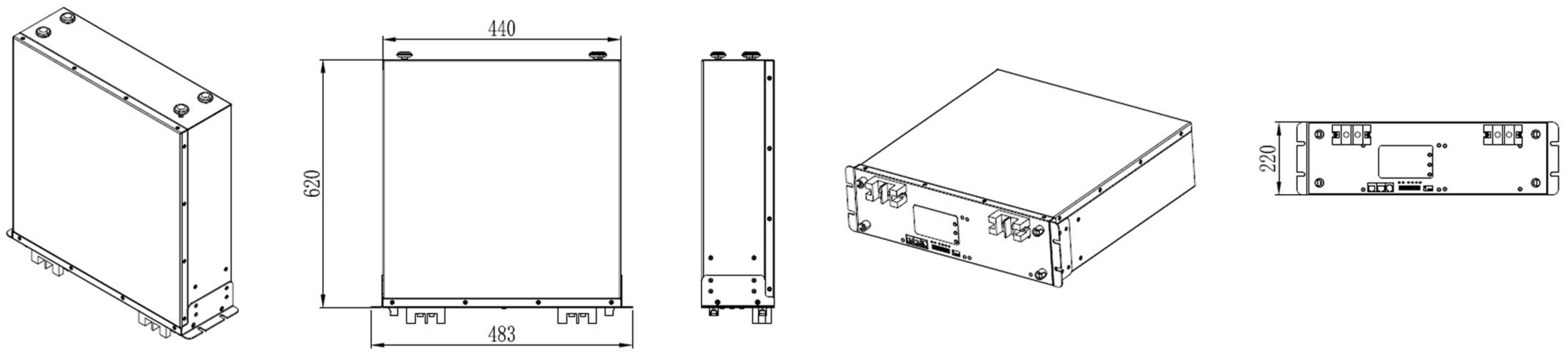
Cell - Constant Current Discharge (Amperes at 25°C/77°F)

Time	1h	2h	4h	6h	8h	10h
Current	200	100	50	33.4	25	20

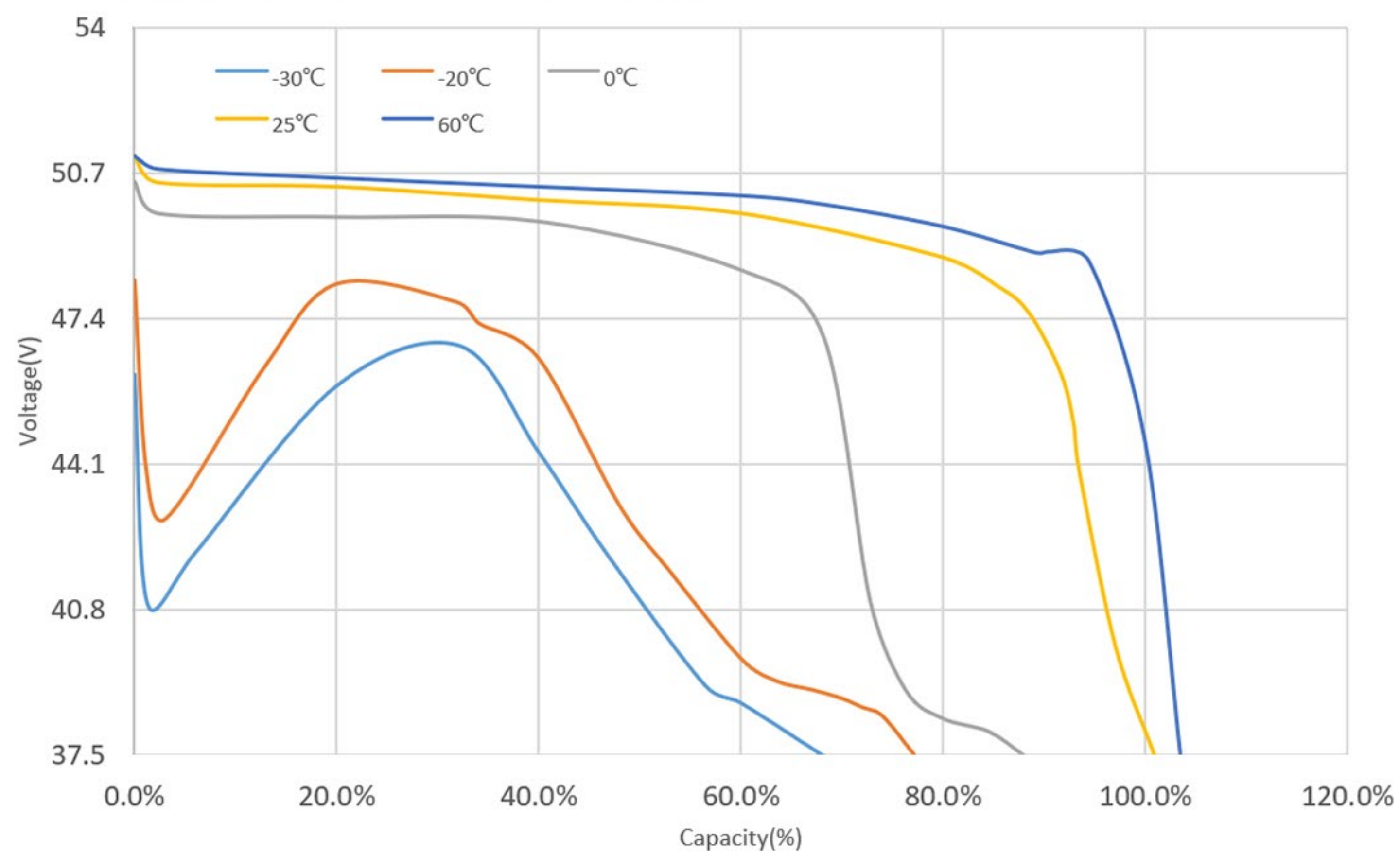
Cell - Constant Power Discharge (Watts per cell at 25°C/77°F)

Time	1h	2h	4h	6h	8h	10h
Watt	960	480	240	160	120	96

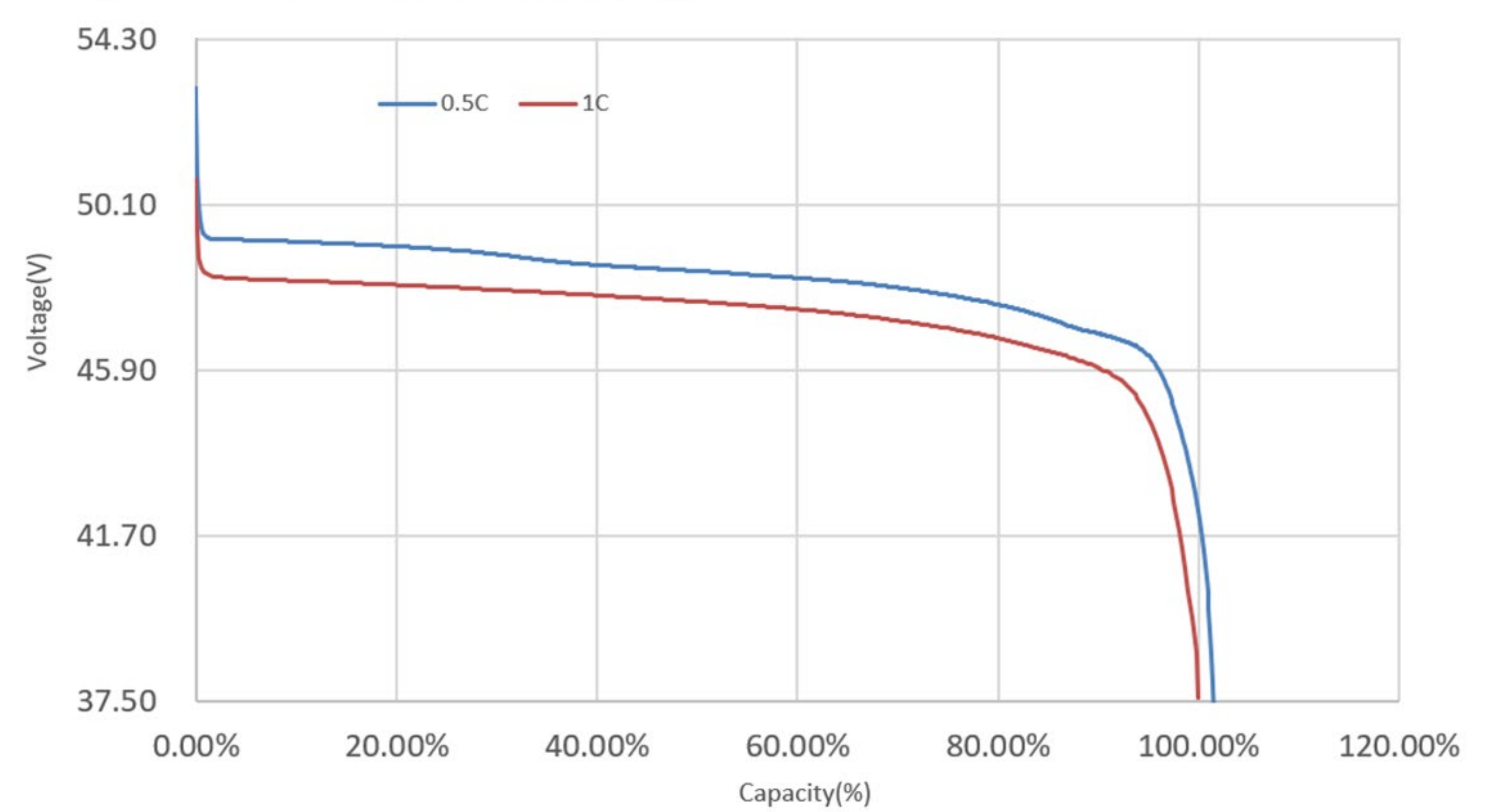
Dimension



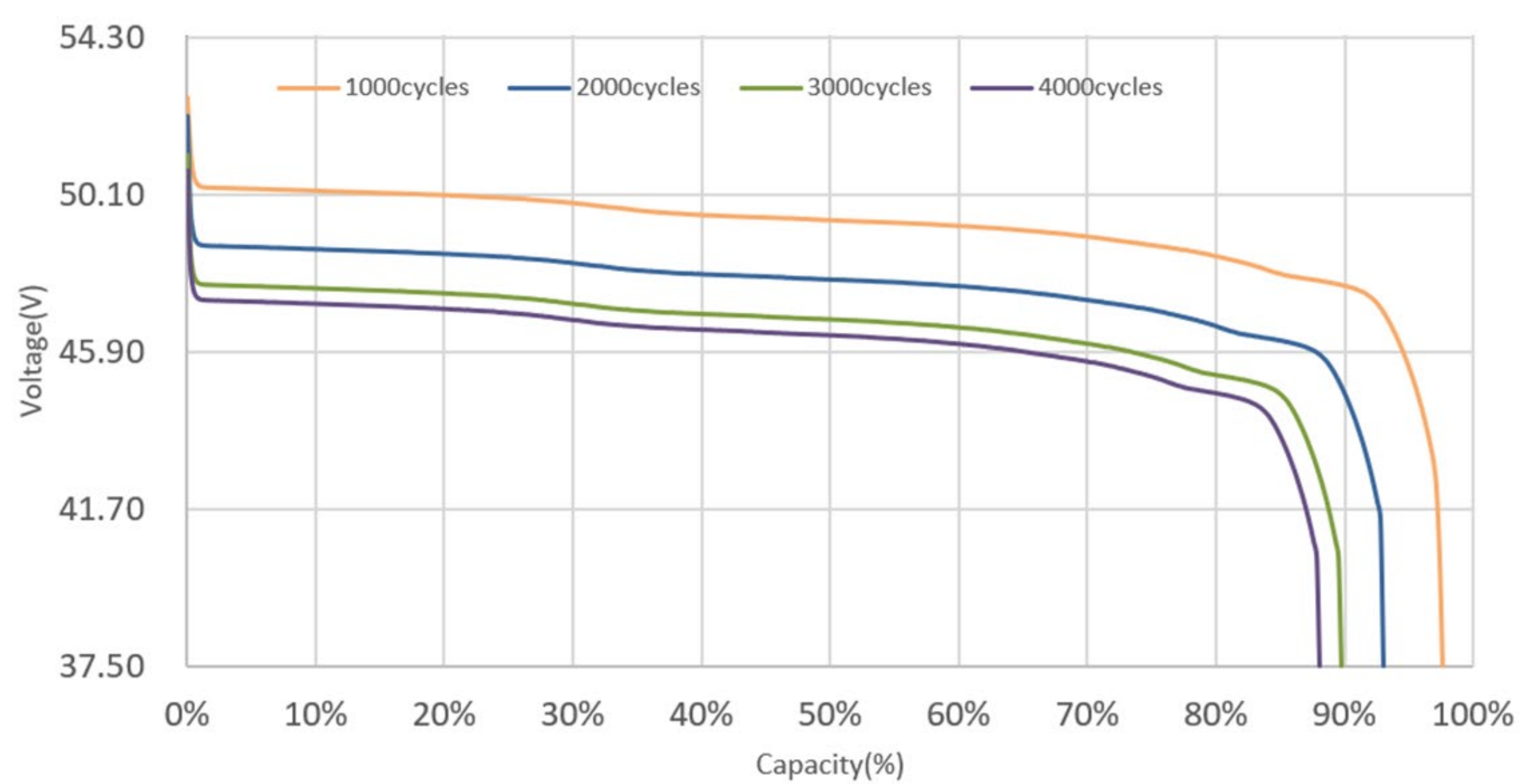
0.5C discharge curve at different temperatures (0.5C standard charge)



Discharge curve at different rates (0.5C standard charge)



80% DOD discharge curve after different cycles (0.5C standard charge)



0.5C charge and discharge cycle curve

