

SLPO12-50N(LiFePO₄ 12.8V50AH Battery Normal)

General Information

SLPO series is a LiFePO₄(lithium iron phosphate)battery pack for backup power 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 also has a Bluetooth function, which checks the detailed status of the battery by downloading the APP.

Application

- § Camper, Caravan and Boat
- § Marine Transport and Fishing
- § Wind Generator and Solar Power Energy Storage

Key Features

- ※ **Super long cycle life**
Over 4000 cycles at 80%DOD can be circularly used.
- ※ **Fast charge capability**
Very fast charging capability up to 50A.
- ※ **Low self discharge**
<1% per month at 25°C.
- ※ **Long Life**
10 years design life at 25°C.
- ※ **Green environmental material**
Eco-friendly and nonpolluting, no acids or no hazardous and noxious substances (including lead, cadmium, mercury).
- ※ **Can be used Max 4 in series or Max 4 in parallel**



- ※ **Intelligent Integrated Battery Manage System(BMS)**
Built-in BMS automatically protects internal cells from over-charge, over-discharge, over-temperature, short-circuit, etc. Ensure battery safety and reliability. Equalize and balance each cell. Prolong battery life. SOC-DOD-SOH reporting/setting device events, battery parameters, and storage, intelligent monitor, remote measure, remote communication, remote control.
- ※ **In compliance with standard**
UN/NOT 38.3, CE.
- ※ **High safety & stable performance**
No explosion and no fire under collision. No risk of leakage.
- ※ **Completely maintenance-free**
Completely Maintenance-free throughout battery lifetime saves OPEX for the users.

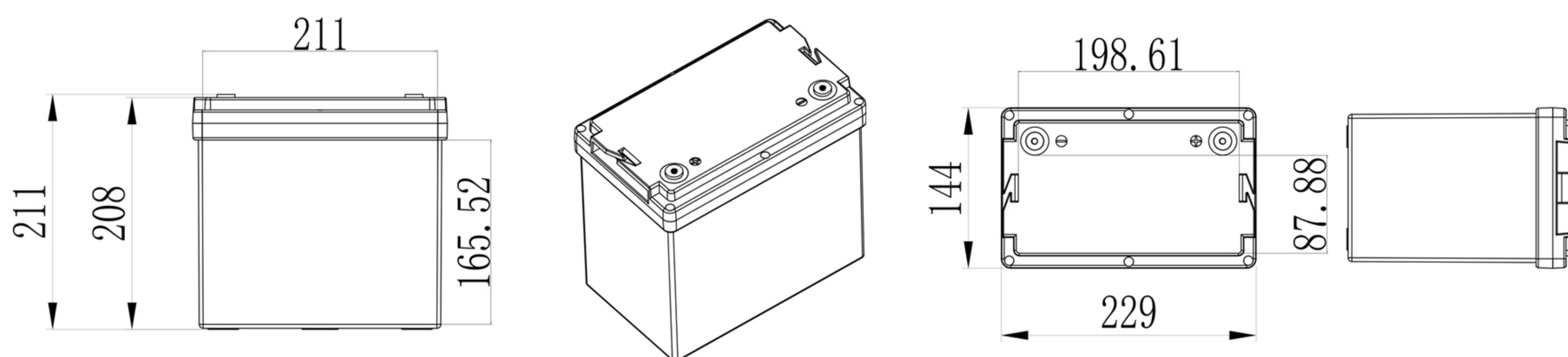
Specification

Weight	Approx.7Kg
Dimensions	229(L)*44(W)*211(H)mm
Nominal voltage	12.8V
Nominal capacity	50Ah
Nominal energy	0.64Kwh
Service life	≥4000 cycles, more than 80% at 0.5C charge and 0.5C discharge at 80% DOD 25°C.
Self-discharge	<1%/M
Charging	50A Max
Discharging	50A Max
Charging voltage	14.4±0.2V
Charging mode	Step 1: 0.5C charge to 14.4V; Step 2: CV (constant voltage 14.4V) charge till charge current decline to 0.05C.
Peak discharge current	50A
DOD discharge rate	100%

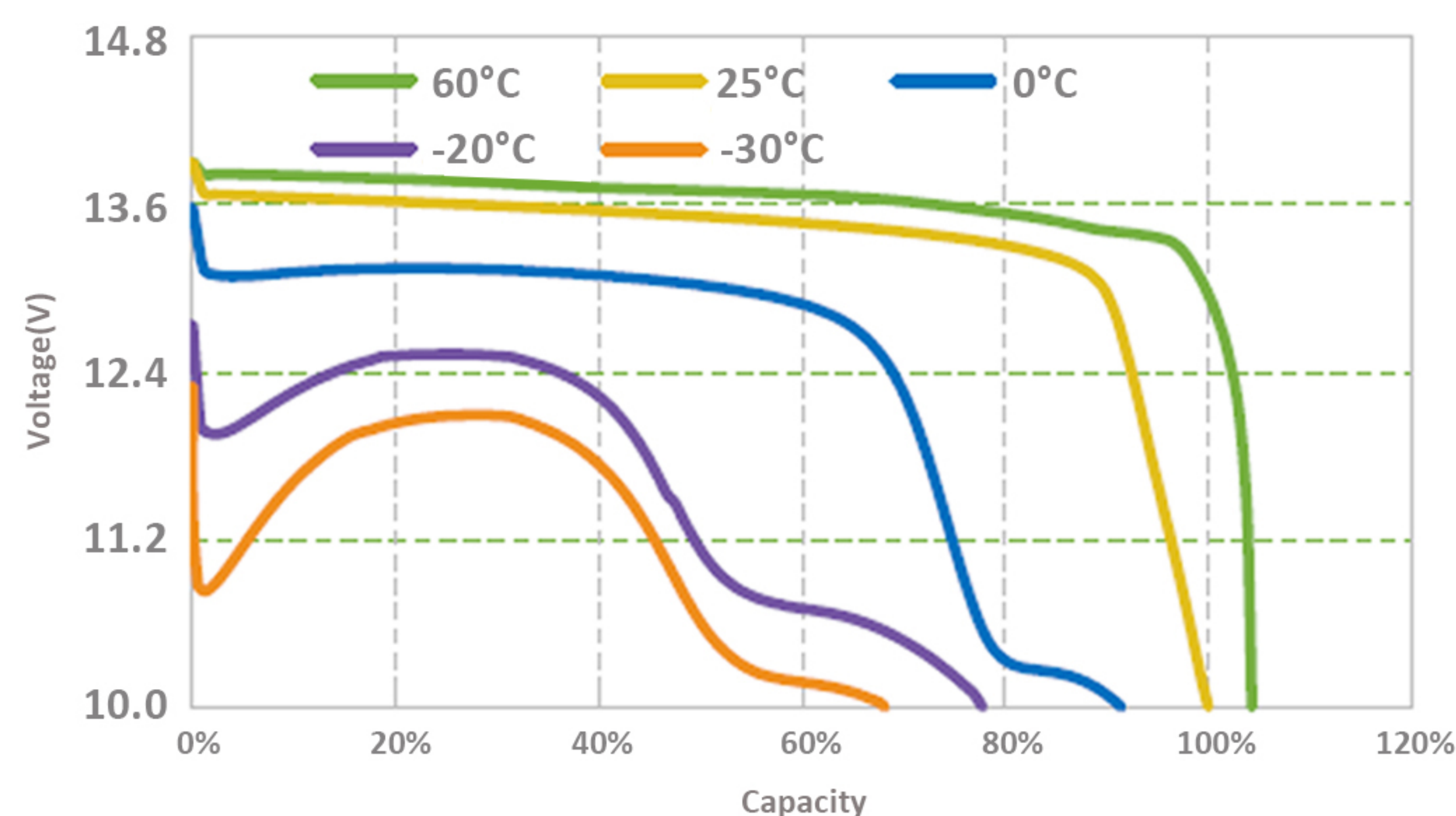
Specification

Charging operating temperature	0~45°C
Discharge operating temperature	-20~55°C
Storage temperature and humidity range	1 month: -20~45°C; 3 months: -10~45°C; 6 months: 0~25°C; Humidity: 45%~90% RH The battery should cycle once in three months. Recommended storage temperature is 25±5°C of SOC 50%~60%.
Degree of protection	IP65
Installation	Battery compartments
Constant current discharge	50A
Constant power discharge	640W
Constant power discharge (Cell)	160W
Pack initial internal impedance	≤100mΩ (50% SOC, Measure the AC impedance at 1kHz)

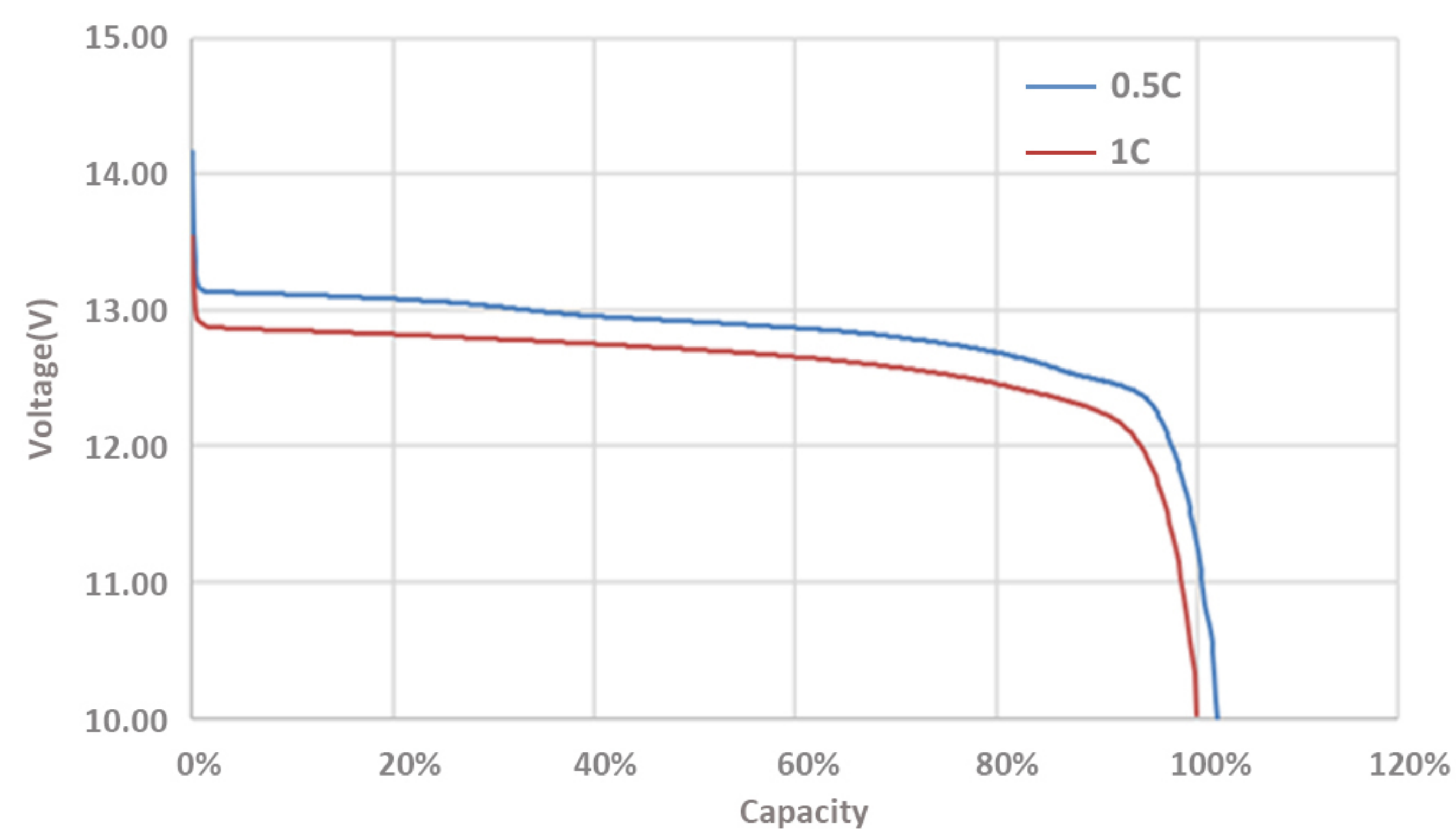
Dimension



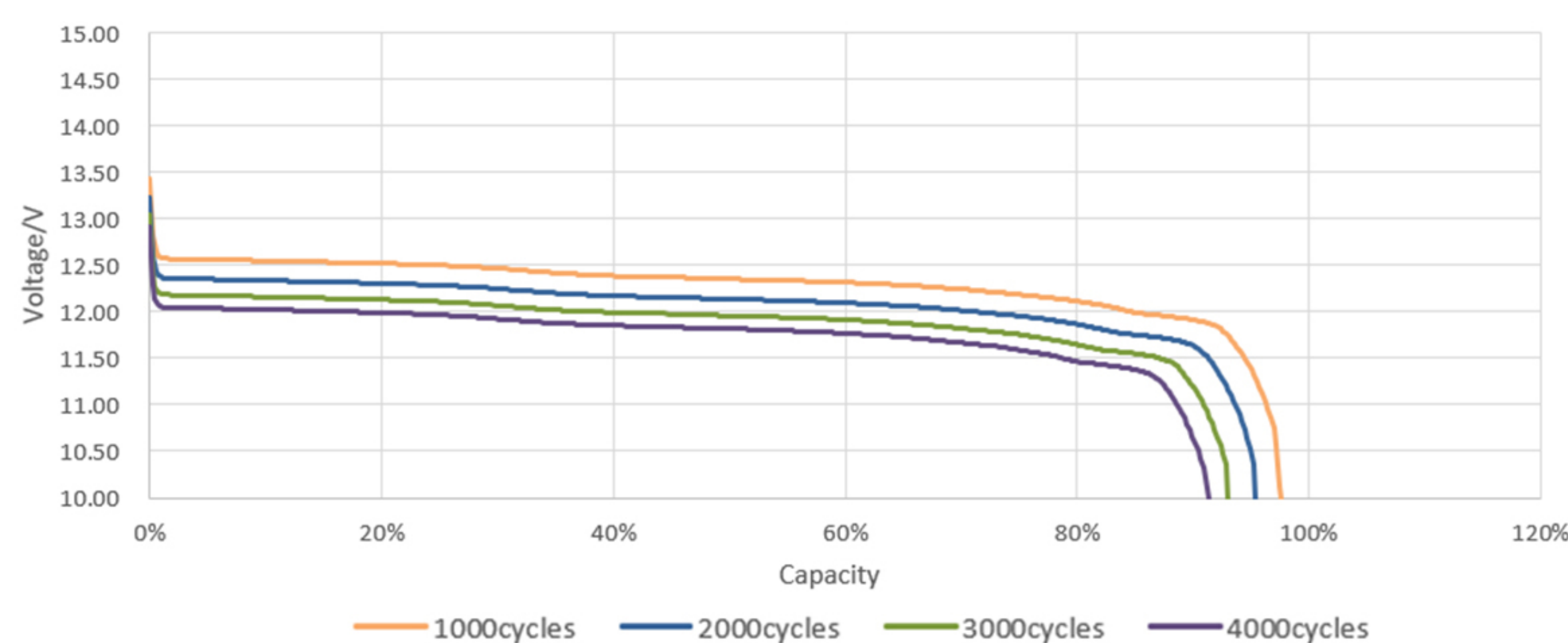
0.5C discharge curve at different temperatures (0.5C standard charge)



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

