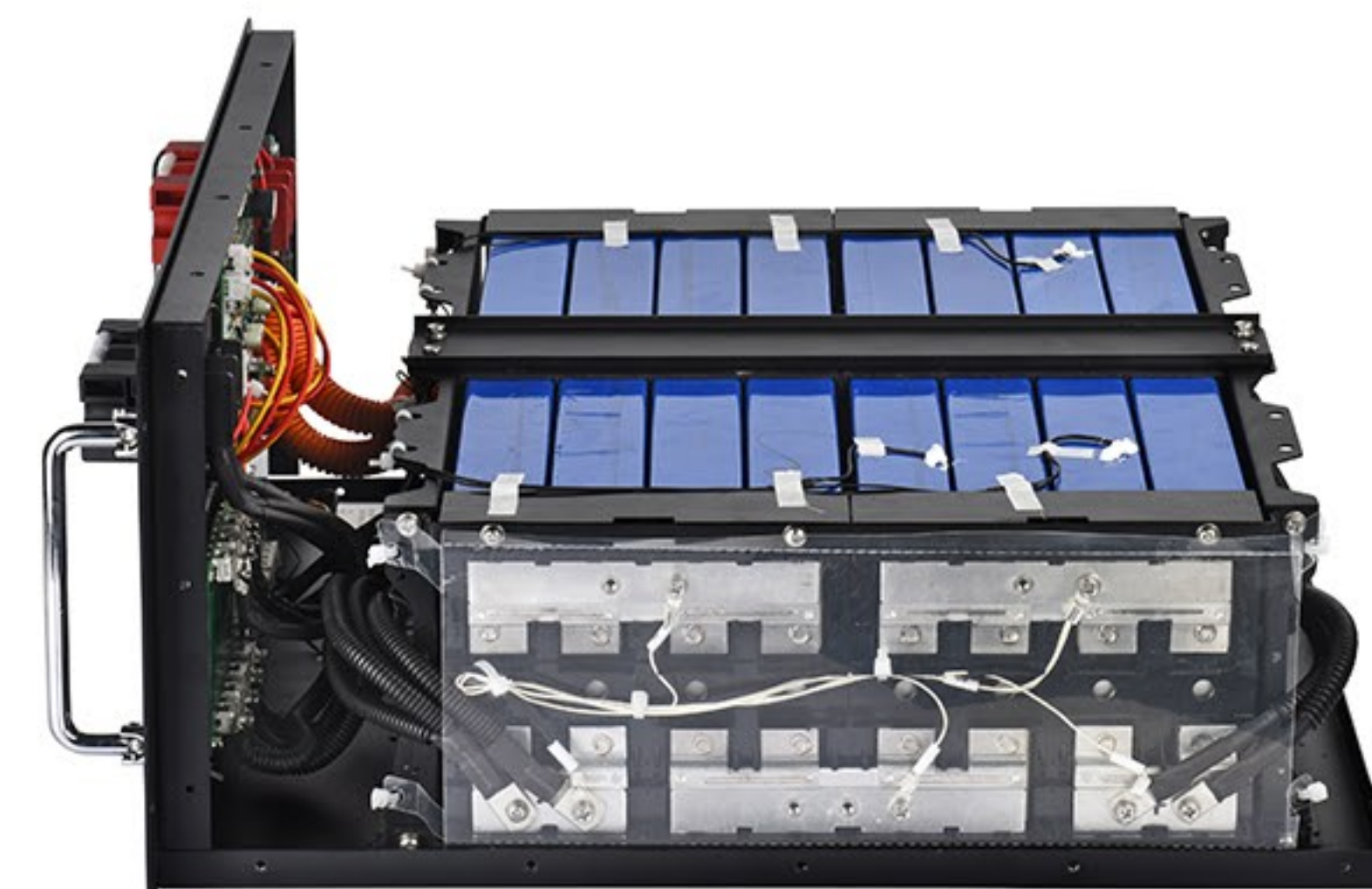


## SLPO24-200(LiFePO<sub>4</sub> 24V200AH Battery)

### General Information

SLPO series is a LiFePO<sub>4</sub>(lithium iron phosphate)battery pack for communications standby application. The battery pack adopts the advanced LiFePO<sub>4</sub> 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 2000 cycle @ 80%DOD @ 25°C can be circularly used, 8 times of Lead acid battery.

※ **Communication port**

RS485 standard communication interface meet requirement of several packages to connect in parallel.

※ **Fast charge capability**

Very fast charging capability up to 0.5C.

※ **Low self discharge**

<1% per month @ 20°C.

※ **Long Life**

10 years design life at 40°C.

※ **Completely maintenance-free**

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

※ **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.

※ **LED or LCD display can be optional**

※ **In compliance with standard**

UN/NOT 38.3, CE, IEC.

※ **High safety & stable performance**

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

※ **Green environmental material**

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

### 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



## SLPO24-200(LiFePO<sub>4</sub> 24V200AH Battery)

### Battery Group Specification

|                              |                                                              |                                                                                                             |
|------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Cell</b>                  | Model                                                        | RLFP34135192                                                                                                |
|                              | Capacity(0.5C)                                               | 100Ah                                                                                                       |
|                              | Rated Voltage                                                | 3.2V                                                                                                        |
|                              | Typical Impedance                                            | ≤0.7mΩ                                                                                                      |
|                              | Battery Material                                             | LiFePO                                                                                                      |
| <b>BMS</b>                   | 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                               | >180A                                                                                                       |
|                              | Over-discharge Cut-off Current Delay                         | 3s                                                                                                          |
|                              | Short-circuit Protection                                     | >200                                                                                                        |
|                              | Condition for the Recovery of Over-current and Short-circuit | 1ms<br>Delayed 5S recovery                                                                                  |
|                              | Balance Current                                              | 80mA                                                                                                        |
|                              | Balance Condition                                            | Single cell voltage is higher than 3.5v<br>and the voltage difference between each cell is higher than 50mV |
|                              | Communication Procotol                                       | RS485                                                                                                       |
|                              | <b>Pack</b> Combination Method                               | 8S2P                                                                                                        |
|                              | Nominal Capacity                                             | 200Ah                                                                                                       |
|                              | Nominal Voltage                                              | 24V                                                                                                         |
|                              | Max. Charge Voltage                                          | 29.2V                                                                                                       |
|                              | Discharge Cut-off voltage                                    | 20V                                                                                                         |
|                              | Max. Charge Current                                          | 100A                                                                                                        |
|                              | Max. Discharge Current                                       | 100A                                                                                                        |
|                              | Standard Charging Current                                    | 0.5C                                                                                                        |
|                              | Standard Discharge Current                                   | 0.5C                                                                                                        |
|                              | Pack Impedance Standard                                      | ≤85mΩ (50% SOC,<br>Measure the AC impedance at 1kHz)                                                        |
|                              | Weight (Approx.)                                             | 45kg                                                                                                        |
|                              | Max.Dimension (L*W*H) (mm)                                   | 460*483*222                                                                                                 |
|                              | Cycle Life                                                   | 2000cycle 80%<br>(0.5C charge&Discharge)                                                                    |
| <b>Operating temperature</b> | Charge temperature                                           | 0°C~45°C                                                                                                    |
|                              | Discharge temperature                                        | -20°C~60°C                                                                                                  |
|                              | Storage temperature                                          | -20°C~45°C                                                                                                  |

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

|         |     |     |    |      |    |     |
|---------|-----|-----|----|------|----|-----|
| Time    | 1h  | 2h  | 4h | 6h   | 8h | 10h |
| Current | 200 | 100 | 50 | 33.2 | 25 | 20  |

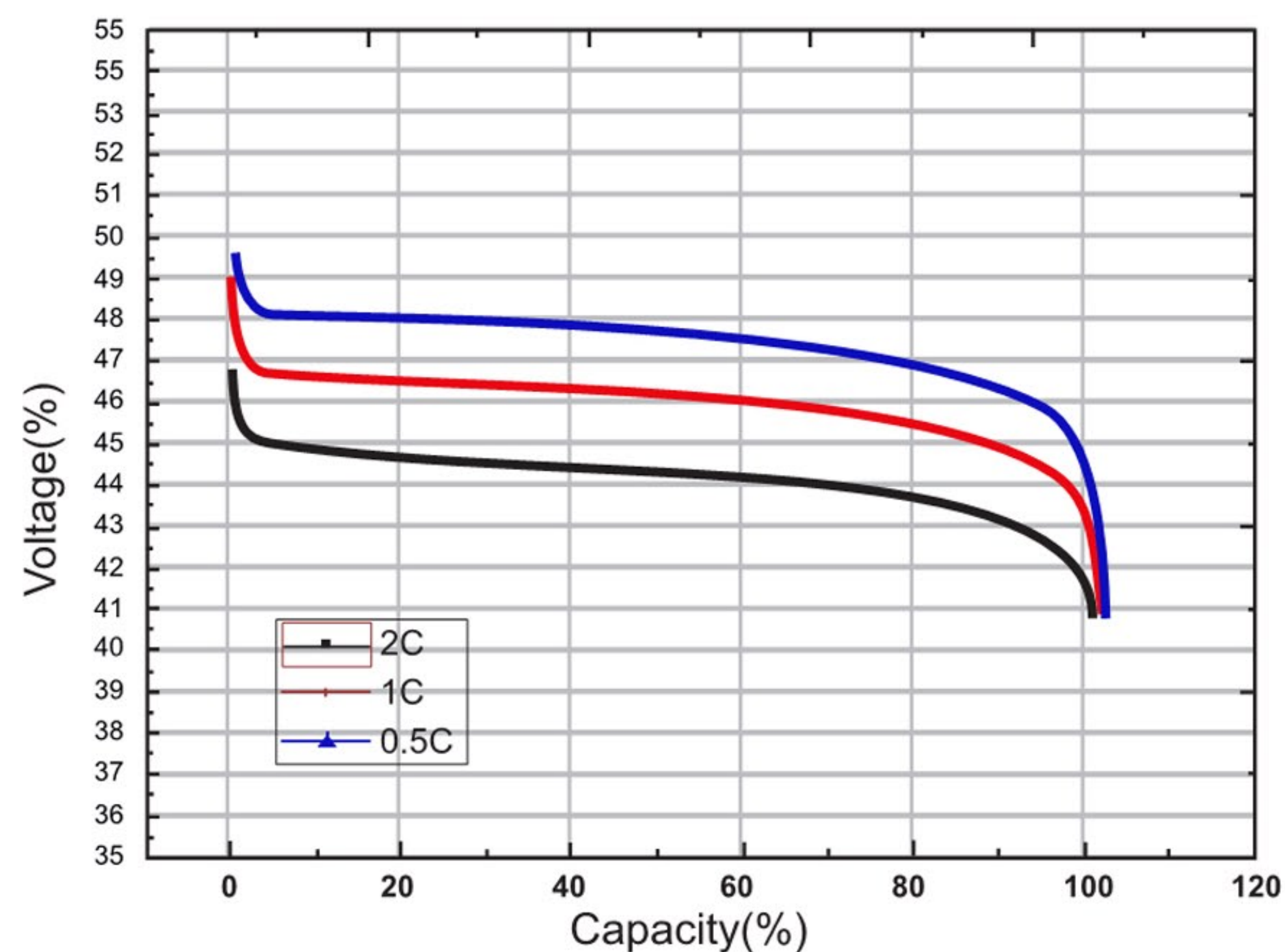
#### Constant Power Discharge (Watts per cell at 25°C/77°F)

|      |     |     |     |       |    |     |
|------|-----|-----|-----|-------|----|-----|
| Time | 1h  | 2h  | 4h  | 6h    | 8h | 10h |
| Watt | 640 | 320 | 160 | 106.2 | 80 | 64  |

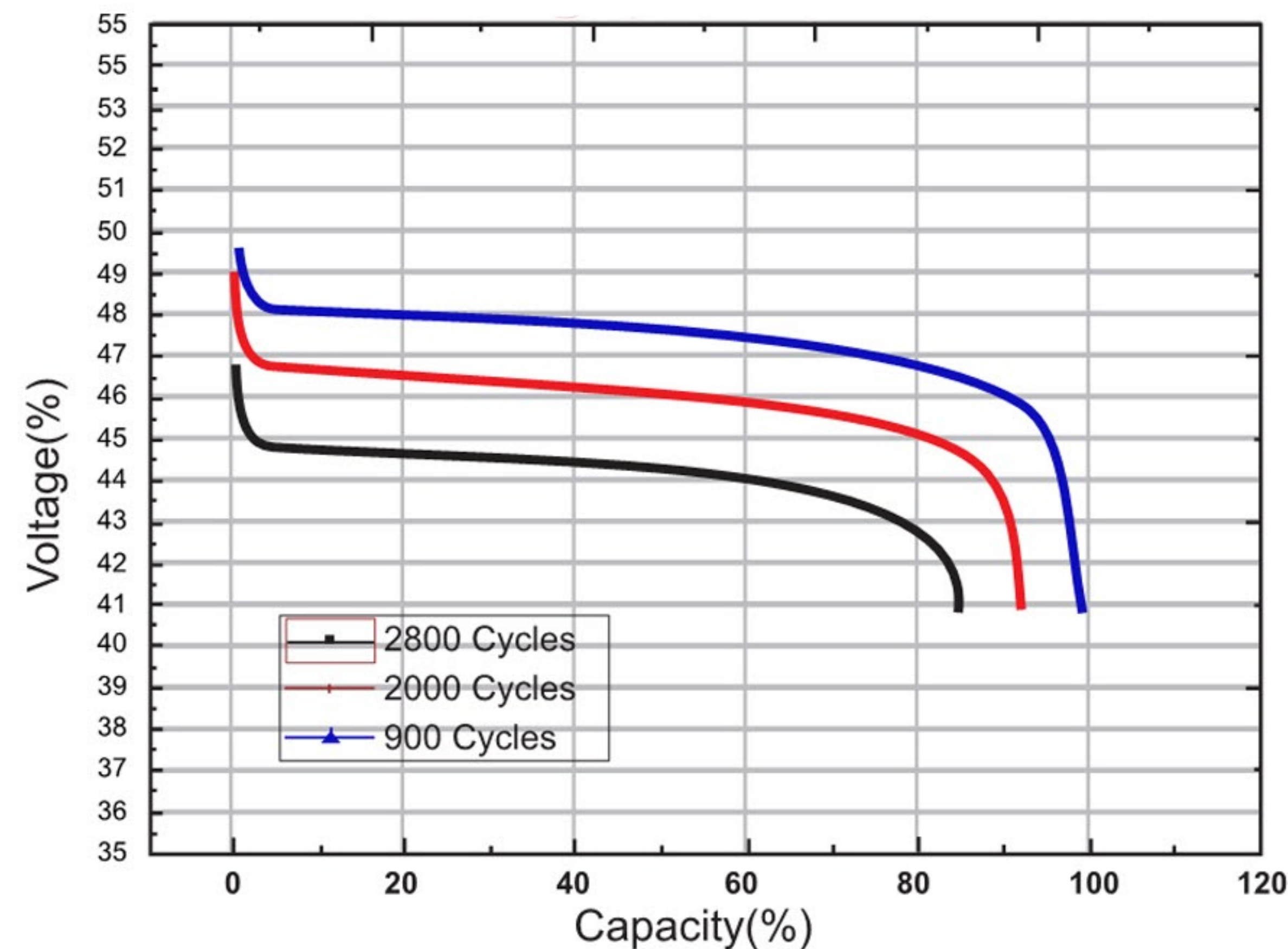


## SLPO24-200(LiFePO<sub>4</sub> 24V200AH Battery)

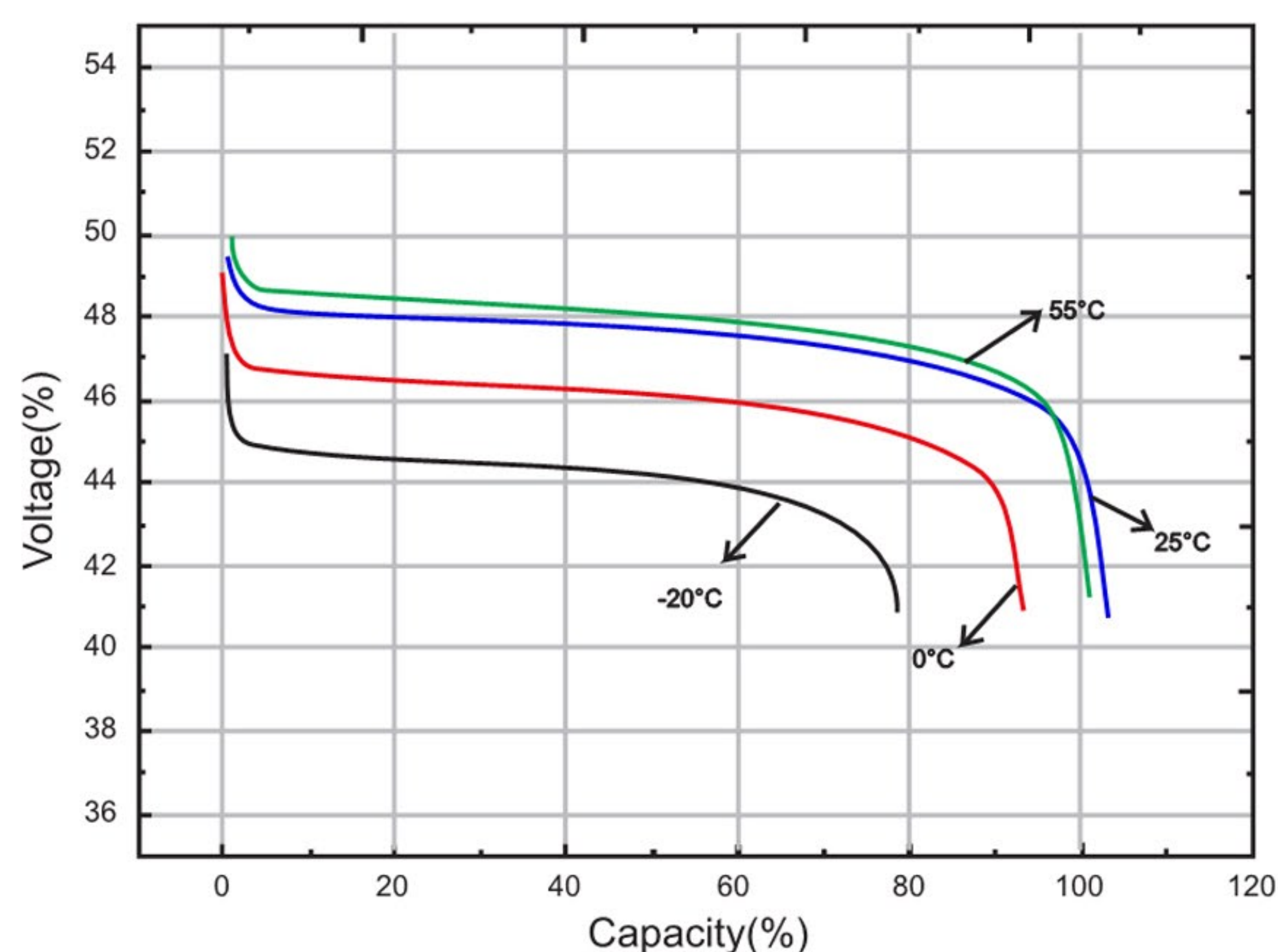
**Discharge curve with different C-Rate  
(0.5C Standard charge)**



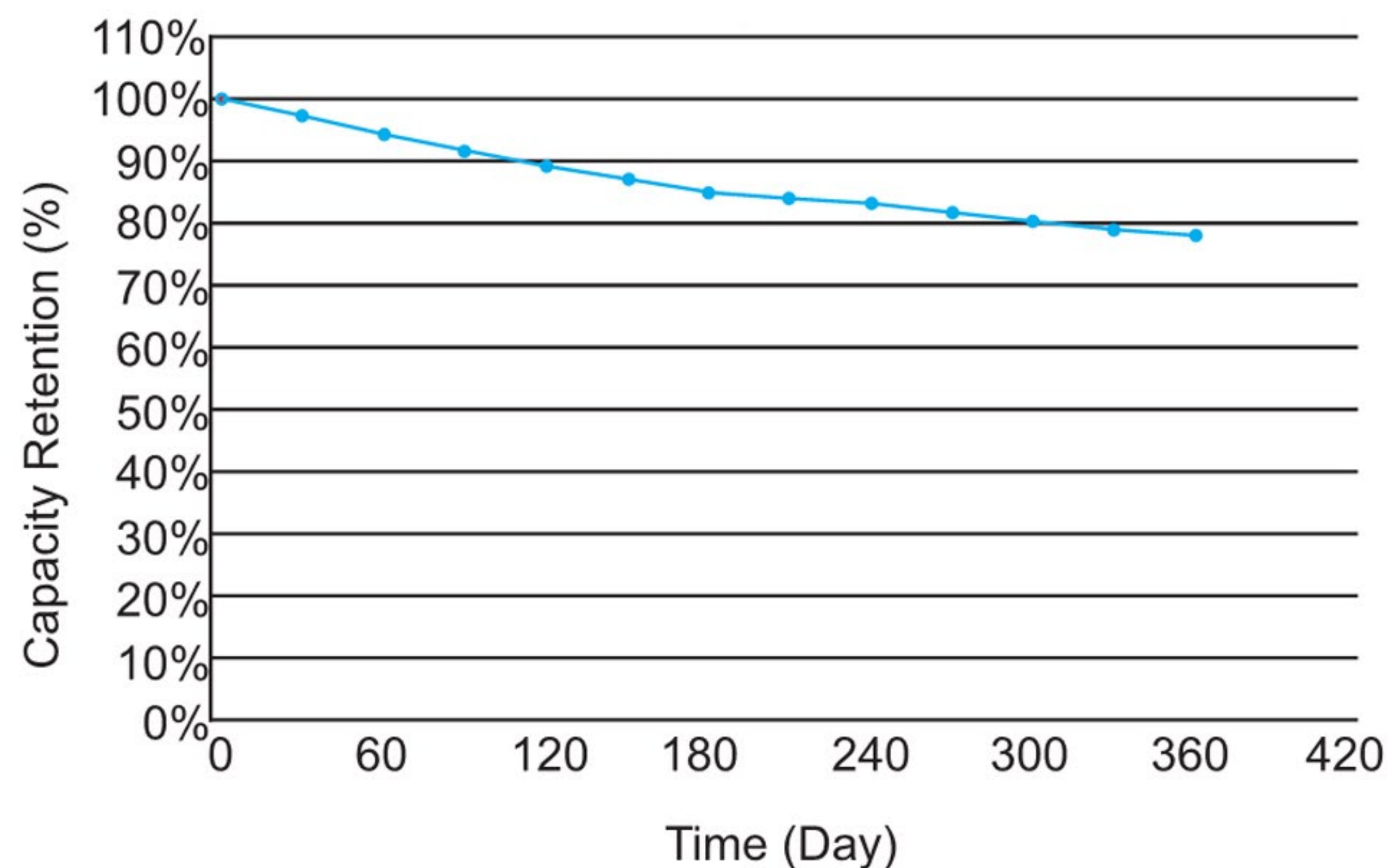
**Discharge curve of cycle performance  
(0.5C Standard charge)**



**Discharge curve at different temperature  
(0.5C Standard charge)**



**Capacity retention curve at room temperature  
storage (0.5C Standard charge)**



### Caution

- ※ Do not disassemble the system.
- ※ The system should be kept away from heat, fire and direct sunlight.
- ※ The system should be kept clean and dry.
- ※ Avoid short-circuit systems and avoid placing the battery where it can cause short circuits.
- ※ Avoid reverse connection, make sure the positive and negative poles of the battery are correct.
- ※ Place the system where children should not be exposed.