

# Built for Power, Designed for Performance, Durable under Scorching Conditions



## HL18650F

## Extreme Temperature Range



### -40°C to 85°C

Operates from -40°C to 85°C with stable output, perfect for harsh environments.

## Stable Under Extreme Storage

Retains 80% capacity after 32 days at 80°C, ensuring consistent performance.

## Extended High-Power Cycles

Supports long-term cycling at 15A discharge, reducing costs for high-power applications.



Delivers stable power at 30A discharge, ideal for tools requiring sustained high energy.

## 30<sub>A</sub>

Ensures over 90% capacity after 3 years storage, providing dependable power in critical operations.

## 90%

Maintains reliable discharge at -30°C after high-temperature storage, meeting freezing conditions.

## -30°C

# Product Specifications

## HL18650F



### Dimension

Diameter ..... 18.25±0.2mm

Height ..... 64.95 ± 0.2 mm

### Capacity

Min capacity (0.2C) ..... 2900 mAh

Typical capacity (0.2C) ..... 3000 mAh

### Voltage and current

Nominal voltage ..... 3.60V

Working voltage ..... 2.50V~4.20V

Max charge /  
discharge current ..... 3A / 30A

### Working temperature

Charge ..... -20~60°C

Discharge ..... -40~85°C

### Other

Cycle life ..... > 500

-40°C capacity (0.2C) ..... ≈ 70%

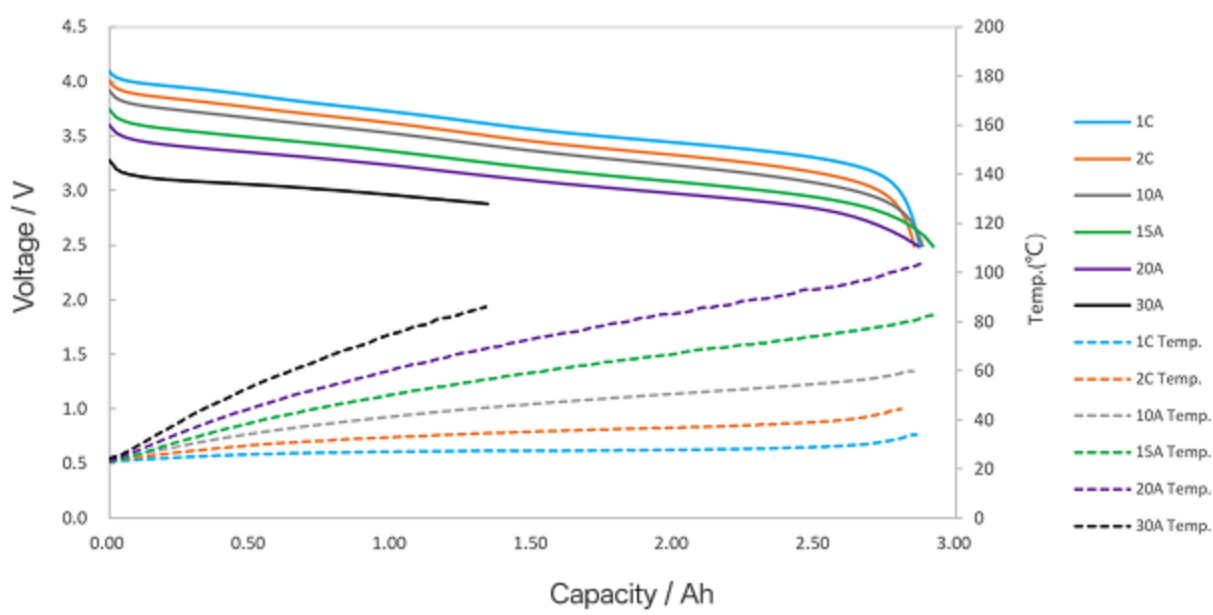
Recovery capacity  
after 30 days 80°C aging ..... ≈ 90%



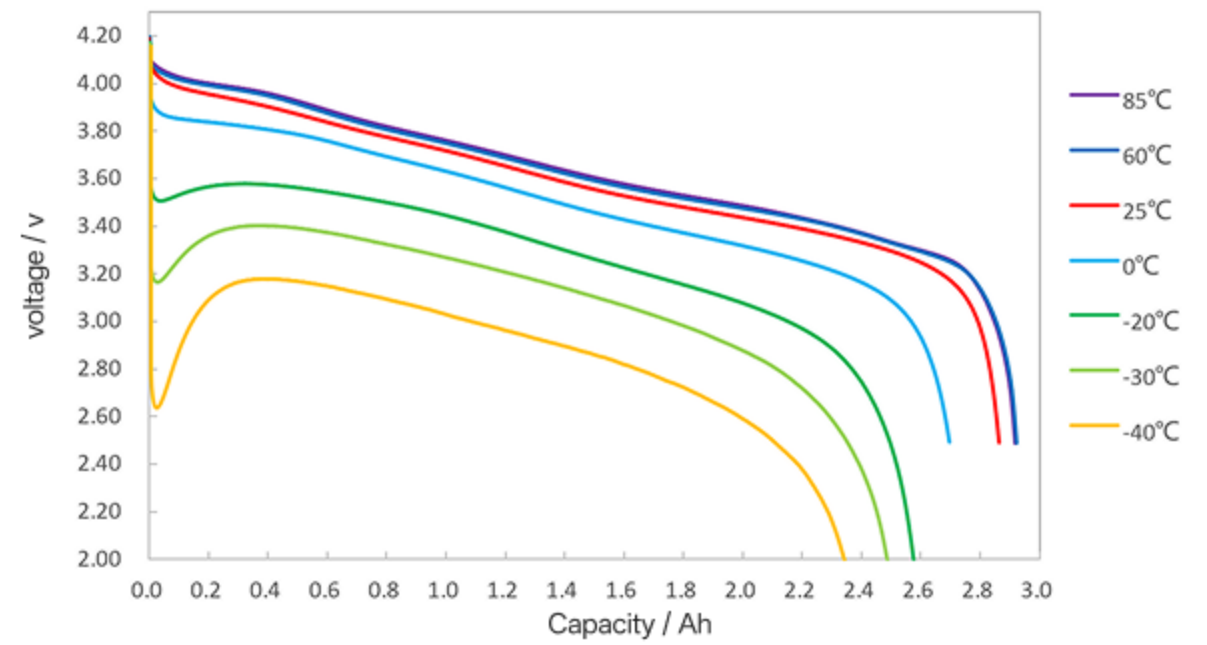
# Explore HL18650F Performance Insights

Durable in Harsh Conditions:  
Uninterrupted Power

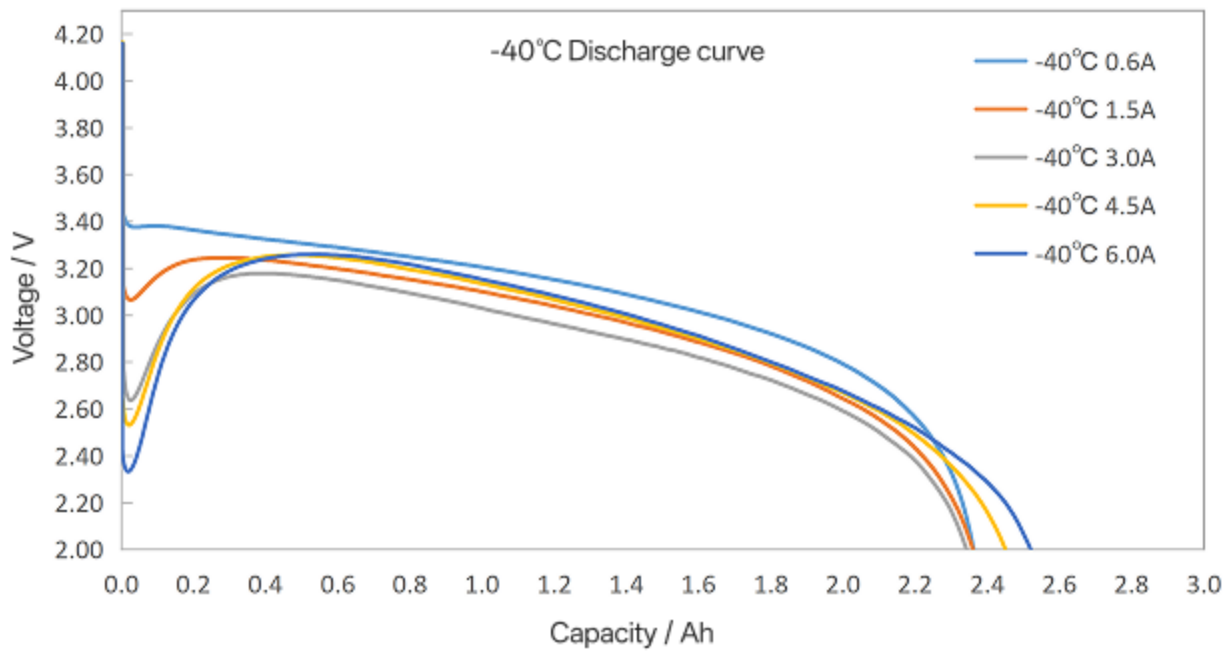
## Rate discharge



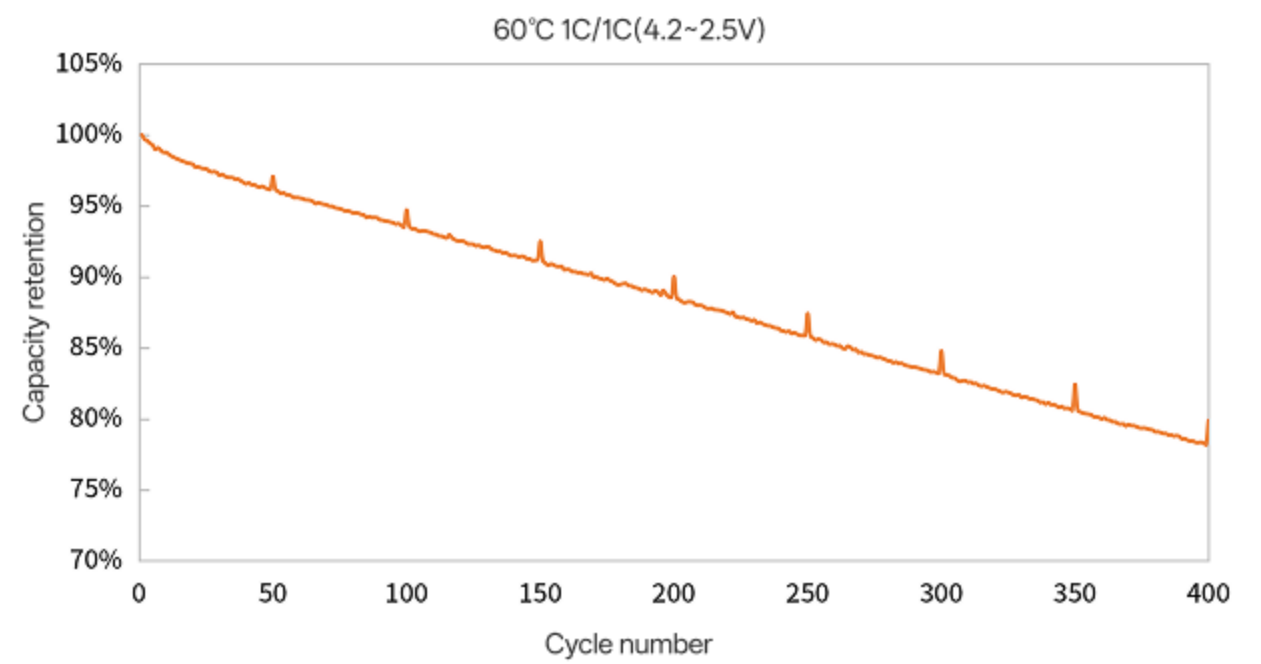
## Discharge at different temperature



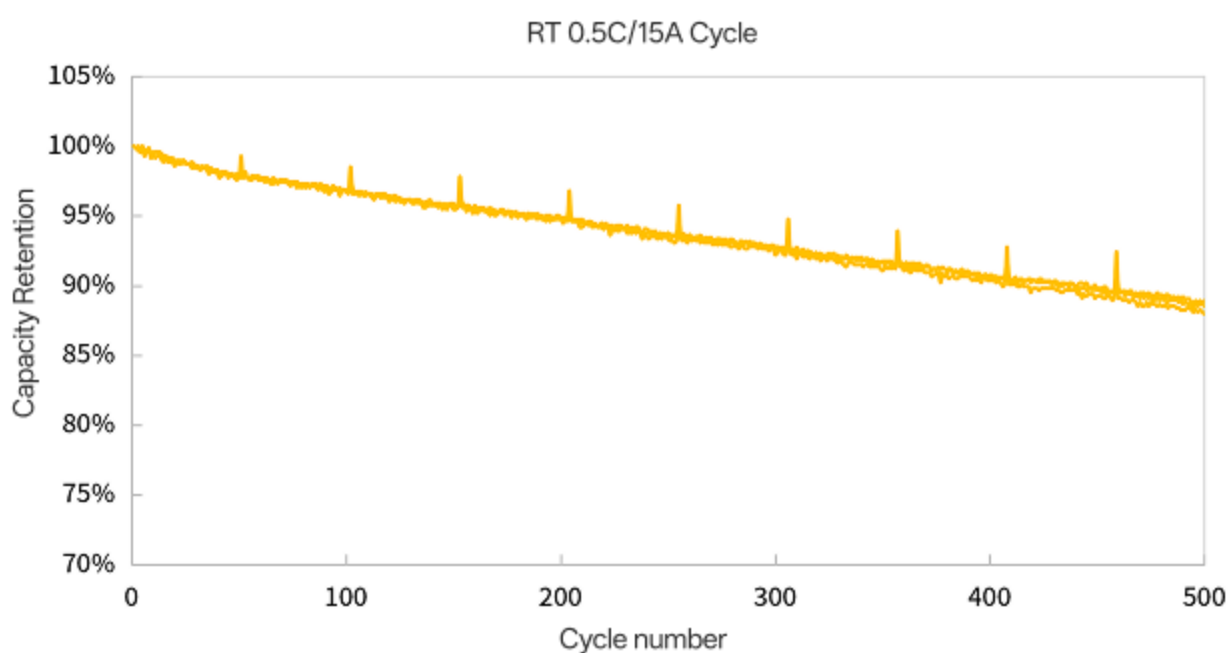
## Rate discharge at low temperature



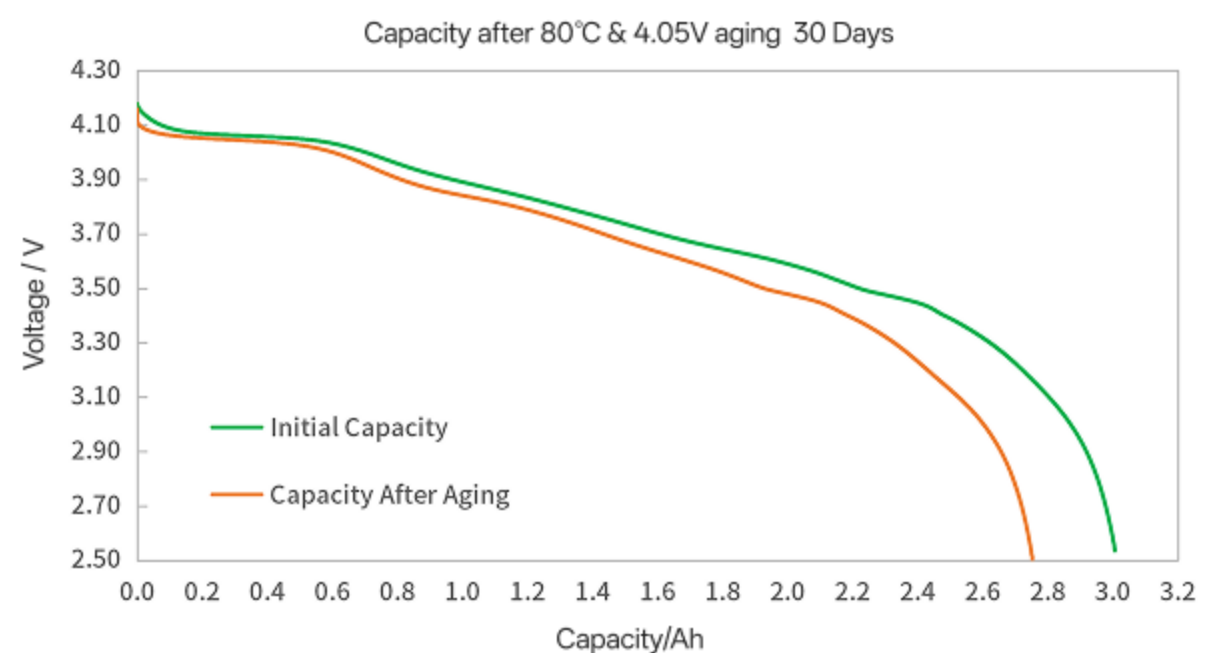
## Cycle at high temperature



## Cycle at room temperature



## 80°C & 4.05V aging



# What we're enabling with HL18650F



## High Power for Electric Drills

Electric drills demand reliable power for high-performance and heavy-duty applications. The HL18650F battery ensures consistent operation for demanding tasks in industrial settings.

## Dependable Energy for AED Devices

Medical devices like AEDs require stable power for critical emergency use. The HL18650F battery provides dependable energy for life-saving operations.



## Reliable Power for Military Drones

Military drones need stable energy to perform in extreme environments and high-load conditions. The HL18650F battery supports mission-critical operations with efficiency.



Power Tools



Medical Devices



Industrial Handhelds



Outdoor Sport



Outdoor Military Gear



Logistics & Containers



Back Up Battery Unit

# UltraXel Limited

UltraXel specializes in wide-temperature lithium-ion cells, provides innovative energy solutions for extreme environments to enhance product performance while powering diverse applications.



# 26

Years  
Battery Expertise

# 50+

Countries  
Global Reach

# 38

Invention Patents

# 6

 Lines

Of Automated Production

# 100+

International Trusted Partnerships

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