



# LIFE 48-24

Rechargeable Lithium Iron Phosphate Battery



## PRODUCT FEATURES



• **Super Safe** Lithium Iron Phosphate Chemistry.



• **High Performance and Durability:** Offers significantly longer cycle life compared to traditional lead-acid batteries, ensuring reliable performance in a wide temperature range from -20°C to 60°C.



• **Compact and Lightweight:** High energy density in a small, lightweight design, ideal for space and weight-sensitive applications.



• **Long Lifespan:** Delivers extended stable, maintenance-free performance



• **Unique Built-In BMS:** Monitors and controls battery parameters, protecting against over-charging, over-discharging, over-current, and short circuits.

## FUNCTIONAL SPECIFICATIONS

Cell Chemistry : . . . . .	LiFePO <sub>4</sub>
Cell Type : . . . . .	Cylindrical
Nominal Voltage : . . . . .	25.6V
Nominal Capacity : . . . . .	48Ah
Stored Energy : . . . . .	1228.8Wh
Internal Resistance : . . . . .	≤60mΩ
Self-Discharge per Month : . . . . .	<3%
Cycle life @ 100% DoD : . . . . .	≥1500 Cycles*
Series Connection : . . . . .	Single Use
Parallel Connection : . . . . .	Single Use
Combination Mode : . . . . .	8S12P/8S8P(3.2V, 4&6Ah)
Communication Interface : . . . . .	.NA

## MECHANICAL SPECIFICATIONS

Dimensions (L*W*H/TH) : . . . . .	227*162*251/257mm
Weight : . . . . .	12.5±0.3Kg
Terminal Type : . . . . .	.M6
Case Material : . . . . .	Metal
Ingress Protection Marking : . . . . .	.IP54

## CHARGE SPECIFICATIONS

Recommended Charge Voltage : . . . . .	≤29.2V
Recommended Charge Current : . . . . .	9.6A
Max. Charge Current : . . . . .	≤30A
Over Voltage Protection : . . . . .	30.8±0.2V
Reconnect Voltage : . . . . .	29.2V
Primary Charge Current Protection : . . . . .	.NA

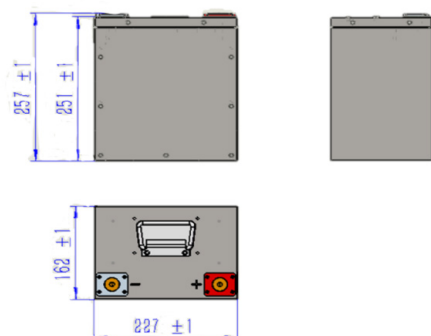
## DISCHARGE SPECIFICATIONS

Recommend Discharge Current : . . . . .	.9.6A
Max. Discharge Current : . . . . .	≤30A
Max. Discharge Voltage : . . . . .	≥20V
Low Voltage Protection : . . . . .	18.4±0.2V
Reconnect Voltage : . . . . .	20V
Primary Discharging Current Protection : . . . . .	90±10A/50-200ms
Short Circuit Protection : . . . . .	.240A/400-800uS

## ENVIRONMENTAL SPECIFICATIONS

Charge Temperature : . . . . .	.0~45°C
Discharge Temperature : . . . . .	-20~60°C
Storage Temperature : . . . . .	0~40°C
Optimal Operation Humidity : . . . . .	5~95%RH/Non-Condense

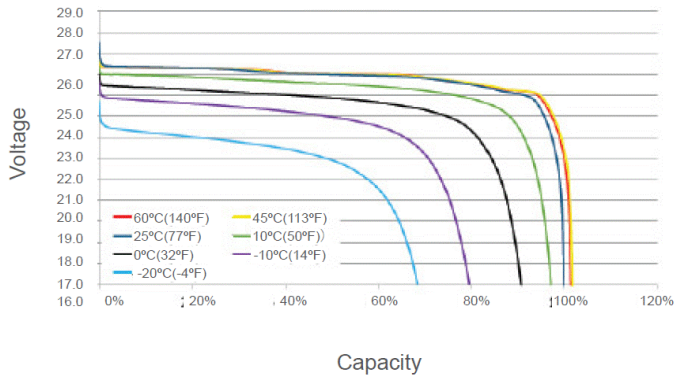
## OUTLINE DIMENSION



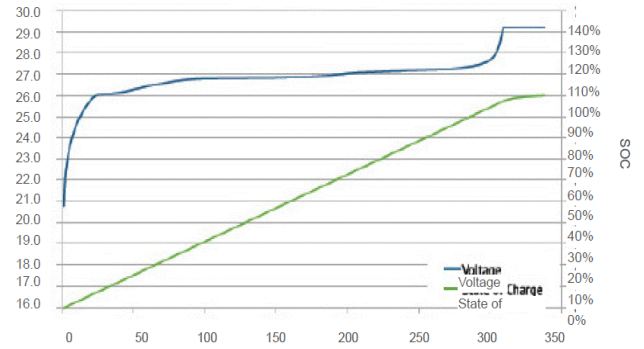
\*Refer to warranty terms for cycle life performance conditions

\*\* C=Capacity

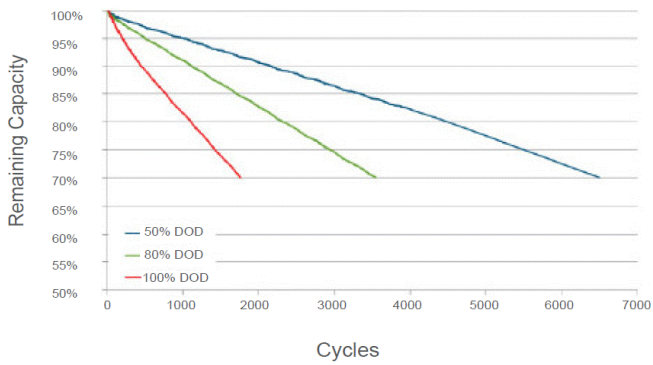
## Discharge Performance at Various Temperatures Discharge 1C



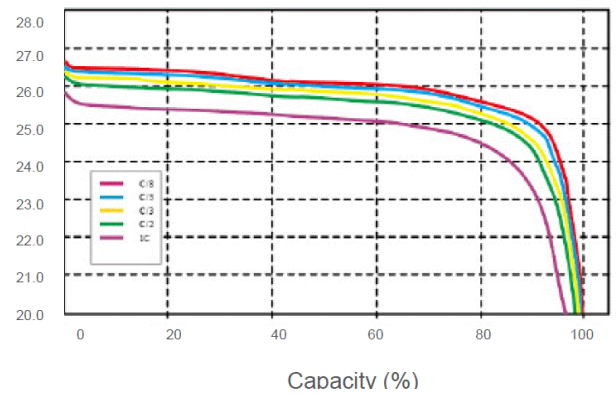
## Charge Performance Charge 0.2C @ 25°C



## Cycle Life vs. Dept of Discharge (DOD) Discharge 0.5C/Charge 0.5C @ 25°C



## Discharge Voltage Profile at Various Rate @ 25°C



## APPLICATIONS



- Telecom and Data Centers
- Energy Storage Systems
- Uninterruptible Power Supply (UPS)
- Remote Power Supply
- Industrial Applications

## CERTIFICATIONS

- UN38.3

## SHIPPING CLASSIFICATION

- UN 3480
- Class 9