



Product Specification Sheet

24V 30Ah LiFePO4 Battery Pack System

High-Performance Deep Cycle Battery for Marine, Solar, and E-Mobility Applications

01. PRODUCT OVERVIEW

The BOOANT 24V 30Ah LiFePO4 (Lithium Iron Phosphate) battery pack is engineered for extreme deep-cycle durability and safety. Featuring high-grade 32700 cells and robust engineering, this pack delivers exceptional thermal stability, extended cycle life, and high continuous power configurations tailored for demanding Western markets.

Key Features

- **Lithium Iron Phosphate (LiFePO4):** Inherently safe chemistry with zero risk of thermal runaway.
- **High Energy Density:** Compact form factor engineered specifically for custom frame spaces, solar storage, and marine applications.
- **Superior Lifecycle:** Retains >80% capacity even after 2000+ deep charge-discharge cycles.
- **Heavy-Duty Interface:** Standardized high-temperature 10AWG silicone wiring ensures optimal current transition without thermal throttling.



02. INTELLIGENT BMS SYSTEM

At the heart of the BOOANT flagship series is our proprietary Smart Battery Management System (BMS). Equipped with an integrated Bluetooth module, the system ensures autonomous real-time monitoring and multi-tiered active protection layers against electronic stress faults.

Protective Architectures

- **Over-Current Protection:** Precision dual-stage threshold setting up to 70A to shield cells from unexpected spikes.
- **Thermal Management:** Active temperature cuts calibrated for cold-weather charging protection (-10°C) and high-load discharge safeguards (75°C).
- **Advanced Cellular Balancing:** Micro-amp static equilibrium circuit automatically corrects voltage deviation across serial strings, maximizing total usable pack runtime.

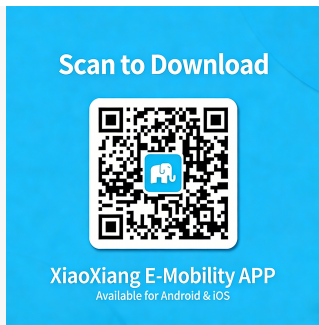
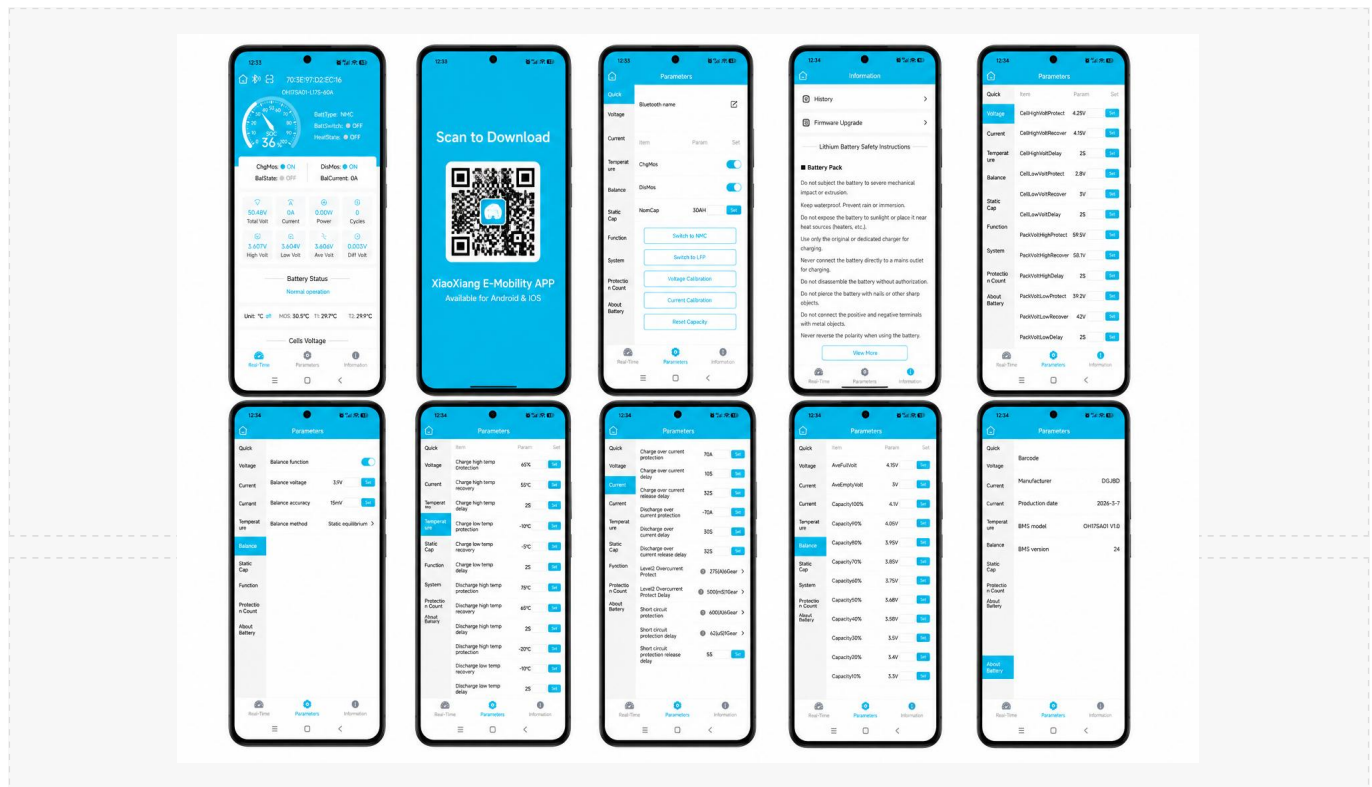


[HIGH-PERFORMANCE HARDWARE JBD SMART BMS BOARD]

03. XIAOXIANG E-MOBILITY APP

Seamlessly pair your iOS or Android smartphone to the BOOANT battery pack using the official XiaoXiang E-Mobility platform. Gain full programmatic control and precise clarity into your power metrics anywhere, anytime.

APP TELEMETRY METRIC	OPERATIONAL CONTROL & SETTINGS
State of Charge (SOC %) & Total Voltage	Battery Chemistry Toggling (NMC / LFP)
Individual Cell Volts & Delta Variance	Custom High/Low Voltage Protection Thresholds
Real-time Amperage & Current Power Draw	Over-current and Short-circuit Reset Delays
MOSFET Status & Dual Temperature Probes	Static Equilibrium Balancing Activation Controls



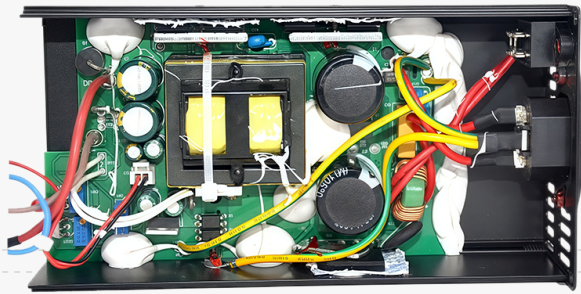
[APP DOWNLOAD SCAN QR CODE]

04. ADVANCED FAST CHARGER SYSTEM

Every BOOANT battery is paired with an industrial-grade high-current smart fast charger. Built inside an anodized aluminum alloy enclosure with forced-air cooling, the charger employs a multi-stage CC/CV algorithm optimized specifically for LiFePO4 chemistry.

Technical Enhancements

- **Premium Engineering Internal Topology:** Heavy-duty transformers, dual premium solid-state filtering capacitors, and clean trace isolation lines provide resilient protection against mains power surges.
- **Dual LED Diagnostic Indicators:** Instantly verify current cycle status via standard color-coded system signals (Red: Charging / Green: Operational / Fully Charged).
- **XT60 Heavy-Duty Connections:** High-amperage continuous gold-plated connectors prevent terminal wear and arcing common with low-grade plugs.



05. TECHNICAL SPECIFICATIONS

The definitive electrical, environmental, and mechanical parameters for the BOOANT 24V 30Ah battery assembly are outlined below:

PARAMETER SPECIFICATION	DESIGN METRIC VALUE
Nominal Voltage	25.6V (Standard 24V System Compatible)
Nominal Rated Capacity	30Ah
Cell Configuration Type	Premium 32700 LiFePO4 Cylindrical Cells
Charging Voltage Limit	29.2V
Standard Continuous Discharge Current	30A - 50A (Configuration Tailored)
Peak Short-Duration Pulse Current	Up to 60A
Discharge Wiring Cable Interface	Heavy-Duty Premium 10AWG Silicone Wires
Cycle Life Endurance	≥ 2,000 Cycles (at 100% DOD to 80% Retained)
Charge Operating Temperature Range	0°C to 45°C (Auto-bms Protection Monitored)
Discharge Operating Temperature Range	-20°C to 60°C
Outer Assembly Wrap Enclosure	Heavy-Duty Industrial Flame-Retardant PVC Membrane Wrap

BOOANT ENERGY

Premium Customized E-Mobility & Deep Cycle Storage Solutions
Engineered for Performance. Built for Safety.

Official Portal: www.booant.com

Support Email: support@booant.com

Product specifications are subject to continuous technical iterative improvements. Please reference the online independent station documentation for the most real-time firmware validations.