



60V 30AH LITHIUM-ION BATTERY PACK

HIGH-PERFORMANCE METAL CASE SERIES

APPLICATION: E-Motorcycles, High-Power Electric Bikes, Mobility Projects

BATTERY MODEL: 60V 30AH Lithium - ion Battery Pack

CELL MODEL: Genuine SAMSUNG INR21700 - 50G

WEBSITE: WWW.BOOANT.COM

1. PRODUCT OVERVIEW & ARCHITECTURE

Engineered for demanding electric motorcycle and high-power conversion setups, the BOOANT 60V 30Ah battery pack sets a premium standard in energy density and resilience. Housed in a rugged, tech-industrial metal enclosure, it shields the internal core from impacts, moisture, and extreme operational stresses. It incorporates advanced cell-matching technology along with heavy-duty 10AWG discharge wiring to minimize resistance and maintain uniform thermal profiles under peak loads.

2. PHYSICAL ENCLOSURE & DIMENSIONS

PHYSICAL & MECHANICAL PROPERTIES

Enclosure Type	Heavy-Duty Metal Case (Tech-Industrial Finished)
Dimensions (L x W x H)	11.8 x 7.5 x 3.5 inches (300 x 190 x 90 mm)
Net Weight	Approx. 20.9 lbs (9.5 kg)
Discharge Cables	Premium 10AWG Heavy-Duty Silicon Wire
Standard Connector	XT60 / XT90 Default (Custom discharge configurations available)



3. COMPREHENSIVE ELECTRICAL SPECIFICATIONS

The core electrical configuration has been systematically optimized to supply rock-solid power to high-amp motor controllers without voltage sag. Leveraging an optimized configuration, this system yields sustained performance across its operational cycle.

ELECTRICAL PARAMETERS

Nominal Voltage	60V
Rated Capacity	30Ah
Total Energy Content	1800Wh
Charging Cut-off Voltage	67.2V
Discharging Cut-off Voltage	48V
Continuous Discharge Current	30A / 40A / 50A
Peak Discharge Current	90A / 120A / 150A (Duration: < 3 seconds)
Standard Charge Current	5A
Cycle Life Rating	> 800 cycles at 80% Depth of Discharge (DoF)

4. APPLICATION & COMPATIBILITY GUIDELINES

- **Motor Power Match:** Perfectly optimized for motor systems ranging from 500W to a continuous output of 2500W.
- **Vehicle Integration:** Ideal for custom electric motorcycles, retrofitted commuter e-bikes, and heavy-duty cargo utility vehicles.
- **Environmental Tolerances:** Designed for an operating temperature range of -20°C to 60°C during discharge cycles.

5. SMART BATTERY MANAGEMENT SYSTEM (BMS) HARDWARE

Safety and lifespan are governed by an integrated Bluetooth-enabled Smart Battery Management System. This advanced circuit hardware acts as the primary safeguard for the battery pack, carefully controlling current flow and executing complex balance routines across cell groups.

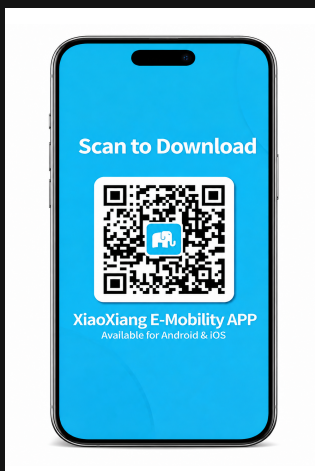
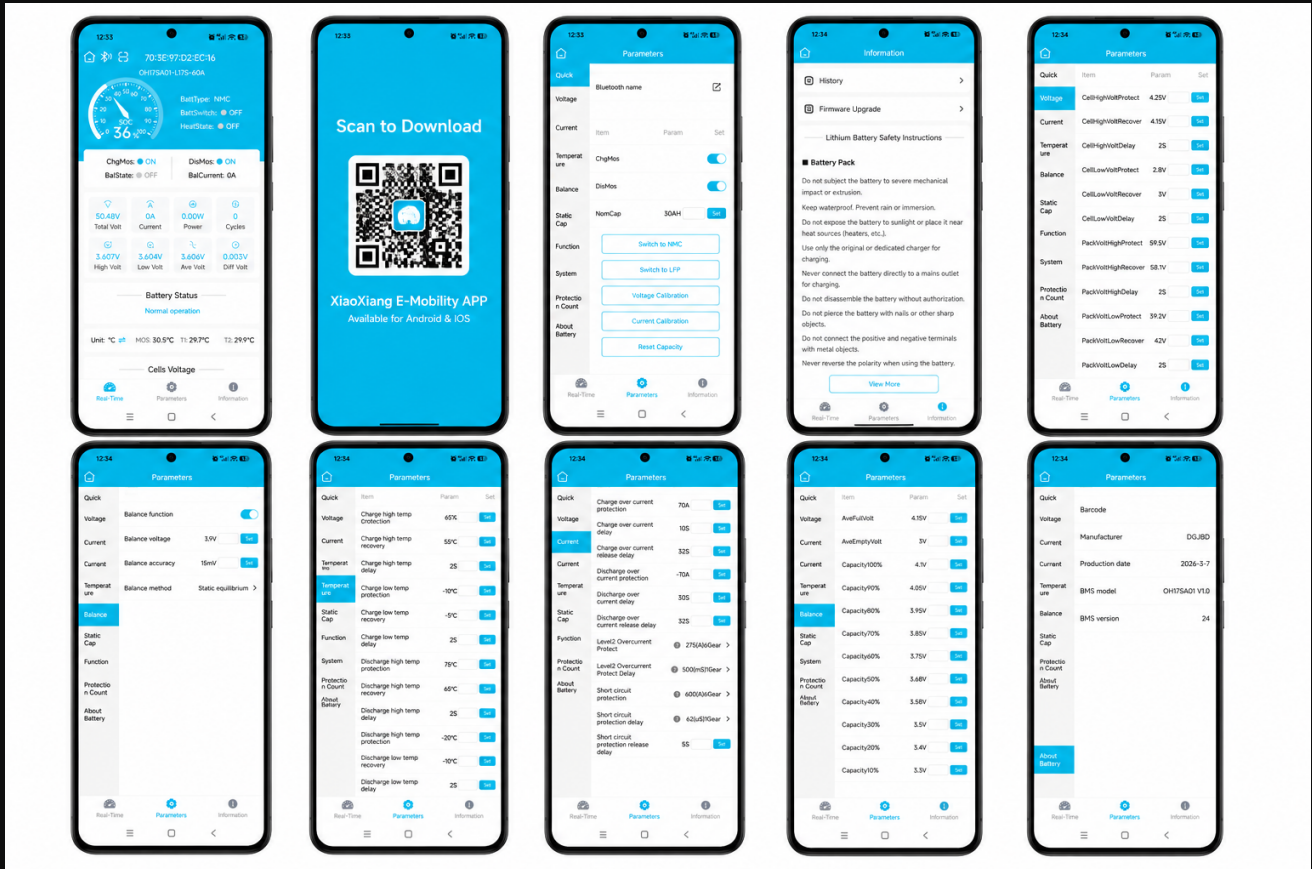


BMS HARDWARE PROTECTIVE THRESHOLDS

Over-Charge Protection Voltage	4.25V \pm 0.025V per cell group
Over-Discharge Protection Voltage	2.80V \pm 0.05V per cell group
Over-Current Protection Range	50A continuous cut-off mechanism
Short-Circuit Protection	Instantaneous dual-fuse microsecond safety isolation
Cell Balancing Methodology	Passive balance algorithm triggered automatically at 4.15V
Thermal Management Cut-off	Charge safety cutoff at 65°C; Discharge safety cutoff at 60°C

6. XIAOXIANG E-MOBILITY SMART MONITORING

The system features integrated Bluetooth telemetry, enabling users to pair the battery with the official app for immediate data updates. This capability allows operators to inspect system health directly from their smartphones, adjust parameters safely, and pinpoint anomalies before they turn into mechanical runtime issues.



SCAN TO DOWNLOAD COMPANION APP

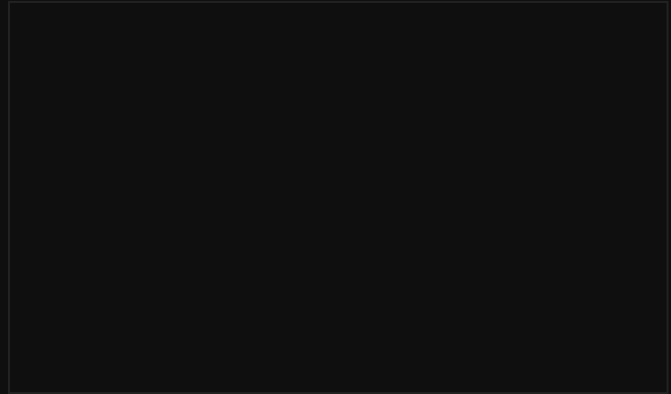
Available on both iOS and Android. Open your camera or QR code reader to download the official XiaoXiang E-Mobility app instantly for telemetry dashboard access.

7. INDUSTRIAL CHARGING SYSTEM ARCHITECTURE

Each battery pack is paired with a heavy-duty 5A smart charger built inside an extruded aluminum housing. The interior layout uses premium solid-state capacitors alongside an independent cooling fan, establishing stable thermal operation throughout high-current charging stages.



Premium Anodized Exterior Enclosure



Heavy-Duty Dual-Transformer Architecture

CHARGER ENGINEERING PARAMETERS

AC Input Range	100V–240VAC (Global grid compatibility)
DC Output Voltage	67.2V Constant Voltage (Optimized for 60V systems)
Output Current Rating	5A Constant Current
Safety Compliance	FCC, CE, RoHS, CB, GS Certified
Charging Stages	CC-CV (Constant Current followed by Constant Voltage)
Status LED Indicators	Red: Active Charging State Green: Fully Charged / Standby Mode

THANK YOU

FOR CHOOSING BOOANT INNOVATION

At BOOANT, we specialize in high-capacity lithium battery packs built for heavy-duty setups and personal e-mobility builds. Our engineering focus ensures your system runs efficiently and reliably, even under heavy operational loads.

Should you require custom wiring adaptations, multi-unit layouts, or technical integration guidance, our global engineering team is always ready to assist.

OFFICIAL SUPPORT CHANNELS:

SUPPORT@BOOANT.COM | WWW.BOOANT.COM