PRODUCT DATASHEET

72V 30Ah Metal
E-MOTORCYCLE BATTERY

Samsung INR21700-50S Cells · JBD Smart BMS

Rated 2,160Wh capacity in a metal case with LCD display. Built fresh to order and bench-tested before shipping.

DOCUMENT TYPE	Technical Specification & Product Data Sheet
BATTERY MODEL	BOOANT 72V 30Ah Metal eBike Battery

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1. Overview

A 72V 30Ah (2,160Wh) lithium-ion battery built with 120 genuine Samsung INR21700-50S cells in a 20S6P configuration, for electric motorcycles, high-power e-bikes and custom EV projects up to 6,000W. The cells sit in a metal case managed by a JBD smart Bluetooth BMS with a live SUPNOVA display, and the pack ships with an 84V 5A fast charger and a fireproof safety bag. Every pack is built fresh to order and bench-tested before shipping.

2. Key Features

- **Genuine Samsung 50S cells** — 120 authentic Samsung INR21700-50S cells (20S6P) deliver a rated 2,160Wh, with stable voltage under load and no rewrapped or B-grade cells.
- **JBD smart Bluetooth BMS** — 60A, 80A or 100A options matched to motors up to 3,500W, 5,000W or 6,000W, with cell balancing and full protection monitoring via the app.
- **Metal case with SUPNOVA display** — A rugged metal case absorbs trail vibration and keeps the center of gravity low, with a live SUPNOVA display showing voltage, capacity and temperature.
- **84V 5A fast charger included** — A full 0 to 100% charge takes approximately 7 hours, at a gentle 0.8A per cell group.
- **Connector of your choice** — Anderson SB120, QS8, QS10 or XT90F/M discharge connector pre-soldered on a 10AWG silicone lead, matched to your controller at no extra cost.
- **Bench-tested before shipping** — Every pack runs a full charge and discharge test before it leaves, and the test report is available on request. Covered by a 2-year warranty.

3. Technical Specifications

Nominal voltage	72V
Rated capacity	30Ah (2,160Wh)
Cell type & configuration	Samsung INR21700-50S, 120 cells, 20S6P
BMS	JBD smart BMS with Bluetooth: 60A / 80A / 100A (peak 180A / 240A / 300A; controller <=50A / <=65A / <=80A)
Motor compatibility	Up to 3,500W (60A BMS) / 5,000W (80A BMS) / 6,000W (100A BMS)
Full-charge voltage	84.0V
Discharge cut-off voltage	60.0V (BOOANT 72V rule: 3.0V per cell, 20S)
Charger	WATE 84V 5A fast charger, included
Charge time	Approx. 7 hours (0 to 100%)
Dimensions	275 x 180 x 140 mm (10.83 x 7.09 x 5.51 in)
Weight	Approx. 11.5 kg (25.35 lb)
Discharge connectors	Anderson SB120 / QS8 / QS10 / XT90F/M / Wire only (10AWG silicone lead)
Display	SUPNOVA LCD display
App	JBD app (Xiaoxiang), iOS & Android
Enclosure	Metal case, fireproof safety bag included

4. Smart BMS & Bluetooth App

The JBD smart BMS monitors voltage, current and temperature in real time and protects the pack against over-charging, over-discharging, over-current, short circuits and over-temperature, with automatic cell balancing to keep the 20 cell groups even. Through the JBD app (Xiaoxiang) you can view individual cell group voltages, balance status, cycle count and protection history, and remotely switch discharge on or off. The SUPNOVA display shows pack voltage and remaining capacity at a glance without opening the app.

5. Charging

Charge only with the included 84V 5A fast charger, an aluminum-case unit with auto-cutoff. The LED shows red while charging (or if a fault is detected) and green when fully charged or in standby. A full charge from near empty (60V) to full (84V) takes approximately 7 hours. At 5A across 6 parallel groups, each cell charges at about 0.8A, a gentle rate that avoids heat stress and protects cycle life.

6. Enclosure & Fitment

Check your battery bay against the case size before ordering: 275 x 180 x 140 mm. Every pack is hand-built, so leave a few millimeters of clearance. The metal case gives better protection against vibration and impact than a soft pack, and the fireproof safety bag is included for storage and charging.

7. What's Included

Battery pack with your selected BMS rating and discharge connector, 84V 5A fast charger, AC power cable (plug matched to your country), fireproof safety bag, and a 10AWG silicone discharge lead with your selected connector pre-soldered. The pack is built fresh to order for your selection.

8. Warranty & Support

Covered by the BOOANT 2-year warranty (24 months or 500 cycles to 70% capacity retention, whichever comes first, per the BOOANT warranty policy). Questions about this product: support@booant.com.

Specifications are taken from the product data for this model. BOOANT packs are built to order; if your setup needs a different connector or BMS rating, select it on the product page or contact us before ordering. Anderson SB120 is rated 120A and covers all three BMS tiers (60A / 80A / 100A).