PRODUCT DATASHEET

72V 30Ah PVC
E-BIKE BATTERY

Samsung INR21700-50G Cells · JBD Smart BMS

Rated 2,160Wh capacity in a lightweight soft pack. Built fresh to order and bench-tested before shipping.

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

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1. Overview

A 72V 30Ah (2,160Wh) lithium-ion battery built with 120 genuine Samsung INR21700-50G cells in a 20S6P configuration, for high-power scooters, performance e-bikes, electric motorcycles and custom EV projects up to 3,500W. The cells sit in a lightweight soft pack managed by a JBD smart Bluetooth BMS, and the pack ships with a WATE 84V 5A charger. Every pack is built fresh to order and bench-tested before shipping.

2. Key Features

- **Genuine Samsung 50G cells** — 120 authentic Samsung INR21700-50G cells (20S6P) deliver a rated 2,160Wh, with stable voltage under load and no rewrapped or B-grade cells.
- **JBD smart Bluetooth BMS** — 30A, 50A or 60A options matched to motors up to 1,500W, 3,000W or 3,500W, with cell balancing and full protection monitoring via the app.
- **Lightweight soft pack** — The soft-pack structure weighs about 8.5 kg (18.7 lb), lighter than a metal case, with more freedom for custom boxes and weight distribution.
- **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** — XT60, XT90, XT90-S, Anderson SB50 or QS8 discharge connector pre-soldered before shipping, 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 INR21700-50G, 120 cells, 20S6P
BMS	JBD smart BMS with Bluetooth: 30A / 50A / 60A (peak current not stated on the product page)
Motor compatibility	Up to 1,500W (30A BMS) / 3,000W (50A BMS) / 3,500W (60A BMS)
Full-charge voltage	84V
Discharge cut-off voltage	60V (BOOANT 72V rule: 3.0V per cell, 20S)
Charger	WATE 84V 5A smart charger, included
Charge time	Approx. 7 hours (0 to 100%)
Dimensions	485 x 145 x 75 mm
Weight	Approx. 8.5 kg (18.7 lb)
Discharge connectors	XT60 / XT90 / XT90-S / Anderson SB50 / QS8 / Wire only
App	JBD app (Xiaoxiang), iOS & Android
Enclosure	Lightweight soft pack, blue PVC wrap

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. There is no display on the pack itself; the app is the dashboard.

5. Charging

Charge only with the included WATE 84V 5A smart charger, running CC/CV stages. 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 box against the pack size before ordering: 485 x 145 x 75 mm. Every pack is hand-built, so leave a few millimeters of clearance. Light rain during normal riding is fine, but the pack is not made to be submerged or exposed to heavy rain for long periods; keeping it dry will help it last longer.

7. What's Included

Battery pack with your selected BMS rating and discharge connector, WATE 84V 5A smart charger, AC power cable (plug matched to your country), and a 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 600 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 SB50 is rated 50A, so it becomes the bottleneck on the 60A tier; choose XT90F/M or QS8 for the 60A tier.