PRODUCT DATASHEET

52V 30Ah Triangle E-BIKE BATTERY

Samsung INR21700-50G Cells · JBD Smart BMS

Rated 1,560Wh capacity. Built fresh to order and bench-tested before shipping.

DOCUMENT TYPE	Technical Specification & Product Data Sheet
BATTERY MODEL	BOOANT 52V 30Ah Triangle eBike Battery

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1. Overview

A 52V 30Ah (1,560Wh) triangle lithium-ion battery built with 84 genuine Samsung INR21700-50G cells in a 14S6P configuration, for 52V hub and mid-drive builds and high-torque trail upgrades up to 2,500W. The cells sit in a space-saving PVC triangle pack managed by a JBD smart Bluetooth BMS, and the pack ships with a 58.8V 5A Fast Charger. Every pack is built fresh to order and bench-tested before shipping.

2. Key Features

- **Genuine Samsung 50G cells** — 84 authentic Samsung INR21700-50G cells (14S6P) deliver a rated 1,560Wh, with stable voltage under load and no rewrapped or B-grade cells.
- **JBD smart Bluetooth BMS** — 30A (90A peak), 50A (150A peak) or 60A (180A peak) options matched to motors up to 1,200W, 2,000W or 2,500W, with cell balancing and full protection monitoring via the app.
- **Triangle pack, 5.6 kg** — The triangle pack measures 300 x 180 x 90 x 245 x 60 x 75 mm and weighs about 5.6 kg (12.4 lb), wrapped in high-temperature PVC film reinforced with internal epoxy fiberglass plates.
- **58.8V 5A Fast charger included** — A full 0 to 100% charge takes approximately 7 hours, at 0.83A per cell across the 6 parallel groups, from an aluminum hard-case charger with active fan cooling.
- **Connector of your choice** — QS8 plug, Anderson SB50, XT60F/M, XT90F/M or Wire only, on dual 10AWG silicone leads. Anderson SB50 is rated 50A, so for the 60A tier choose XT90 or QS8.
- **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	52V
Rated capacity	30Ah (1,560Wh)
Cell type & configuration	Samsung INR21700-50G, 84 cells, 14S6P
BMS	JBD smart BMS with Bluetooth: 30A (90A peak) / 50A (150A peak) / 60A (180A peak)
Motor compatibility	Up to 1,200W (30A BMS) / 2,000W (50A BMS) / 2,500W (60A BMS)
Full-charge voltage	58.8V
Low-voltage protection	39.2V protection / 42.0V recovery
Charger	58.8V 5A Fast Charger, aluminum hard-case, fan-cooled, CC/CV, included
Charge time	Approx. 7 hours (0 to 100%)
Dimensions	300 x 180 x 90 x 245 x 60 x 75 mm
Weight	Approx. 5.6 kg (12.4 lb)
Discharge connectors	QS8 plug / Anderson SB50 / XT60F/M / XT90F/M / Wire only (dual 10AWG silicone leads)
App	JBD app (XiaoxiangBMS), iOS & Android
Enclosure	High-temperature PVC film, internal epoxy fiberglass plates
Operating temperature	Charge: 0-45°C | Discharge: -20-60°C | Storage: 0-35°C

4. Smart BMS & Bluetooth App

The genuine JBD smart BMS board, in 30A, 50A or 60A continuous versions, delivers real-time telemetry including total pack voltage, continuous amp draw, cell group balancing and state of charge via the official Xiaoxiang App on iOS and Android. It features a remote on/off switch via the app, active millivolt cell balancing during charging, and hardware safeguards against overcharge, short circuits, overheating and low-voltage protection at 39.2V with recovery at 42.0V.

5. Charging

Charge only with the included 58.8V 5A Fast Charger, a rigid aluminum-alloy unit with an integrated active cooling fan and an intelligent CC/CV profile with automated cutoff at 100%. The LED shows solid red while charging (or if a fault occurs or the BMS cuts off input) and solid green when charging is complete or when the charger is plugged into AC power without a battery connected (standby). A full charge takes approximately 7 hours. At 5A across 6 parallel groups, each cell charges at about 0.83A.

6. Enclosure & Fitment

Check your frame triangle against the pack dimensions before ordering: 300 x 180 x 90 x 245 x 60 x 75 mm. Every pack is hand-built, so leave a few millimeters of clearance. This is a lightweight triangle-profile soft pack wrapped in high-temperature PVC insulation reinforced with internal epoxy fiberglass plates, rather than a hard metal box. Use a tape measure to verify your internal mid-frame cavity clearance.

7. What's Included

Battery pack with your selected BMS rating and discharge connector, 58.8V 5A Fast Charger, AC power cable (plug matched to your country), discharge leads with your selected connector pre-installed (dual 10AWG silicone, 30 cm standard, 50 cm or 100 cm extensions available), triangle battery bag with straps, and an app download QR code inside the package. 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. Cycle life is not listed with a number on this product page, so it is omitted here rather than estimated. 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.