PRODUCT DATASHEET

52V 30Ah Metal 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 Metal 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, housed in a heavy-duty aluminum metal case with an LCD battery indicator and frame mounting brackets, for custom electric bike conversions and high-power hub or mid-drive motors up to 2,500W. The pack is managed by a JBD smart Bluetooth BMS and 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.
- **Metal triangle case, 8.5 kg** — The triangle pack measures 330 x 240 x 120 x 195 x 75 mm, 85 mm thick, and weighs about 8.5 kg (18.7 lb), in a heavy-duty aluminum case with an LCD battery indicator and frame mounting brackets.
- **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 a fan-cooled charger with an IEC AC power cord.
- **Connector of your choice** — QS8 plug, Anderson SB50, XT90F/M, XT60F/M or Wire only, on 10AWG silicone leads. Anderson SB50 is rated 50A, so for the 60A tier choose QS8 plug or XT90-S.
- **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
Discharge cut-off voltage	39.2V
Charger	58.8V 5A, fan-cooled, included
Charge time	Approx. 7 hours (0 to 100%)
Dimensions	330 x 240 x 120 x 195 x 75 mm, 85 mm thick
Weight	Approx. 8.5 kg (18.7 lb)
Discharge connectors	QS8 plug / Anderson SB50 / XT90F/M / XT60F/M / Wire only (10AWG silicone leads)
App	JBD app (XiaoxiangBMS), iOS & Android
Enclosure	Heavy-duty aluminum metal case, LCD battery indicator

Operating temperature	Charge: 0 to 45°C; Discharge: -20 to 60°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 deep over-discharge down to a safe 39.2V cutoff.

5. Charging

Charge only with the included 58.8V 5A charger, a fan-cooled unit with an intelligent CC/CV profile with smart 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: 330 x 240 x 120 x 195 x 75 mm, 85 mm thick. Every pack is hand-built, so leave a few millimeters of clearance. This is a rugged aluminum metal case with an LCD battery indicator and mounting brackets, rather than a PVC soft pack, and it protects the cells from trail impacts, debris and weather.

7. What's Included

Battery pack with your selected BMS rating and discharge connector, 58.8V 5A fast charger, AC power cable, discharge leads with your selected connector pre-installed (10AWG silicone), fireproof safety bag, frame mounting 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.