PRODUCT DATASHEET

72V 40Ah Triangle E-BIKE BATTERY

Samsung INR21700-50S Cells · JBD Smart BMS

Rated 2,880Wh capacity for 6,000W to 12,000W builds. Built fresh to order and bench-tested before shipping.

DOCUMENT TYPE	Technical Specification & Product Data Sheet
BATTERY MODEL	BOOANT 72V 40Ah Triangle eBike Battery

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1. Overview

A 72V 40Ah (2,880Wh) lithium-ion battery built with 160 genuine Samsung INR21700-50S high-drain cells in a 20S8P configuration, for high-performance frame-mount e-bike conversions from 6,000W to 12,000W. The cells sit in a heavy-duty PVC triangle pack managed by a JBD smart Bluetooth BMS, and the pack ships with an 84V 10A aluminum fast charger and a triangle mounting bag. Every pack is built fresh to order and bench-tested before shipping.

2. Key Features

- **Genuine Samsung 50S high-drain cells** — 160 authentic Samsung INR21700-50S cells (20S8P) deliver a rated 2,880Wh, with low internal resistance and almost no voltage sag under full throttle.
- **JBD smart Bluetooth BMS** — 100A, 150A or 200A options matched to motors up to 6,000W, 9,000W or 12,000W, with cell balancing and full protection monitoring via the app.
- **Triangle pack with mounting bag** — The heavy-duty PVC triangle pack ships with a weather-resistant triangle frame bag and reinforced mounting straps.
- **84V 10A fast charger included** — A full 0 to 100% charge takes approximately 5 hours, at a gentle 1.25A per cell group.
- **High-current connectors** — QS10 or QS8 discharge connector pre-soldered before shipping. Anderson SB50 (50A) is far below this pack's current tiers and must not be selected for it.
- **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	40Ah (2,880Wh)
Cell type & configuration	Samsung INR21700-50S, 160 cells, 20S8P
BMS	JBD smart BMS with Bluetooth: 100A (300A peak) / 150A (450A peak) / 200A (600A peak)
Motor compatibility	Up to 6,000W (100A BMS) / 9,000W (150A BMS) / 12,000W (200A BMS)
Full-charge voltage	84.0V
Discharge cut-off voltage	60.0V
Charger	84V 10A aluminum fast charger, fan-cooled, included
Charge time	Approx. 5 hours (0 to 100%)
Dimensions	Triangle outline: 375 x 250 x 330 x 95 mm, thickness 85 mm
Weight	Approx. 11.5 kg (25.35 lb)
Discharge connectors	QS10 / QS8 / Anderson SB50 (not suitable for 100A+ tiers) / Wire only
App	JBD app (Xiaoxiang), iOS & Android
Enclosure	Heavy-duty PVC wrap, FR4 epoxy isolation, triangle mounting bag included

Operating temperature	Charge: 0 to 45°C / Discharge: -20 to 60°C

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, dual temperature sensor readings and state of charge, 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 84V 10A aluminum fast charger, with an active cooling fan and CC/CV mode. 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 5 hours. At 10A across 8 parallel groups, each cell charges at about 1.25A (0.25C), a safe rate that avoids heat buildup and protects cycle life.

6. Enclosure & Fitment

Check your frame triangle against the pack outline before ordering: 375 x 250 x 330 x 95 mm, thickness 85 mm. Every pack is hand-built, so leave a few millimeters of clearance. The included weather-resistant triangle frame bag with reinforced straps mounts the pack securely inside the frame triangle. The heavy-duty PVC wrap with liquid waterproof adhesive at the top wire entries resists road spray. Never submerge the pack or clean it with a high-pressure washer.

7. What's Included

Battery pack with your selected BMS rating and discharge connector, 84V 10A intelligent aluminum fast charger, AC power cable (plug matched to your country), heavy-duty discharge extension cable with your selected connector, and a weather-resistant triangle frame battery bag with reinforced mounting straps. 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. Do not select Anderson SB50 for this pack: it is rated 50A, while this pack's BMS tiers run 100A to 200A continuous.