PRODUCT DATASHEET

72V 20Ah Triangle E-BIKE BATTERY

Samsung INR21700-50G Cells · JBD Smart BMS

Rated 1,440Wh capacity. Built fresh to order and bench-tested before shipping.

DOCUMENT TYPE	Technical Specification & Product Data Sheet
BATTERY MODEL	BOOANT 72V 20Ah Triangle eBike Battery

Product Datasheet

72V 20Ah Triangle eBike Battery · Samsung INR21700-50G Cells · JBD Smart BMS

1. Overview

A 72V 20Ah (1,440Wh) lithium-ion battery built with 80 genuine Samsung INR21700-50G cells in a 20S4P configuration, for 72V e-bikes, enduro builds and high-power conversion kits up to 3,000W. The cells sit in a sealed blue PVC triangle pack managed by a JBD smart Bluetooth BMS, and the pack ships with an 84V 5A charger and a triangle mounting bag. Every pack is built fresh to order and bench-tested before shipping.

2. Key Features

- **Genuine Samsung 50G cells** — 80 authentic Samsung INR21700-50G cells (20S4P) deliver a rated 1,440Wh, with stable voltage under load and no rewrapped or B-grade cells.
- **JBD smart Bluetooth BMS** — 30A, 40A or 60A options matched to motors up to 1,500W, 2,000W or 3,000W, with cell balancing and full protection monitoring via the app.
- **Lightweight triangle pack** — The sealed blue PVC triangle pack weighs about 6.5 kg (14.33 lb), far lighter than a metal case, and a triangle mounting bag with frame straps is included.
- **84V 5A fast charger included** — A full 0 to 100% charge takes approximately 5 hours, at a gentle 1.25A per cell group.
- **Connector of your choice** — QS8, Anderson SB50, XT60F/M or XT90F/M discharge connector pre-soldered on a 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	20Ah (1,440Wh)
Cell type & configuration	Samsung INR21700-50G, 80 cells, 20S4P
BMS	JBD smart BMS with Bluetooth: 30A (90A peak) / 40A (120A peak) / 60A (180A peak)
Motor compatibility	Up to 1,500W (30A BMS) / 2,000W (40A BMS) / 3,000W (60A BMS)
Full-charge voltage	84V
Discharge cut-off voltage	60V
Charger	84V 5A, aluminum case, fan-cooled, included
Charge time	Approx. 5 hours (0 to 100%)
Dimensions	Triangle outline: slope 280 / base 220 / height 175 mm, thickness 90 mm
Weight	Approx. 6.5 kg (14.33 lb)
Discharge connectors	QS8 / Anderson SB50 / XT60F/M / XT90F/M / Wire only
Cycle life	Over 800 cycles (per product page, before significant capacity decay)
App	JBD app (XiaoxiangBMS), iOS & Android
Enclosure	Blue PVC heat-shrink wrap, epoxy plate insulation, 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 (XiaoxiangBMS, QR code inside the package) 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 84V 5A charger, an aluminum-case unit with a cooling fan, running CC/CV stages and protected by an external replaceable 250V / 10A fuse. 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 5A across 4 parallel groups, each cell charges at about 1.25A, a gentle rate that avoids heat stress and protects cycle life.

6. Enclosure & Fitment

Check your frame triangle against the pack outline before ordering: slope 280 mm, base 220 mm, height 175 mm, thickness 90 mm. Every pack is hand-built, so leave a few millimeters of clearance. The included triangle mounting bag straps the pack securely inside the frame triangle, with no separate bracket or rack. The sealed multi-layer PVC wrap handles rain and 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 5A smart fast charger, AC power cable (plug matched to your country), triangle mounting bag with frame straps, discharge lead with your selected connector pre-soldered, and a user manual with JBD Bluetooth app guide. 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.