PRODUCT DATASHEET

60V 40Ah 50S
E-BIKE BATTERY

Samsung INR21700-50S Cells · JBD Smart BMS

Rated 2,400Wh capacity. Built fresh to order and bench-tested before shipping.

DOCUMENT TYPE	Technical Specification & Product Data Sheet
BATTERY MODEL	BOOANT 60V 40Ah 50S eBike Battery

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60V 40Ah 50S eBike Battery · Samsung INR21700-50S Cells · JBD Smart BMS

1. Overview

A 60V 40Ah (2,400Wh) high-performance lithium-ion battery built with 128 genuine Samsung INR21700-50S cells in a 16S8P configuration, for electric motorcycles, high-performance e-bikes, electric dirt bikes and custom EV projects requiring sustained high-load performance up to 5,000W. The cells sit in a compact pack managed by a JBD smart Bluetooth BMS, and the pack ships with a WATE 67.2V 5A smart charger. Every pack is built fresh to order and bench-tested before shipping.

2. Key Features

- **Genuine Samsung 50S cells** — 128 authentic Samsung INR21700-50S cells (16S8P) deliver a rated 2,400Wh, with strong current delivery under sustained heavy load and no rewrapped or B-grade cells.
- **JBD smart Bluetooth BMS** — 60A, 80A or 100A options matched to motors up to 1,500W, 4,000W or 5,000W as listed on the product page, with cell balancing and full protection monitoring via the app, plus a remote digital lock.
- **High-performance pack, 10 kg** — The pack measures about 285 x 235 x 75 mm and weighs about 10 kg (22.05 lb), built for electric motorcycles, electric dirt bikes, high-performance e-bikes and custom EV projects.
- **WATE 67.2V 5A charger included** — A full 0 to 100% charge takes approximately 9 hours, at 0.63A per cell across the 8 parallel groups.
- **Connector of your choice** — QS8 plug, QS10 plug, XT90F/M, Anderson SB50 or Wire only, on 10AWG leads. For the 80A and 100A tiers choose QS8 or QS10 plug; Anderson SB50 (50A) and XT90 (about 90A) are not suitable for the 100A tier.
- **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	60V
Rated capacity	40Ah (2,400Wh)
Cell type & configuration	Samsung INR21700-50S, 128 cells, 16S8P
BMS	JBD smart BMS with Bluetooth: 60A / 80A / 100A
Motor compatibility	Up to 1,500W (60A BMS) / 4,000W (80A BMS) / 5,000W (100A BMS) as listed
Full-charge voltage	67.2V
Charger	WATE 67.2V 5A smart charger, included
Charge time	Approx. 9 hours (0 to 100%)
Dimensions	Approx. 285 x 235 x 75 mm
Weight	Approx. 10 kg (22.05 lb)
Discharge connectors	QS8 plug / QS10 plug / XT90F/M / Anderson SB50 / Wire only (10AWG leads)
App	JBD app (XiaoxiangBMS), iOS & Android
Enclosure	Blue PVC wrap, compact high-performance pack

4. Smart BMS & Bluetooth App

The integrated JBD Bluetooth smart BMS protects the pack against overcharge, over-discharge, overcurrent, short circuit and excessive temperature. Battery voltage, current draw, cell status and temperature can be monitored in real time through a compatible mobile app, with a remote digital lock so nobody can roll off with your bike.

5. Charging

Charge only with the included WATE 67.2V 5A smart charger. The charge voltage is 67.2V. A full charge takes approximately 9 hours. At 5A across 8 parallel groups, each cell charges at about 0.63A, a gentle rate that protects cycle life under sustained heavy load.

6. Enclosure & Fitment

The pack measures about 285 x 235 x 75 mm and weighs about 10 kg. Its compact structure balances high energy capacity with strong discharge performance and thermal stability for demanding builds. Check your mounting space against these dimensions before ordering.

7. What's Included

Battery pack with your selected BMS rating and discharge connector, WATE 67.2V 5A smart charger, AC power cable (plug matched to your country), discharge lead with your selected connector pre-soldered (10AWG leads), 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 500 cycles to 70% capacity retention, whichever comes first, per the BOOANT warranty policy for 50S cells). Questions about this product: support@booant.com.

Specifications are taken from the product data for this model. Peak BMS currents, discharge cut-off voltage, operating temperature and cycle life are not listed on this product page, so they are 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.