



PRODUCT DATASHEET

60V 20Ah Metal E-BIKE BATTERY

Samsung INR21700-50G Cells · JBD Smart BMS

Rated 1,200Wh capacity. Built fresh to order and bench-tested before shipping.

DOCUMENT TYPE Technical Specification & Product Data Sheet

BATTERY MODEL BOOANT 60V 20Ah Metal eBike Battery

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1. Overview

A 60V 20Ah (1,200Wh) metal case lithium-ion battery built with 64 genuine Samsung INR21700-50G cells in a 16S4P configuration, for electric motorcycles, high-power electric scooters and custom electric vehicle projects up to 2,000W. The cells sit in a rugged powder-coated metal enclosure managed by a JBD smart Bluetooth BMS, and the pack ships with a WATE 67.2V 5A smart charger and a fireproof safety bag. Every pack is built fresh to order and bench-tested before shipping.

2. Key Features

- **Genuine Samsung 50G cells** — 64 authentic Samsung INR21700-50G cells (16S4P) deliver a rated 1,200Wh, with stable voltage under load and no rewrapped or B-grade cells.
- **JBD smart Bluetooth BMS** — 30A or 50A options matched to motors up to 1,200W or 2,000W, with cell balancing and full protection monitoring via the app.
- **Metal case, 7 kg** — The rugged powder-coated metal case measures 290 x 195 x 95 mm and weighs about 7 kg (15.4 lb), built for electric motorcycles, high-power scooters and custom EV projects.
- **WATE 67.2V 5A charger included** — A full 0 to 100% charge takes approximately 5 hours, at 1.25A per cell across the 4 parallel groups.
- **Connector of your choice** — QS8 plug, Anderson SB50, Anderson PP45, XT60F/M or XT90F/M, matched to your controller.
- **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	20Ah (1,200Wh)
Cell type & configuration	Samsung INR21700-50G, 64 cells, 16S4P
BMS	JBD smart BMS with Bluetooth: 30A / 50A
Motor compatibility	Up to 1,200W (30A BMS) / 2,000W (50A BMS)
Full-charge voltage	67.2V
Charger	WATE 67.2V 5A smart charger, included
Charge time	Approx. 5 hours (0 to 100%)
Dimensions	290 x 195 x 95 mm
Weight	Approx. 7 kg (15.4 lb)
Discharge connectors	QS8 plug / Anderson SB50 / Anderson PP45 / XT60F/M / XT90F/M
App	JBD app (XiaoxiangBMS), iOS & Android
Enclosure	Rugged powder-coated metal case, fireproof safety bag included

4. Smart BMS & Bluetooth App

The original JBD Smart Bluetooth BMS continuously monitors battery operation and provides protection against over-charge, over-discharge, over-current, short circuit, over-temperature and cell imbalance. Battery voltage, current, cell status and temperature can be monitored in real time through the official JBD mobile app for iOS and Android.

5. Charging

Charge only with the included WATE 67.2V 5A smart charger. The charge voltage is 67.2V. A full charge takes approximately 5 hours. At 5A across 4 parallel groups, each cell charges at about 1.25A.

6. Enclosure & Fitment

The solid steel metal case measures exactly 290 x 195 x 95 mm and has absolutely zero flex, so it will not squeeze into a tight deck. Measure your compartment clearance against these dimensions before ordering, and confirm output wire orientation with us if needed for your controller.

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), fireproof safety bag, discharge lead with your selected connector, 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. 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.