PRODUCT DATASHEET

60V 30Ah PVC
E-BIKE BATTERY

Samsung INR21700-50G Cells · JBD Smart BMS

Rated 1,800Wh capacity. Built fresh to order and bench-tested before shipping.

DOCUMENT TYPE	Technical Specification & Product Data Sheet
BATTERY MODEL	BOOANT 60V 30Ah PVC eBike Battery

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1. Overview

A 60V 30Ah (1,800Wh) lightweight lithium-ion battery built with 96 genuine Samsung INR21700-50G cells in a 16S6P configuration, for high-power scooters, custom e-bikes, electric trikes and DIY electric vehicle projects up to 2,500W. The cells sit in a PVC pack with solid matrix alignment brackets, managed by a JBD smart Bluetooth BMS, and the pack ships with a 67.2V 5A smart fast charger. Every pack is built fresh to order and bench-tested before shipping.

2. Key Features

- **Genuine Samsung 50G cells** — 96 authentic Samsung INR21700-50G cells (16S6P) deliver a rated 1,800Wh, with stable voltage under load and no rewrapped or B-grade cells.
- **JBD smart Bluetooth BMS** — 30A (90A peak), 40A (120A peak) or 50A (150A peak) options matched to motors up to 1,500W, 2,000W or 2,500W, with cell balancing and full protection monitoring via the app.
- **Lightweight PVC pack, 7.0 kg** — The PVC pack measures 390 x 145 x 75 mm and weighs about 7.0 kg (15.4 lb), with solid matrix alignment brackets locking every cell in place for off-road vibration resistance.
- **67.2V 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 CC/CV charger with active fan cooling.
- **Connector of your choice** — QS8 plug, XT90F/M, Anderson SB50, XT60F/M or Wire only, on 10AWG silicone leads, 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	30Ah (1,800Wh)
Cell type & configuration	Samsung INR21700-50G, 96 cells, 16S6P
BMS	JBD smart BMS with Bluetooth: 30A (90A peak) / 40A (120A peak) / 50A (150A peak)
Motor compatibility	Up to 1,500W (30A BMS) / 2,000W (40A BMS) / 2,500W (50A BMS)
Full-charge voltage	67.2V
Discharge cut-off voltage	44.8V (2.8V per cell)
Charger	67.2V 5A, CC/CV, fan-cooled, included
Charge time	Approx. 7 hours (0 to 100%)
Dimensions	390 x 145 x 75 mm
Weight	Approx. 7.0 kg (15.4 lb)
Discharge connectors	QS8 plug / XT90F/M / Anderson SB50 / XT60F/M / Wire only (10AWG silicone lead)
App	JBD app (XiaoxiangBMS), iOS & Android
Enclosure	Premium high-density PVC film, solid matrix alignment brackets
Cycle life	Up to 1,000 full cycles (actual life depends on load, storage and temperature)

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 discharge switch to lock out thieves.

5. Charging

Charge only with the included 67.2V 5A charger, a CC/CV unit with active fan cooling. The LED shows solid red while charging and solid green when fully charged or in standby (connected to wall power without a battery attached). A full charge takes approximately 7 hours. At 5A across 6 parallel groups, each cell charges at about 0.83A, well below the Samsung maximum charge rating.

6. Enclosure & Fitment

The pack measures 390 x 145 x 75 mm (production tolerance plus or minus 2 mm) and weighs about 7.0 kg. It is wrapped in heavy-duty protective PVC without a rigid metal box, so do not guess the spacing. Cut out a mock cardboard box to these exact dimensions and test-fit it inside your frame bag or compartment before ordering. Keep it inside a proper battery bag or enclosure to shield it from road debris and heavy rain.

7. What's Included

Battery pack with your selected BMS rating and discharge connector, 67.2V 5A smart fast charger, AC power cable (plug matched to your country), discharge lead with your selected connector pre-installed (10AWG silicone wire), 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. 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.