PRODUCT DATASHEET

48V 30Ah PVC
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 48V 30Ah PVC eBike Battery

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1. Overview

A 48V 30Ah (1,440Wh) lithium-ion battery built with 78 genuine Samsung INR21700-50G cells in a 13S6P configuration, for commuting, cargo bikes, conversion kits and custom e-bike builds up to 2,000W. The cells sit in a PVC pack managed by a JBD smart Bluetooth BMS, and the pack ships with a 54.6V 5A Fast Charger. Every pack is built fresh to order and bench-tested before shipping.

2. Key Features

- **Genuine Samsung 50G cells** — 78 authentic Samsung INR21700-50G cells (13S6P) deliver a rated 1,440Wh, with stable voltage under load and no rewrapped or B-grade cells.
- **JBD smart Bluetooth BMS** — 30A, 40A or 50A options matched to motors up to 1,000W, 1,500W or 2,000W, with cell balancing and full protection monitoring via the app.
- **Lightweight PVC pack** — The PVC enclosure keeps the pack light at about 6.0 kg, making installation easier for commuting, cargo bikes, conversion kits and custom builds.
- **54.6V 5A Fast Charger included** — A full 0 to 100% charge takes approximately 7 hours, at 0.83A per cell across the 6 parallel groups.
- **Connector of your choice** — XT60F/M, XT90F/M, Anderson SB50, QS8 plug or Wire only, 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	48V
Rated capacity	30Ah (1,440Wh)
Cell type & configuration	Samsung INR21700-50G, 78 cells, 13S6P
BMS	JBD smart BMS with Bluetooth: 30A / 40A / 50A
Motor compatibility	Up to 1,000W (30A BMS) / 1,500W (40A BMS) / 2,000W (50A BMS)
Peak current	90A (30A BMS) / 120A (40A BMS) / 150A (50A BMS)
Full-charge voltage	54.6V
Discharge cutoff	39.0V
Charger	54.6V 5A Fast Charger, included
Charge time	Approx. 7 hours (0 to 100%)
Dimensions	Approx. 295 × 135 × 75 mm (11.61 × 5.31 × 2.95 in)
Weight	Approx. 6.0 kg (13.23 lb)
Discharge connectors	XT60F/M / XT90F/M / Anderson SB50 / QS8 plug / Wire only
App	JBD Bluetooth app, iOS & Android
Enclosure	PVC heat-shrink wrap, epoxy board, waterproof coating (top & bottom)
Operating temperature	Charge 0-45°C / Discharge -20-60°C / Storage 0-35°C

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, cell status and temperature can be monitored in real time through a compatible mobile app.

5. Charging

Charge only with the included 54.6V 5A Fast Charger. The charge voltage is 54.6V. A full charge takes approximately 7 hours. At 5A across 6 parallel groups, each cell charges at about 0.83A, a gentle rate that protects cycle life.

6. Enclosure & Fitment

The PVC enclosure helps reduce total battery weight while maintaining durability for daily riding and regular use. Its lighter construction makes installation easier for many e-bike and conversion setups without adding unnecessary bulk. Check your frame and mounting space against the product page before ordering.

7. What's Included

Battery pack with your selected BMS rating and discharge connector, 54.6V 5A Fast Charger, AC power lead (plug type by country), discharge extension cable (by connector), and JBD App download QR code. 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.