PRODUCT DATASHEET

36V 30Ah Blue PVC E-BIKE BATTERY

Samsung INR21700-50G Cells · JBD Smart BMS

True 1,080Wh capacity. Built fresh to order and bench-tested before shipping.

DOCUMENT TYPE	Technical Specification & Product Data Sheet
BATTERY MODEL	BOOANT 36V 30Ah Blue PVC eBike Battery

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1. Overview

A 36V 30Ah (1,080Wh) lithium-ion battery built with 60 genuine Samsung INR21700-50G cells in a 10S6P configuration, for high-mileage commuters, cargo bikes and DIY conversion kits up to 1,200W. The pack is wrapped in blue PVC over epoxy insulation boards, managed by a JBD smart Bluetooth BMS, and ships with a 42V 5A Fast Charger. Every pack is built fresh to order and bench-tested before shipping.

2. Key Features

- **Genuine Samsung 50G cells** — 60 authentic Samsung INR21700-50G cells (10S6P) deliver a true 1,080Wh, with low internal resistance and stable output under load.
- **JBD smart Bluetooth BMS** — 30A or 40A options matched to motors up to 750W or 1,200W, with cell balancing and full protection monitoring via the JBD app.
- **Dual-layer sealed construction** — Rigid epoxy insulation boards protect the cell matrix inside, blue PVC heat-shrink wraps the outside, and sealant at both wire exits blocks road spray.
- **Your connector, pre-soldered** — XT60, XT90, QS8, Anderson or bare wire, soldered and heat-shrunk to your controller interface at no extra charge.
- **42V 5A Fast Charger included** — A full 0 to 100% charge takes approximately 6-7 hours, at a gentle 0.83A per cell group.
- **Bench-tested before shipping** — Every pack runs a full charge and discharge test before it leaves, and is covered by a 2-year warranty.

3. Technical Specifications

Nominal voltage	36V
Rated capacity	30Ah (1,080Wh)
Cell type & configuration	Samsung INR21700-50G, 60 cells, 10S6P
BMS	JBD Smart BMS with Bluetooth: 30A (90A peak) / 40A (120A peak)
Motor compatibility	Up to 750W (30A BMS) / 1,200W (40A BMS)
Full-charge voltage	42.0V
Discharge cut-off voltage	30.0V
Charger	42V 5A Fast Charger, aluminum body, fan-cooled, included
Charge time	Approx. 6-7 hours (0 to 100%)
Dimensions	230 × 135 × 75 mm (9.06 × 5.31 × 2.95 in)
Weight	Approx. 4.5 kg (9.92 lb)
Discharge connectors	XT60F/M / XT90F/M / QS8 / Anderson SB50 / Wire only
App	JBD app (XiaoxiangBMS), iOS & Android
Enclosure	Blue PVC heat-shrink wrap, epoxy insulation boards, sealed wire exits
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 and short circuits, with automatic cell balancing to keep the 10 cell groups even. Through the JBD app (XiaoxiangBMS) you can view individual cell group voltages, cycle count and protection history, and remotely switch charge and discharge on or off.

5. Charging

Charge only with the included 42V 5A charger, an aluminum-body fan-cooled unit with dual safety fuses. A full charge takes approximately 6-7 hours. At 5A across 6 parallel groups, each cell charges at about 0.83A, keeping the pack cool and protecting cycle life.

6. Enclosure & Fitment

Check the 230 × 135 × 75 mm pack against your battery bag, tray or frame space before ordering. The PVC-wrapped pack is compact and light for its capacity at about 4.5 kg. The sealed construction handles wet roads, light rain and trail puddles. Never submerge the pack or clean it with a high-pressure washer.

7. What's Included

Battery pack with your selected BMS rating and pre-soldered discharge connector, 42V 5A Fast Charger, AC power cord with the plug for your region, discharge extension cable, 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.