PRODUCT DATASHEET

36V 60Ah Metal Case
E-BIKE BATTERY

Samsung INR21700-50G Cells · JBD Smart BMS

True 2,160Wh capacity. Built fresh to order and bench-tested before shipping.

DOCUMENT TYPE	Technical Specification & Product Data Sheet
BATTERY MODEL	BOOANT 36V 60Ah Metal Case eBike Battery

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1. Overview

A 36V 60Ah (2,160Wh) lithium-ion battery built with 120 genuine Samsung INR21700-50G cells in a 10S12P configuration, for e-bikes, cargo trikes and custom mobility builds from 250W to 1,500W. The pack sits in a powder-coated metal case with a live LCD display and carry handle, managed by a JBD smart Bluetooth BMS, and ships with a 42V 10A aluminum fast charger. Every pack is built fresh to order and bench-tested before shipping.

2. Key Features

- **Genuine Samsung 50G cells** — 120 authentic Samsung INR21700-50G cells (10S12P) deliver a true 2,160Wh, with low internal resistance and minimal voltage sag under sustained load.
- **JBD smart Bluetooth BMS** — 30A or 50A options matched to motors up to 1,000W or 1,500W, with cell balancing and full protection monitoring via the JBD app.
- **Live LCD display** — The top display shows pack voltage, battery percentage, operating temperature and charging progress at a glance, no phone needed.
- **Powder-coated metal case** — One-piece sheet-metal housing with carry handle, internal shock-absorbing foam and waterproof potting around the cell assembly.
- **42V 10A fast charger included** — A full 0 to 100% charge takes approximately 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	60Ah (2,160Wh)
Cell type & configuration	Samsung INR21700-50G, 120 cells, 10S12P
BMS	JBD smart BMS with Bluetooth: 30A (90A peak) / 50A (150A peak)
Motor compatibility	Up to 1,000W (30A BMS) / 1,500W (50A BMS)
Full-charge voltage	42.0V
Discharge cut-off voltage	30.0V
Charger	42V 10A, aluminum case, fan-cooled, included
Charge time	Approx. 7 hours (0 to 100%)
Dimensions	275 × 180 × 140 mm (10.8 × 7.1 × 5.5 in)
Weight	Approx. 11.5 kg (25.4 lb)
Discharge connectors	QS8 / Anderson / XT60 / XT90 / Wire only
Display	LCD: voltage, percentage, temperature, charging progress
App	JBD app (XiaoxiangBMS), iOS & Android
Enclosure	Powder-coated sheet-metal case, waterproof potting, internal shock-absorbing foam

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 discharge on or off. The pack also works fully on its own: the LCD display covers the key figures without the app.

5. Charging

Charge only with the included 42V 10A charger. The indicator is solid red while charging (or if there is a connection fault) and turns solid green when the pack is fully charged to 42.0V and the charger has cut off automatically. At 10A across 12 parallel groups, each cell charges at about 0.83A, well within Samsung's recommended rate, so fast charging does not cost cycle life.

6. Enclosure & Fitment

Check the 275 × 180 × 140 mm case against your battery compartment, rack or frame space before ordering, and leave 5 to 10 mm of clearance: the rigid metal shell will not flex or squeeze down. 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 discharge connector, 42V 10A aluminum smart fast charger, AC power cable with the plug for your region, and a fireproof battery safety storage bag. 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.