PRODUCT DATASHEET

36V 30Ah Metal Case
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 Metal Case eBike Battery

Product Datasheet

36V 30Ah Metal Case eBike Battery · Samsung INR21700-50G Cells · JBD Smart BMS

1. Overview

A 36V 30Ah (1,080Wh) lithium-ion e-bike battery built with 60 genuine Samsung INR21700-50G cells in a 10S6P configuration. The pack is housed in a sealed sheet-metal case with a live LCD display and a JBD smart Bluetooth BMS, and is matched 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 stable output and no inflated capacity figures.
- **JBD smart Bluetooth BMS** — 30A, 40A or 50A options matched to motors up to 1,500W, with cell balancing and full protection monitoring via the JBD app.
- **Live LCD display** — The case display shows pack voltage, battery percentage, operating temperature and charging progress at a glance.
- **Sealed metal case** — Sheet-metal enclosure with sealed seams, waterproof potting and shock-absorbing foam around the cell pack.
- **42V 5A 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	30Ah (1,080Wh)
Cell type & configuration	Samsung INR21700-50G, 60 cells, 10S6P
BMS	JBD smart BMS with Bluetooth: 30A (90A peak) / 40A (120A peak) / 50A (150A peak)
Motor compatibility	Up to 1,000W (30A BMS) / 1,200W (40A BMS) / 1,500W (50A BMS)
Full-charge voltage	42.0V
Discharge cut-off voltage	30.0V
Charger	42V 5A, fan-cooled, included
Charge time	Approx. 7 hours (0 to 100%)
Dimensions	300 × 190 × 90 mm (11.8 × 7.5 × 3.5 in)
Weight	Approx. 7 kg (15.4 lb)
Discharge connectors	Anderson / QS8 / XT60 / XT90 / Wire only
Display	LCD: voltage, percentage, temperature, charging progress
App	JBD app (XiaoxiangBMS), iOS & Android
Enclosure	Sheet-metal case, sealed seams, waterproof potting, internal shock-absorbing foam

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 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 5A 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 5A across 6 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 300 × 190 × 90 mm case against your battery tray 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 5A fast charger, 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.