PRODUCT DATASHEET

# 72V 20Ah Slim
# E-MOTORCYCLE BATTERY

Samsung INR21700-50G Cells · JBD Smart BMS

Rated 1,440Wh capacity in a slim 485 mm pack. Built fresh to order and bench-tested before shipping.

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| DOCUMENT TYPE | Technical Specification & Product Data Sheet |
| BATTERY MODEL | BOOANT 72V 20Ah E-Motorcycle Battery |

# Product Datasheet

72V 20Ah E-Motorcycle Battery · Samsung INR21700-50G Cells · JBD Smart BMS

## 1. Overview

A 72V 20Ah (1,440Wh) lithium-ion battery built with 80 genuine Samsung INR21700-50G cells in a 20S4P configuration, for 72V electric motorcycles, performance e-bikes and custom conversion builds up to 3,000W. The cells sit in a slim blue PVC pack managed by a JBD smart Bluetooth BMS, and the pack ships with an 84V 5A charger. Every pack is built fresh to order and bench-tested before shipping.

## 2. Key Features

- **Genuine Samsung 50G cells** — 80 authentic Samsung INR21700-50G cells (20S4P) deliver a rated 1,440Wh, with stable voltage under load and no rewrapped or B-grade cells.
- **JBD smart Bluetooth BMS** — 30A or 50A options matched to motors up to 1,800W or 3,000W, with cell balancing and full protection monitoring via the app.
- **Slim PVC drop-in pack** — The blue PVC pack measures 485 x 100 x 75 mm and weighs about 5.5 kg (12.13 lb), made to slip into narrow motorcycle frames and custom boxes.
- **84V 5A fast charger included** — A full 0 to 100% charge takes approximately 5 hours, at a gentle 1.25A per cell group.
- **Connector of your choice** — QS8, XT90F/M, XT60 or Anderson SB50 discharge connector pre-soldered before shipping, matched to your controller at no extra cost.
- **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

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| **Nominal voltage** | 72V |
| **Rated capacity** | 20Ah (1,440Wh) |
| **Cell type & configuration** | Samsung INR21700-50G, 80 cells, 20S4P |
| **BMS** | JBD smart BMS with Bluetooth: 30A / 50A (peak current not stated on the product page) |
| **Motor compatibility** | Up to 1,800W (30A BMS) / 3,000W (50A BMS) |
| **Full-charge voltage** | 84V |
| **Discharge cut-off voltage** | 60V (BOOANT 72V rule: 3.0V per cell, 20S) |
| **Charger** | 84V 5A smart charger, included |
| **Charge time** | Approx. 5 hours (0 to 100%) |
| **Dimensions** | 485 x 100 x 75 mm (19.09 x 3.94 x 2.95 in) |
| **Weight** | Approx. 5.5 kg (12.13 lb) |
| **Discharge connectors** | QS8 / XT90F/M / XT60 / Anderson SB50 / Wire only |
| **App** | JBD app (XiaoxiangBMS), iOS & Android |
| **Enclosure** | Blue PVC heat-shrink wrap, reinforced internal cell structure |

## 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, short circuits and over-temperature, with automatic cell balancing to keep the 20 cell groups even. Through the JBD app you can view individual cell group voltages, balance status, cycle count and protection history, and remotely switch discharge on or off. There is no display on the pack itself; the app is the dashboard.

## 5. Charging

Charge only with the included 84V 5A charger, running CC/CV stages with overheat protection. The LED shows red while charging (or if a fault is detected) and green when fully charged or in standby. A full charge from near empty (60V) to full (84V) takes approximately 5 hours. At 5A across 4 parallel groups, each cell charges at about 1.25A, a gentle rate that avoids heat stress and protects cycle life.

## 6. Enclosure & Fitment

Check your frame or battery box against the pack size before ordering: 485 x 100 x 75 mm. Every pack is hand-built, so leave a few millimeters of clearance. Because it is a PVC-wrapped pack, never let it rub directly against bare metal frame corners or sharp bolt heads; use foam padding or a battery bag to lock it down. The sealed wrap handles splashes and light rain. Never submerge the pack or leave it exposed to a heavy downpour on an open frame.

## 7. What's Included

Battery pack with your selected BMS rating and discharge connector, 84V 5A smart charger, AC power cable (plug matched to your country), and an XT60 adapter cable. 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. Anderson SB50 is rated 50A, so it runs at its limit on the 50A tier; QS8 is the safer pick for the 50A tier.