73.6V48Ah E-Motorcycle Battery Pack LFP IP67 Power System

Key Specifications

Capacity	73.6V	Voltage	48Ah
Model	E-Motorcycle Battery	Operating Temp	-40°C ~ +60°C

Product Overview

Model Number	73.6V48Ah E-Motorcycle Power System
Configuration	23S
Chemical Materials	LFP
Nominal Capacity (Ah)	48
Nominal Energy (kWh)	3.39
Nominal Voltage (V)	73.6
Operating Voltage Range (V)	57.5-83.95
Max. Continuous Charging Current (A)	40
Peak Charging Current (A)	92
Max. Continuous Discharge Current (A)	100
Peak Discharge Current (A)	130 @ 30s / 25°C
Cycle Life (times)	3000 @ 1C/1C
Protection Function	Overcharge, over-discharge, and over-current protection
Communication Function	CAN
Dimensions (mm)	352 x 192 x 300 (L x W x H)
Product Weight (kg)	32

Protection Level	IP67
Charging / Discharge / Storage Temperature (°C)	-40°C to +60°C
Working Altitude (m)	Up to 5000
Design Standards	GB/T 38058-2019, GB 31241-2022
Certification Standards	UN38.3, RoHS, UL 2054

Solution

Electric motorcycle battery packs have to survive more than a clean bench test. A road pack sees acceleration current, vibration, rain, dust, heat, cold, and long idle periods, often in the same service life. If the enclosure sealing, BMS protection, and voltage window are not designed together, the vehicle becomes sensitive to weather and load spikes instead of just energy capacity.

This 73.6V48Ah LFP power system is built for e-motorcycle platforms that need a safer, longer-cycle chemistry with CAN communication and a sealed pack structure. The 57.5-83.95V operating window, 3000-cycle rating, IP67 protection, and up to 5000m operating altitude make it a practical option for vehicles used beyond mild city conditions. See LiTrue's full range of battery pack systems for adjacent electric mobility platforms.

Application Areas

- Electric Motorcycles: supports a 73.6V traction system with LFP chemistry, CAN communication, and built-in pack protection for daily road use.
- Electric Scooters & Light EVs: provides 48Ah capacity in a 352 x 192 x 300mm enclosure where long cycle life matters more than minimum pack weight.
- Shared Mobility Fleets: the 3000-cycle rating, BMS protection functions, and CAN interface help

operators monitor battery status across repeated charge and discharge cycles.

- Cold and High-Altitude Operation: the stated -40°C to +60°C operating range and up to 5000m altitude support use in harsher regional environments.
- Outdoor Utility Vehicles: IP67 protection helps the pack resist dust and water exposure, consistent with the IP code classification system.

FAQs

Is this an LFP or NMC battery pack?

It is an LFP battery pack. LFP is usually chosen when cycle life, thermal stability, and operating durability matter more than achieving the lightest possible pack weight.

What voltage platform does this pack support?

The nominal voltage is 73.6V, with an operating voltage range of 57.5-83.95V. That points to a 23S LFP system, but the final series-parallel configuration should be confirmed against the internal cell layout.

Can this pack be used in cold or hot environments?

Yes, based on the supplied operating range of -40°C to +60°C. The separate charging, discharging, and storage temperature limits should still be confirmed because charging restrictions are often narrower than discharge operation.

Can I request samples or confirm certification documents?

Yes. Sample availability, interface details, and model-specific certification documents should be reviewed during project scoping. Contact LiTrue's applications team to confirm the electrical interface, enclosure requirements, and qualification plan.