

Powerful long lifepan 8kWh lifepo4 battery pack for truck

Our Product Introduction

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Basic Information

- Place of Origin: CHINA
- Brand Name: TINKO/OEM
- Certification: CE/ROHS/MSDS/UN38.3
- Model Number: RS007-P
- Minimum Order Quantity: 1PC
- Price: Negotiable
- Packaging Details: 1pc/parer carton
- Delivery Time: 15-20 work days
- Supply Ability: 100pcs/day



Product Specification

- Highlight: 8kWh lifepo4 battery pack for truck, long lifespan truck battery pack, powerful EV motorcycle battery pack



More Images



Product Description

TINKO RS007-FS 25.6V 314Ah Parking Air Conditioner Lithium Battery

The TINKO RS007-FS is a premium 25.6V 314Ah lithium iron phosphate (LiFePO₄) battery engineered specifically for truck parking air conditioner systems, heavy-duty commercial vehicles, RVs, and off-grid auxiliary power applications. Delivering a robust 8,038.4Wh (8.0kWh) of stored energy, this battery is the ultimate solution for drivers seeking reliable overnight cabin comfort without the noise, fumes, or fuel waste of engine idling.

What sets the RS007-FS apart is its versatile form factor availability - offered in three distinct dimension configurations, this battery adapts to a wide range of vehicle chassis and mounting spaces. Whether you drive a semi-truck, delivery van, motorhome, or construction vehicle, there is a TINKO RS007-FS size tailored to your specific installation requirements.

Built around advanced LiFePO₄ cell technology, the RS007-FS delivers superior thermal stability, intrinsic safety, and an exceptional cycle life that far outperforms traditional lead-acid batteries. The integrated intelligent Battery Management System (BMS) actively monitors and protects against overcharge, over-discharge, short circuits, overcurrent, and temperature extremes - ensuring safe, dependable operation even in the most demanding conditions.

For fleet operators, owner-operators, and overland adventurers alike, the TINKO RS007-FS represents a cost-effective, eco-friendly upgrade that reduces idle fuel consumption, lowers maintenance costs, and delivers peace of mind on every journey.

Key Features

- Massive 8.0kWh Energy Reserve - 314Ah capacity powers parking air conditioners, refrigerators, and cabin electronics through extended rest periods
- Premium LiFePO₄ Chemistry - Inherently safe, thermally stable, and built for thousands of charge cycles
- Intelligent BMS Protection - Comprehensive safeguards against overcharge, over-discharge, short circuits, overcurrent, and temperature fluctuations
- Three Size Options Available - Choose the dimension that best fits your vehicle's available mounting space
- High Current Output - 200A continuous discharge with 400A peak (3-5 seconds) for startup surges and simultaneous appliance operation
- Wide Operating Temperature Range - Discharge from -20°C to 60°C; charge from 0°C to 55°C
- Heavy-Duty Construction - Engineered for the rigors of commercial transportation and off-grid travel
- ROHS Compliant - Environmentally responsible manufacturing

Technical Parameters

Model	RS-007P
Battery Type	LiFePO ₄ (Lithium Iron Phosphate)
Nominal Capacity	314AH
Nominal Voltage	25.6V
Total Energy	8038.4Wh
Charge Voltage	28.4-29.2V
Max. Charge Current	200A
Max. Continuous Discharge Current	200A
Peak Discharge Current	400A(3-5S)
Parking Air Conditioner Discharge Cut-off Voltage	22V
Parking Air Conditioner Reconnect Voltage	25.6±0.5V
Parking Air Conditioner Output Current	≤200A
Discharge Cut-off Voltage	22V
Dimension	523*334*237MM
Weight	58kg
Discharge Temperature Range	-20 -60
Charge Temperature Range	0 -55

Storage Temperature	-5 -35
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Product Advantages

Three Size Configurations - One Perfect Fit

Unlike fixed-dimension batteries that force you to compromise on installation, the TINKO RS007-FS is available in three distinct size variants. Whether you have a tight compartment, a standard battery tray, or a custom mounting area, you can select the configuration that fits your vehicle without costly modifications. This flexibility makes the RS007-FS the go-to choice for fleet standardization across multiple vehicle types.

Industry-Leading Energy Density

With 314Ah capacity packing 8.0kWh into a compact footprint, the RS007-FS delivers exceptional energy density. This means more power in less space - a critical advantage for commercial vehicles where every inch of cargo or cabin space matters. Compared to lead-acid batteries of similar capacity, the RS007-FS is significantly lighter and more compact.

Extended Runtime for Overnight Comfort

A typical truck parking air conditioner draws between 800W and 1,200W. With 8.0kWh of usable energy, the RS007-FS provides 7 to 10+ hours of continuous air conditioning on a single charge - enough for a full night's rest without ever starting the engine. This translates to tangible fuel savings and compliance with anti-idling regulations.

Unmatched Cycle Life & Value

LiFePO4 technology delivers 3,000 to 6,000+ charge cycles - roughly 8 to 10 times the lifespan of conventional lead-acid batteries. While the upfront investment is higher, the total cost of ownership over the battery's lifetime is substantially lower, making the RS007-FS a smart long-term investment for serious drivers and fleet managers.

Smart BMS - Your Battery's Guardian

The built-in Battery Management System actively monitors cell voltages, temperatures, and current draw. It automatically disconnects the battery in fault conditions, prevents deep discharge damage, and balances cells for optimal performance. This intelligent protection extends battery life and provides comprehensive safety in all operating conditions.

All-Weather Reliability

Engineered for the extremes of commercial driving, the RS007-FS performs reliably in discharge temperatures from -20°C to 60°C and charges safely from 0°C to 55°C. Whether you're parked in a frozen truck stop or a sun-baked desert rest area, this battery delivers consistent, dependable power.

Fuel Savings & Environmental Impact

By powering your cab comfort with the TINKO RS007-FS instead of idling the engine, you can achieve significant fuel savings and reduce your carbon footprint. For fleet operators, this translates to lower operating costs and improved sustainability metrics - a win for both your bottom line and the environment.

Frequently Asked Questions (Q&A)

What is the difference between the three size options?

The three dimension variants - 523×334×237 mm, 526×376×268 mm, and 403×245×407 mm - are designed to accommodate different vehicle mounting spaces while maintaining identical electrical performance. All three deliver the same 314Ah capacity, 25.6V nominal voltage, and 8.0kWh energy. Weight varies slightly (56-60kg) based on casing and internal configuration. Choose the size that best fits your available space.

How long will the RS007-FS run my parking air conditioner?

Runtime depends on your AC unit's power draw. For an 800W parking air conditioner, expect approximately 8-10 hours of continuous operation. For a 1,000W unit, runtime is roughly 7-8 hours. Actual performance will vary based on ambient temperature, thermostat settings, and any additional appliances drawing power simultaneously.

Is this a direct replacement for my existing lead-acid battery?

Yes - the RS007-FS is designed as a drop-in replacement for 24V lead-acid batteries in parking air conditioner applications. However, we recommend using a LiFePO4-compatible charger with a charge voltage of 28.4V to 29.2V to ensure optimal performance and longevity. The battery can also be charged via your vehicle's alternator through a proper DC-DC charging setup.

What safety features does the BMS provide?

The integrated BMS provides comprehensive protection including: overcharge protection, over-discharge protection, short-circuit protection, overcurrent protection, high-temperature protection, low-temperature protection, and automatic disconnection in fault conditions. This ensures safe operation and maximizes battery lifespan.

What is the expected lifespan of this battery?

LiFePO4 batteries like the RS007-FS typically deliver 3,000-6,000+ charge cycles. For a driver who uses the battery daily for overnight parking AC, this translates to approximately 8-10+ years of reliable service - far outlasting any lead-acid alternative.

Can I use the RS007-FS for engine starting as well?

The RS007-FS is primarily designed for parking air conditioner and auxiliary power applications, with a maximum continuous discharge of 200A and a peak of 400A (3-5 seconds). While it can support some auxiliary starting functions, we recommend maintaining a dedicated starter battery for engine cranking to ensure optimal performance for both systems.

What is the recommended way to store the battery?

For long-term storage, keep the battery in a cool, dry environment at -5°C to 35°C. We recommend storing at approximately 50% state of charge and performing a recharge every 3-6 months to maintain optimal cell health.

Can I use this battery with my RV or campervan?

Absolutely. The RS007-FS is an excellent choice for RVs, campervans, and overland vehicles. Its high capacity powers not only air conditioning but also refrigerators, lighting, entertainment systems, and other 24V appliances during off-grid camping.

Does TINKO offer warranty coverage?

Yes, TINKO provides comprehensive warranty coverage for the RS007-FS series. Please contact your authorized TINKO dealer or visit our official website for detailed warranty terms and conditions.

What certifications does this battery hold?

The TINKO RS007-FS is manufactured to meet ROHS environmental compliance standards and undergoes rigorous quality control testing. For specific certification details, please consult the product documentation or contact our sales team.

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