# 32.14kWh Floor-Standing LiFePO4 Battery | 51.2V 628Ah Whole Home Solar Energy Storage | KT-HS010

Our Product Introduction

## Basic Information

- Place of Origin: Dongguan, Guangdong, China
- Brand Name: TINKO
- Certification: CE/ROHS/MSDS/UN38.3
- Model Number: KT-HS010
- Minimum Order Quantity: 1 Piece
- Price: Negotiable
- Packaging Details: Standard export double-layer corrugated carton, 1 piece per carton.
- Delivery Time: 25-30 work days
- Payment Terms: L/C, T/T
- Supply Ability: 100pcs/day




## Product Specification

- Battery Type: LiFePO4 (Lithium Iron Phosphate)
- Nominal Voltage: 51.2V
- Nominal Capacity: 628Ah
- Energy: 32.14 KWh
- Cycle Life: ≥6000 Cycles @ 80% DOD
- Design Life: Over 15 Years
- Installation: Floor-standing With Casters
- Communication Port: RS232, RS485, CAN
- Max Charge Current: 300A Per Unit
- Max Discharge Current: 300A Per Unit
- Dimensions: 720 × 440 × 870 Mm
- Operating Temperature: Charge: 0 ~55 ; Discharge: -20 ~60
- Safety Certifications: CE/ROHS/MSDS/UN38.3
- Original: Dongguan, Guangdong, China
- Application: Whole Home Solar Storage / Backup Power /




## More Images



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# Product Description

## Product Overview

The KT-HS010 is a high-capacity floor-standing residential and light commercial energy storage battery manufactured by TINKO. Built with premium grade-A LiFePO4 cells and an integrated 300A high-power smart BMS, it delivers 32.14kWh of stored energy at a 51.2V / 628Ah rated specification — a single-unit large-capacity solution for whole-home power backup and solar self-consumption.

Equipped with RS485, CAN and RS232 communication interfaces, the KT-HS010 is highly compatible with most mainstream 51.2V hybrid and off-grid inverters. Its vertical cabinet design with industrial casters allows flexible placement without wall drilling, making it ideal for large households, small businesses and off-grid energy systems.

## Key Advantages

**Ultra-High Single-Unit Capacity:** 32.14kWh in one unit, capable of powering heavy household appliances including air conditioners, water heaters and EV chargers during outages — no multi-module stacking required.

**300A High-Power Smart BMS:** The built-in 300A intelligent BMS efficiently manages charge and discharge rates and provides comprehensive protection against over-charge, over-discharge, over-current, short circuit and over-temperature.

**Safe & Long-Life LiFePO4 Chemistry:** Grade-A lithium iron phosphate cells with excellent thermal stability, ≥6000 cycles @ 80% DOD and a design life of over 15 years for long-term reliable operation.

**Mobile Floor-Standing Cabinet:** Robust steel cabinet with heavy-duty casters for easy movement and positioning. The front LCD screen and LED indicators allow real-time monitoring of battery status.

**Seamless Solar Integration:** Standard 51.2V voltage platform, compatible with most mainstream hybrid inverters via CAN and RS485 communication, perfectly matching existing rooftop PV systems.

**High Energy Efficiency:** System energy efficiency ≥95%, low self-discharge rate and maintenance-free operation for daily use.

**Strict Quality Compliance:** 100% full inspection before delivery, compliant with CE, RoHS, MSDS and UN38.3 international safety and transportation standards.

## Key Specifications

### Battery System

| Item | Parameter |
|---|---|
| Battery Type | LiFePO4 (Lithium Iron Phosphate) |
| Rated Voltage | 51.2V |
| Rated Capacity | 628Ah |
| Rated Energy | 32.14kWh |
| Max. Continuous Charge Current | 300A |
| Max. Continuous Discharge Current | 300A |
| Cycle Life | ≥6000 cycles @ 80% DOD |
| Design Life | Over 15 years |
| System Efficiency | ≥95% |
| Installation | Floor-standing with casters, indoor use only |
| Color | White & Grey |
| Dimensions | 720 × 440 × 870 mm (W×D×H) |

## Detailed Technical Parameters

| No. | Item | General Parameter | Remark |
|---|---|---|---|
| 1 | Battery Type | LiFePO4 (Lithium Iron Phosphate) | 8 series 1 parallel configuration |
| 2 | Rated Capacity | Typical 105Ah / Minimum 100Ah | Standard discharge after standard charge |
| 3 | Battery Pack Voltage Range | 20V – 29.2V (40%–60% SOC) | Working voltage range |
| 4 | Discharge Cut-off Voltage | 20V | Minimum discharge voltage |
| 5 | Charging Voltage Range | 16V – 29.2V | Full charge voltage range |
| 6 | Internal Impedance | ≤40mΩ | Measured at 50% SOC, AC 1kHz |
| 7 | Standard Charge Current | 20A CC / 29.2V CV, 0.02CA cut-off | Charge time approx. 5.0h |
| 8 | Standard Discharge Current | 20A constant current | Cut-off at 20V |
| 9 | Max. Continuous Charge Current | 100A (1C) | @ ambient temperature ≥10 |
| 10 | Max. Continuous Discharge Current | 100A (1C) | @ ambient temperature ≥10 |
| 11 | Operating Temperature | Charge: 0 ~ 55 ; Discharge: -20 ~ 60 | Official specification |
| 12 | Storage Temperature | -10 ~ 35 (≤12 months); -10 ~ 45 (≤3 months) | Shipment state |
| 13 | Product Dimension | 360 × 560 × 152 mm | Including mounting bracket |
| 14 | Net Weight | Approx. 50 kg | Approximate value |
| 15 | Installation Method | Wall-mounted, indoor use only | Space-saving flat panel design |

## Installation & Capacity Expansion

**Wall-Mounted Installation:** Comes with standard wall-mounting brackets and accessories for easy installation on indoor walls, saving floor space and keeping a tidy appearance.

**Parallel Capacity Expansion:** Multiple battery modules can be connected in parallel to increase total capacity. Please consult our technical team for detailed parallel wiring and configuration solutions.

**Inverter Compatibility:** Compatible with most mainstream 24V hybrid and off-grid inverters via RS485 or CAN communication, supporting solar charging, grid charging and discharge scheduling functions.

**Installation Environment:** For indoor use only. Install in a dry, well-ventilated area away from water sources, direct sunlight and flammable materials, with reserved heat dissipation space.

## Application Scenarios

Small household rooftop solar self-consumption and peak load shifting

Home emergency backup power for essential appliances during outages

Small off-grid residential and cabin power systems

Time-of-use electricity price arbitrage for small households

Small retail shops and home office energy backup

Remote area power supply matched with small solar PV systems

## Frequently Asked Questions

**Q: Can multiple KTBG-24100 batteries be connected in parallel?**

A: Yes, parallel connection is supported for larger capacity. Please contact us for detailed parallel wiring and configuration guidance to ensure system safety and stability.

**Q: What inverters is this battery compatible with?**

A: It is compatible with most mainstream 24V hybrid inverters and off-grid inverters, supporting RS485 and CAN communication protocols. You can provide your inverter model for compatibility confirmation before ordering.

**Q: Can it be installed outdoors?**

A: No. This model is designed for indoor use only. It must be installed in a dry, ventilated indoor environment, avoiding direct rain, immersion and humid conditions.

**Q: How long is the battery service life?**

A: Under standard operating conditions, the battery has a design service life of 10–20 years. Actual cycle life varies with charge-discharge depth, ambient temperature and usage habits.

**Q: Does it have a display screen?**

A: Yes, the front panel is equipped with an LCD display screen that shows real-time parameters such as battery voltage, current, remaining capacity (SOC) and operating status directly.

## Certifications & Warranty

- 100% full inspection and aging test before delivery, with strict quality control throughout production
- Compliant with CE, RoHS, MSDS and UN38.3 international safety and transportation standards
- Built with premium grade-A LiFePO4 cells for stable performance and long service life
- Official warranty: 1-year product warranty from the date of delivery, covering quality defects under normal use. Extended warranty is available for bulk project orders.
- Professional technical team provides pre-sales consultation, installation guidance and after-sales technical support
- OEM/ODM customization is available for bulk wholesale orders

## Product Display

Multi-angle product images of the KTBG-24100 wall-mounted LiFePO4 energy storage battery, presenting the front LCD display panel, side power terminals, metal carrying handles and ultra-slim flat body in detail, for your direct reference.




Front view with LCD display panel




Side view showing power terminals and carrying handles



Angled view of the ultra-slim flat body design

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