

# Lithium-Ion Battery

## Customized Battery-LFP 48V



# ATOMBOTIX

### LONGER LIFESPAN



- Cycle Life: ATOMBOTIX's AGV specifically designed Lithium-Ion batteries typically offer a higher cycle life, often exceeding 4X cycles for lead-acid batteries.
- Durability: They maintain their capacity over time, reducing the need for frequent replacements.

### ENHANCED SAFETY



- Thermal Stability: LFP chemistry is inherently more stable, reducing the risk of thermal runaway and fires.
- Non-Toxic Materials: It uses safer, non-toxic materials, making it more environmentally friendly.

### WIDE OPERATING TEMPERATURE RANGE



- Temperature Tolerance: LFP batteries perform well in a broader temperature range (-20°C to 60°C), making them ideal for diverse environments.

### SCALABILITY AND MODULARITY



- Modular Design: The modularity allows for flexible capacity scaling by adding or removing modules to suit specific energy requirements.
- Minimum Maintenance: Close to none requirement for maintenance, Damaged or underperforming modules can be replaced without affecting the entire system.

### HIGH ENERGY EFFICIENCY



- Charging Efficiency: They boast higher round-trip efficiency (90–98%) compared to lead-acid (70–85%);
- Fast Charging: LFP batteries support faster charging without significant performance degradation.

### LIGHTWEIGHT AND COMPACT



- High Energy Density: With high energy density, ATOMBOTIX's AGV battery saves most of the space and weight compared to traditional batteries, making them easier to install and transport.

### COST-EFFECTIVENESS



- Fast & cost effective customization: Modular design, global supply chain, enables fast and inexpensive pack design & manufacturing.
- Lower Total Cost of Ownership: Low upfront cost, plus the extended lifespan, reduced maintenance, and higher efficiency of LFP batteries lead to a lower overall cost of ownership.

Type	AB-BT-LFP-48V-9AH	AB-BT-LFP-48V-12AH	AB-BT-LFP-48V-20AH	AB-BT-LFP-48V-30AH	AB-BT-LFP-48V-30AH-Split	AB-BT-LFP-48V-30AH	AB-BT-LFP-48V-40AH
Nominal Voltage	48V						
Operating Temperature	0°C~55°C						
Operating Temperature	-20°C~60°C						
Communication	RS485-ASCII/MODBUS						
Cell material	Lithium Iron Phosphate						
Cycle Life	>2000 cycles						
Full Charging(FC) Voltage	54V	57.6V	54V	54V	54V	54V	54V
Nominal Capacity	9AH	12AH	20AH	30AH	30AH	30AH	40AH
Max Charging Current	10A	24A	20A	30A	30A	30A	40A
Discharge cut-off voltage (FD)	37.5V	40V	37.5V	37.5V	37.5V	37.5V	37.5V
Maximum Discharge Current	10A	24A	40A	30A	30A	30A	40A
Dimensions	200×150×80 mm	190×148×140 mm	295×99.5×220 mm	255×170×180 mm	200×155×130 mm	300×235×135 mm	310×250×137 mm
Weight	3kg	8kg	9kg	12.5kg	13kg	13kg	15kg
Type	AB-BT-LFP-48V-54AH	AB-BT-LFP-48V-72AH	AB-BT-LFP-48V-100AH	AB-BT-LFP-48V-173AH	AB-BT-LFP-48V-300AH	AB-BT-LFP-48V-412AH	
Nominal Voltage	48V						
Operating Temperature	0°C~55°C						
Operating Temperature	-20°C~60°C						
Communication	RS485-ASCII/MODBUS						
Cell material	Lithium Iron Phosphate						
Cycle Life	>2000 cycles						
Full Charging(FC) Voltage	54V	57.6V	54V	57.6V	54V	57.6V	
Nominal Capacity	54AH	72AH	100AH	173AH	300AH	412AH	
Max Charging Current	50A	50A	100A	100A	200A	200A	
Discharge cut-off voltage (FD)	37.5V	44.8V	37.5V	40V	37.5V	40V	
Maximum Discharge Current	50A	50A	100A	100A	200A	300A	
Dimensions	400×260×145 mm	430×235×230 mm	380×33×220 mm	680×300×240 mm	900×360×260 mm	850×550×275 mm	
Weight	21.5kg	32.5kg	40kg	65kg	105kg	200kg	

