# **ATEAGO LO Autonomous Forklift**



### **Product Mix Overview**



### **Products introduce**



### ATEAGO LO Autonomous Forklift

ATEAGO L0 Autonomous Forklift, built-in forklift special PLC actuation system and special industrial control machine, maximum load capacity of 1.5T, laser SLAM navigation, without reflectors, more convenient deployment; pallet recognition, accurate forklift; slim figure, small turning radius, adapt to narrow channel applications; with 3D obstacle avoidance, safety touch edge and other sensors for 360 ° threedimensional safety protection, it is the best choice for pallet cargo handling and material transport and other work requirements. With 3D obstacle avoidance, safety touch and other sensors for 360° three-dimensional safety protection, it is the perfect choice for pallet cargo handling, material transport and other work requirements.

# **Pain Point Issues Facing Robotics Companies**



# 1. High labour costs for business inputs

2. Difficulty in managing the work of porters

 3. High work intensity and susceptibility to accidents



### **Product Advantage**

### Autonomous navigation, no coding required

Real laser SLAM navigation, highprecision navigation and positioning, no coding required for robot deployment More convenient and easier

### 1.5T super large load capacity

Built-in special PLC execution system and special industrial computer for forklifts, with a maximum load capacity of 1.5T Can lift cargo 12cm.



# A large area of 40,000 square meters

Adopting single line LIDAR, 60m detection distance, to meet the needs of 40,000 square metres of large and complex environments.

### Help factories reduce costs and increase efficiency

ATEAGO L0 Forklift has mature and stable navigation solutions to help companies achieve automated robot handling and reduce factory operating costs.

### **Functional features**



#### 01 Ultra-large capacity

1.5T large capacity, sheet metal structure, solid and not deformed, can lift the cargo 12cm high

### **02 Active Obstacle Avoidance**

3D camera + LIDAR, all-round autonomous obstacle avoidance, flexible steering, and

### 03 Travelling in both directions, no need to turn round

1.7 metres narrow aisle, unobstructed, easy to deal with a variety of complex environments in the factory

### 04 Single line LiDAR

60 metres detection range, meet the needs of 40,000 square metres factory environment navigation and use of the map

### **05 Autonomous Dispatch System**

The robot speed can be dynamically adjusted according to the task priority to achieve efficient and stable delivery.

# 06 Quick Change & Extreme Charging

Removable battery design, low battery automatic recharge, support super fast charging, 1 hour charging complete

### **1.5T Large load capacity**

# **1.5T large load capacity, suitable for a variety of places**

Equipped with various specification fork styles, the minimum height of the fork surface from the ground is 84mm, with super dual-drive power, bi-directional driving, strong load-bearing capacity, can be loaded with a maximum of 1.5 tonnes, to meet the needs of unmanned forklift trucks for use in factory scenarios.



# **Quick Change & Extreme Charging**

Custom set the minimum power value, when the robot's power is lower than the minimum value, it will automatically return to charge without manual operation.

### **Quick battery swap**

Charging and usage scenarios are separated, quickdetachable design, and battery can be quickly replaced to achieve 24-hour working status.

### **Extremely fast charging**

The maximum output current of the charger is 30A DC, which only requires After 1 hour, the battery will automatically return to charging when the battery level drops below 20%.

\* Full load range of up to 6 hours



replacement more convenient

# Single-line laser radar (SLR)

### 60m detection range, 40,000m<sup>2</sup> of complex factory environment, easily accomplished

ATEAGO L0 forklift is equipped with vehicle-grade single-line LIDAR on the top, with stable operation and accurate data. Standard X86 industrial host, powerful computing power to meet multiple scenarios, stable operation of industrial host.





# **Multi-sensor fusion technology**

Equipped with ATEAGO's self-developed SLAM synchronous positioning and mapping system, high-precision navigation and positioning, multisensor fusion technology such as LIDAR + 3D camera + cardboard limit detection, all-round perception of the surrounding environment, efficient and stable operation.





### Two way traffic, no need to turn round

### 1.7m narrow aisle, free to walk through

The 94cm wide and slim body has an ultra-low turning radius and no need to turn around when driving in both directions, meeting the needs of driving in narrow aisles.





### Real laser SLAM, no coding required

No need for reflectors, magnetic strips, or QR codes, simpler navigation and deployment, high-precision pallet positioning of ±30mm, pallet identification, and accurate forklift.

- Robot navigation deployment eliminates the need to post codes for auxiliary positioning, saving labor costs
- There is no need to stick codes on the ceiling and it will not affect the appearance of the decoration.
- Customized planning of delivery routes makes the operation easier
- It has a mature and stable navigation algorithm and accurate positioning.
- Lidar + 3D camera multi-sensor fusion technology to sense the surrounding environment in real time



### Hand-to-hand integration, easy switching

# Fully functional, use it however you want

Autonomous navigation, remote mapping, manual mapping,Hand-to-automatic switching is easy to meet the needs of different scenarios.

\*Freely switch between multiple modes to make driverless forklifts more usable



### **Central Dispatch System**

### Multi-computer collaboration for orderly operation

The built-in scheduling system and multimachine collaboration can dynamically adjust the body speed and delivery path according to task priority to achieve efficient, safe, stable and reliable delivery efficiency.



### Lithium iron phosphate safety battery



High temperature resistance, non-burning, safe enough



Support fast charging, charging faster



Long battery life, discharge cycle up to 2000 times



Green, energy saving, environmental protection



# Wide range of applications

Products are widely used in modern logistics, manufacturing, factory workshops, ports, stations, airports, freight yards, warehouses, circulation centers and distribution centers, etc...



# **Product parameters**

Rated load	1500KG	tire size, training wheels	100mmx40mm
Load center distance	600mm	Number of wheels Carrying wheel/driving wheel (x=driving wheel)+auxiliary wheel	4/1x+2
Vehicle weight (battery included)	380KG		
Body size	1715mm(L)x940mm(W)x2080mm(H)	wheel base, drive side	518mm
Fork size	1150mm/182mm/55mm	Wheel base, load-bearing side	515mm
Fork outside distance	685mm	Right angle stacking channel width	
Lifting height	120mm	(Pallet 1000×1200) 1200 across fork direction	2176mm
Minimum height of fork surface from ground	84cm	Right angle stacking channel width (Pallet 800×1200)1200 along the direction of the fork	2103mm
body ground clearance	50mm	Travel speed, full/empty	0.8m/s, 1m/s
Wheelbase	1115mm	Lifting speed, full/empty	40mm/s, 40mm/s
Turning radius	1350mm	Descending speed, full/empty	70mm/s, 60mm/s
tire type Carrying wheel/driving wheel/auxiliary wheel	organosilicon	Maximum climbing ability Full/Empty	5%, 10%
tire size, load wheel	82mmx96mm	Braking method	electromagnetic
tire size, drive wheel	230mmx75mm	- <u> </u>	

# **Product parameters**

Drive motor power	0.9Kw	
Lifting motor power	0.8Kw	
Steering motor power	0.4Kw	
Lithium battery voltage	48V	
Lithium battery capacity	30Ah	
Manual operation mode	handle	
Top single line LiDAR	60m	
Single-line laser obstacle avoidance radar*4	8m	
Industrial grade pallet image recognition (IP65)*1	8m	
Highly accurate 3-axis attitude	1Pcs	
HD touch display integrated screen size	10.1 inches	

# Thanks for watching

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