

Camel-400-SP1.1 潜伏移动机器人



Functional Features:

- Positioning & Navigation: Utilizes hybrid navigation technologies, such as QR code and Laser SLAM, to achieve high-precision positioning;
- Motion Control: Employs dual-wheel differential drive, supporting versatile motion control modes including forward, backward, and in-place rotation;
- Power Management: Supports multi-level battery threshold control with customizable minimum charging levels and idle-time charging management;
- Safety Protection: Equipped with multiple safety measures, including front laser obstacle avoidance, contact-based bumper collision detection, and emergency stop buttons;
- Human-Machine Interaction: Features physical button switches and standard audio-visual alarms to indicate real-time equipment status;
- Control Modes: Supports automatic, manual, and remote control operations;
- Material Handling: Supports lifting, transporting, and rotating payloads up to 400kg. Customizable load-handling attachments are available to adapt to diverse application scenarios;
- Network Communication: Supports Wi-Fi with seamless roaming and is expandable to 5G network connectivity;

Target Industries:

E-commerce, 3C Electronics, Tobacco, Pharmaceuticals, and more. It also serves as an expandable platform with customizable attachments to meet the needs of diverse application scenarios.

QR Code Spacing:

Standard reference spacing is 1000 x 1000 mm; supports non-uniform (irregular) QR code layout patterns.

Technical Specifications

Model			Camel-400-SP1.1	
Basic Specifications	Dimensions: L*W*H		778*540*255 (±5)	mm
	Self-weight		98	Kg
	Minimum Rotation Diameter		778	mm
	Rated Payload		400	Kg
	Ground Clearance		25	mm
	Lifting Platform Dimensions		710*500	mm
	Lifting Drive		Electric	
	Lifting Height		60	mm
Motion Performance	Rated Speed (Unloaded)		1.9	m/s
	Rated Speed (Full Load)		1.5	m/s
	Acceleration (Unloaded)		0.6	m/s ²
	Acceleration (Full Load)		0.3	m/s ²
	Rotation Speed (Unloaded)		200	° /s
	Rotation Speed (Full Load)		100	° /s
	Drive Type		Differential Drive	
Positioning & Navigation	Navigation Method		Laser SLAM or QR Code	
	Lidar Mounting Height		220	mm
	Stopping Accuracy		±10	mm
	Stop Angle Accuracy		±1	°
Battery	Battery Type		Lithium Iron Phosphate	
	Capacity / Rated Voltage		16/48	Ah/V
	Cycle Count		1500 cycles (100% DOD)	
	Battery Runtime (Rated Conditions)		8	h
	Charging Time		≤1.5	h
Safety & Protection	Frontal Safety Scanning	Mounting Height	203.5	mm
		Scanning Angle	220	°
	Rearward Safety Scanning	Mounting Height	201	mm

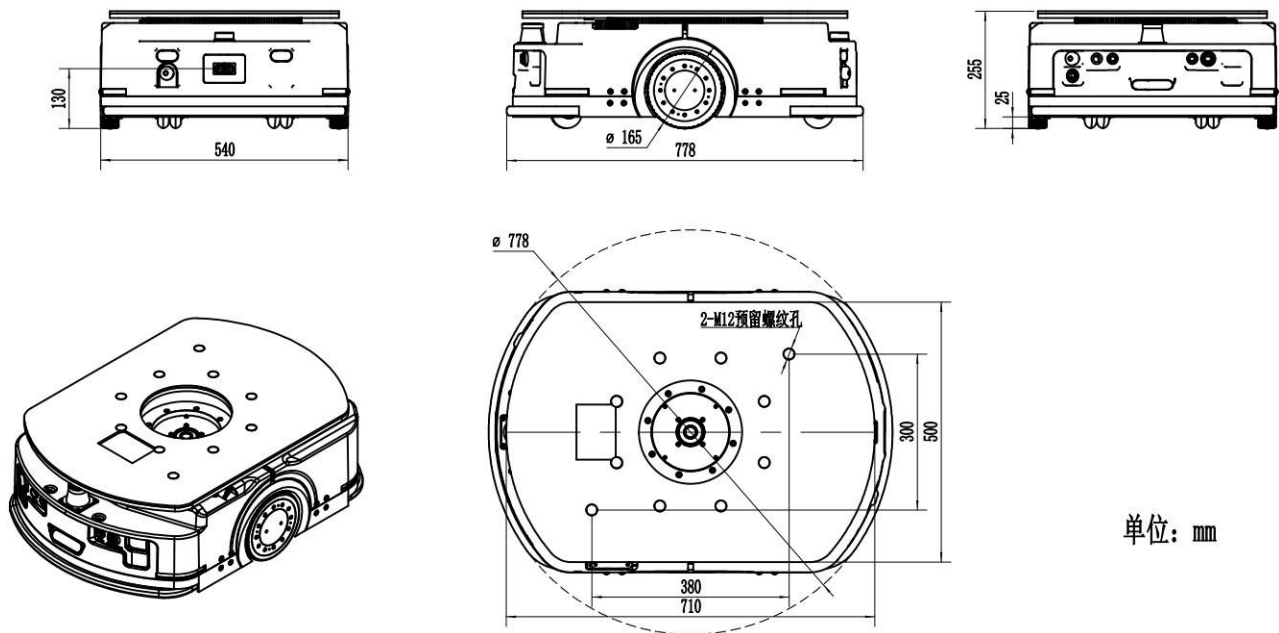
	Scanning Angle	180	°
	Emergency Stop Button	Qty: 2 (Front & Rear x1)	/
	Contact-based Protection	Piezoelectric Safety Edge	/
	Audio-Visual Alarm	Classic	/
Trafficability	Chassis Suspension System	Dual-stage Floating Chassis	/
	Gradeability	$\leq 5\%/3^\circ$	%/°
	Step-climbing Ability	≤ 5	mm
	Gap-crossing Ability	≤ 30	mm

- ✧ The positioning accuracy specified above is obtained under ideal conditions;
- ✧ Actual accuracy is subject to site environment, rack/carrier dimensions, docking conditions, and other factors; please refer to the actual performance achieved on-site

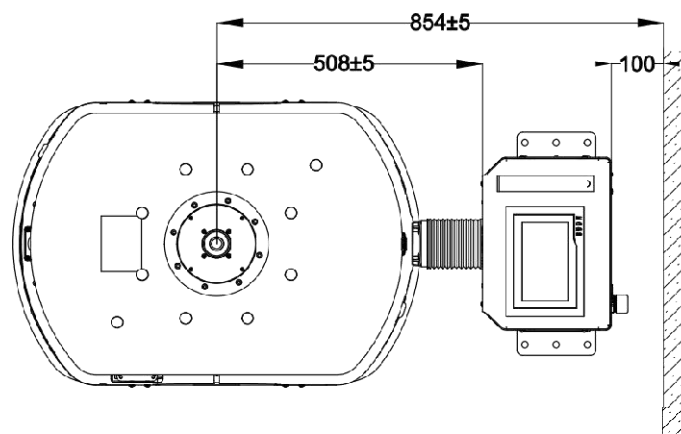
Operating Environment Requirements

Environment	Indoor Environment
Floor Conditions	Optimal floor materials for AGV operation are hard concrete or conductive plastic (ESD) flooring
	The AGV operating surface must be kept free of iron filings, oil stains, and corrosive liquids
	Avoid seams in the driving path; maximum gaps should not exceed 10 mm
	Floor slope should not exceed 3° ; at docking positions requiring high-precision positioning, the slope must not exceed 1° ; To meet the requirements for safe braking distance and positioning accuracy, the floor's sliding friction coefficient must be at least 0.5;
Temperature	Working Environment Temperature: -Operating Temperature Range: -10°C to 40°C -Charging Temperature Range: 0°C to 40°C -Customization is required for cold storage environments
Ambient Humidity	Relative Humidity: 10%-90% (Non-condensing)
Signal	Dual-band WiFi (2.4GHz/5GHz) Wireless signal coverage strength $> -70\text{ dBm}$

Outline Dimensions Drawing



Charging Pile Docking



Optional Components

Components	Series	Description
Charging Station	Eh-4850-C1-0	
Manual Charger	Eh-4810-C1-S	
Slope	MR607X-7(L 216cm*W 84.5cm)	
Maintenance Tools	WDT-V1.0	