HAIPICK A42N Carton-Picking ACR

Basic Parameters

Dimensions (L*W*H) (mm)	1600*1000*4220 (height 1000~4500 customizable)
Mechanical Rotation Diameter (mm)	1600
Driving Mode	Two-wheel differential, two-way travel
Navigation Mode	IMU + DM code
Pick Up Method	Rotating arm + 2D/3D visual correction
Compatible Case Type	Tote, carton
Net Weight (kg)	440
Max. Load of Robot (kg)	150 (customizable up to 300)
Max. Load of Case (kg)	30/50
Storage Capacity	5 cases (customizable up to 8 cases)
Dimension of Case (L*W*H) (mm)	(600~300)*(400~300)*(330~150)
Height of Customized Case (mm)	600~330
Lowest Picking Height (mm)	400
Highest Picking Height (mm)	3860 (customizable up to 4160)
Running Noise (dB(A))	≤75

Communication

Wireless Mode	WIFI 5GHz 802.11n

Deployment Environment

Shelving	Regular high-bay shelving
Temperature (°C)	0~45
Humidity	RH 5%~95% (no condensation, no frost)
Aisle Width (mm)	1110
Ground Flatness (mm/2.25m²)	±4
Max. Floor Cracks (mm)	7

Performance

Movement Speed (m/s)	Full/empty load 1.8
Pick Up/Drop Off Time (s)	≤9
Stop Accuracy (mm)	±10
Stop Angle Accuracy (°)	±1

Battery

Battery Type	Lithium iron phosphate
Battery Voltage (V)	48
Battery Capacity (Ah)	35
Charging Cycle (cycle)	≥2000 (fast charge)
Charging Time (Full Charge) (h)	≤1.5
Charging Time (Fast Charge) (min)	≤40
Working Time (Full Charge) (h)	≥5.4 (100%->20%)

Antistatic Performance

Surface Resistance (Ω)	$10^5 \sim 10^9$
System Resistance (Ω)	$10^5 \sim 10^9$
Friction Voltage	<100

Safety

Obstacle Detection Mode	360° radar, forward and reverse
Anti-collision	Forward and reverse safety contact edges
Sound & Light Alarm	Buzzer + voice prompt + indicator lamp
Emergency Stop Button	Placed on each side (front, rear, right, left)
Lifting Limit Switch	✓
Lifting/Fall Protection	✓
Motor Shaft Lock Protection	✓
Electric Motor Protection	✓
Battery Protection	✓
Charging Interface Connection Protection	✓
Loss of Position Protection	✓
Storage Location Protection	✓
Taking & Placing of Goods Protection	✓
Warning Signs	✓