

INTELLIGENT MOBILE ROBOT

FULL-SCENARIO INTELLIGENT LOGISTICS
FULL-STACK SOLUTION SERVICE PROVIDER

MAKE HANDLING FULLY AUTONOMOUS,
EMPOWER LOGISTICS WITH BOUNDLESS FREEDOM



TikTok Account



WeChat Official Account



WeChat Video Account

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安徽合力宇锋智能科技有限公司

Anhui Heli Yufeng Intelligent Technology Co., Ltd.

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COMPANY INTRODUCTION

Anhui HELI was founded in 1958 and listed on the Main Board in 1996. The company's main business covers four segments: complete machine, intelligent logistics, components and after-market. The company has 9 major global complete machine manufacturing bases, nearly 400,000 units in annual sales, 28 provincial marketing companies in China and more than 1,000 marketing service agencies worldwide. Its products are sold in over 180 countries and regions. HELI is currently the leading enterprise in China's industrial vehicle industry, possessing the largest scale, the most complete industrial chain and the strongest comprehensive strength.

HELI YUFENG has structured four major business segments which are intelligent warehousing, intelligent handling, intelligent factory and intelligent park. Based on seven decades of HELI's advanced technological accumulation, HELI YUFENG builds hardware product matrices of intelligent warehouse robots and intelligent mobile robots, while independently developing software product atlas including intelligent integration system and HELI digital twin platform. Together with over 1,000 global marketing service organizations of HELI, HELI YUFENG provides customers with full-stack solutions comprehensive services for full-cycle intelligent logistics, including project consulting, solution planning, product R&D, implementation and delivery as well as after-sales O&M. It has successfully implemented a number of national-level benchmark demonstration projects in China's pillar and emerging industries, such as new energy, food & cold chain, chemicals, auto parts, metallurgy, new materials, and military industry. HELI YUFENG is committed to bringing AI logistics robots into thousands of thousands of enterprises and factories, empowering every industry.

China's Leading, World-Class Excellence



60+

Over 60 Years of Logistics Expertise



9+

9 Major Global Complete Machine Manufacturing Bases



28+

28 Provincial Marketing Centers
Over 700 Marketing Service Organizations in China



400+

Overseas Marketing & Service Organization

HELI

HELI

智能物流产业园
HELI INTELLIGENT LOGISTICS INDUSTRIAL PARK

/ Honor /

National-level Specialized, Sophisticated Distinctive and Innovative "Little Giant" Enterprise	National High-Tech Enterprise	Sci-Tech Reform Demonstration Enterprise by the SASAC
Key Project Supported by Development Fund	2023-2025 First (Set) Major Technical Equipment Certification	National Intellectual Property Advantage Enterprise
Provincial Postdoctoral Research Workstation	Co-editor of the "Blue Book on the Development of the Forklift Mobile Robot Industry"	Co-editor of the Technical Specification for Unmanned Forklifts / Data Interface Specification for Dispatching Systems
Co-editor of the Specification for Explosion-Proof Forklifts / Specification for Robot Modules	Recommended Brand for Intelligent Warehousing Equipment and Technology	Top 10 Promoter of New Quality Productive Forces Application
Excellent Recommended Brand for Intelligent Logistics	AGV Innovative Application Award and Benchmark Case Award	Gaogong Golden Globe Award

/ R&D and Manufacturing Capabilities /



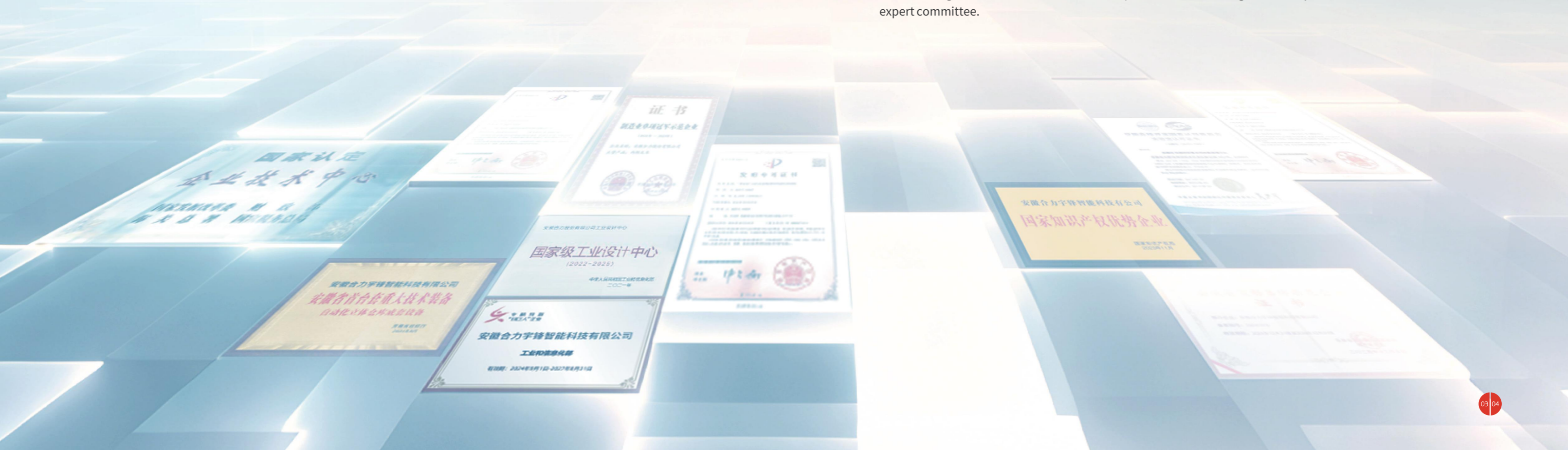
National-Level Enterprise Technology Center, National-Level Industrial Design Center

National Innovative Enterprise, National Manufacturing Single Champion Demonstration Enterprise

CNAS Accredited Testing and Inspection Center

/ Technology Innovation Ecosystem /

- With nearly 10 universities, including Hefei University of Technology, Anhui University and upstream/downstream enterprises, Heli has carried out over 60 industry-university-research projects.
- Heli lead the collaboration with University of Science and Technology of China, Shanghai Jiao Tong University and other organizations to established Anhui province's first intelligent industry innovation alliance and technical expert committee.



DEVELOPMENT HISTORY

Origins

Anhui Heli Logistics Technology Co., Ltd. was founded in 1999, deploying on automated high-bay warehouse, pioneering a new path in intelligent logistics.

HELI TECH

HELI TECH was established in 2016 and was officially operated in 2017, which accelerate the industrialization of intelligent logistics.

It has successively been awarded honorary titles such as National "High-Tech Enterprise", "Specialized, Sophisticated, Distinctive and Innovative SME" in Shanghai, "Little Giant" in Yangpu District.

HELI TECH was selected for "Sci-Tech Reform Demonstration Enterprise" by the SASAC in 2022.

Strategic Layout

National Union Fund invested YUFENG INTELLIGENT in 2021, which accelerate intelligence business expansion and full-category product matrix development.

Win-Win Cooperation

In 2024, HELI has completed the acquisition of YUFENG INTELLIGENT, building a complete puzzle of intelligent logistics full-stack solution.

In 2024, YUFENG INTELLIGENT was awarded National-level Specialized, Sophisticated, Distinctive and Innovative 'Little Giant' Enterprises and "Sci-Tech Reform Demonstration Enterprise" by the SASAC.

Embarking on a New Leap

In 2026, HELI YUFENG aims to achieve "China's Leading, World-Class Excellence". With a global layout as an anchor, HELI YUFENG takes intelligent logistics to new heights during the 15th Five-Year Plan period and brings next-generation intelligent logistics into thousands of enterprises and factories.

Solidify Technology Base

In 2014, HELI established the Intelligent Logistics Industry Innovation Institute. In 2021, it was renamed HELI intelligent logistics and industrial Internet research institute, specializing in full-scenario applications of unmanned forklifts (AGVs), building electromechanical software platforms, and conducting full-stack independently R&D and manufacturing.

In 2016, HELI and Kollmorgen which is global AGV technology leader have established the first strategic partnership in the industrial vehicle.

YUFENG INTELLIGENT

In 2018, Anhui Yufeng intelligent Technology Co., Ltd. was established, deploying on intelligent high-bay warehouse, intelligent mobile robot and AGV body.

The Robotics R&D Center and Smart Logistics Research Institute were established simultaneously in 2019.

In 2023, YUFENG INTELLIGENT was awarded the certification of National "High-Tech Enterprise".

ZHIXING TECH

Anhui Jianghuai Zhixing Technology Co., Ltd. operated simulation company in 2023 which focus on automotive industry, developing a comprehensive factory handling solution.

HELI YUFENG




HELI YUFENG as a new brand is derived from the Integration of "One Institute and Three Companies" including HELI INTELLIGENT INSTITUTE, YUFENG INTELLIGENT, HELI TECH, ZHIXING TECH in 2025, with AI logistics robots and system integration as dual core businesses, HELI YUFENG jointly embarks on a new chapter in intelligent logistics.




It has developed in in-depth collaboration with HUAWEI and JAC Innovation Center to build TIANGONG Laboratory and TIANSHU Laboratory, which engage in some specialized fields such as embodied intelligence and smart logistics parks. It is approved for a Provincial Postdoctoral Research Station and win the First Prize for Scientific and Technological Progress in the Professional (Discipline) Category of the Anhui Provincial Science and Technology Award.

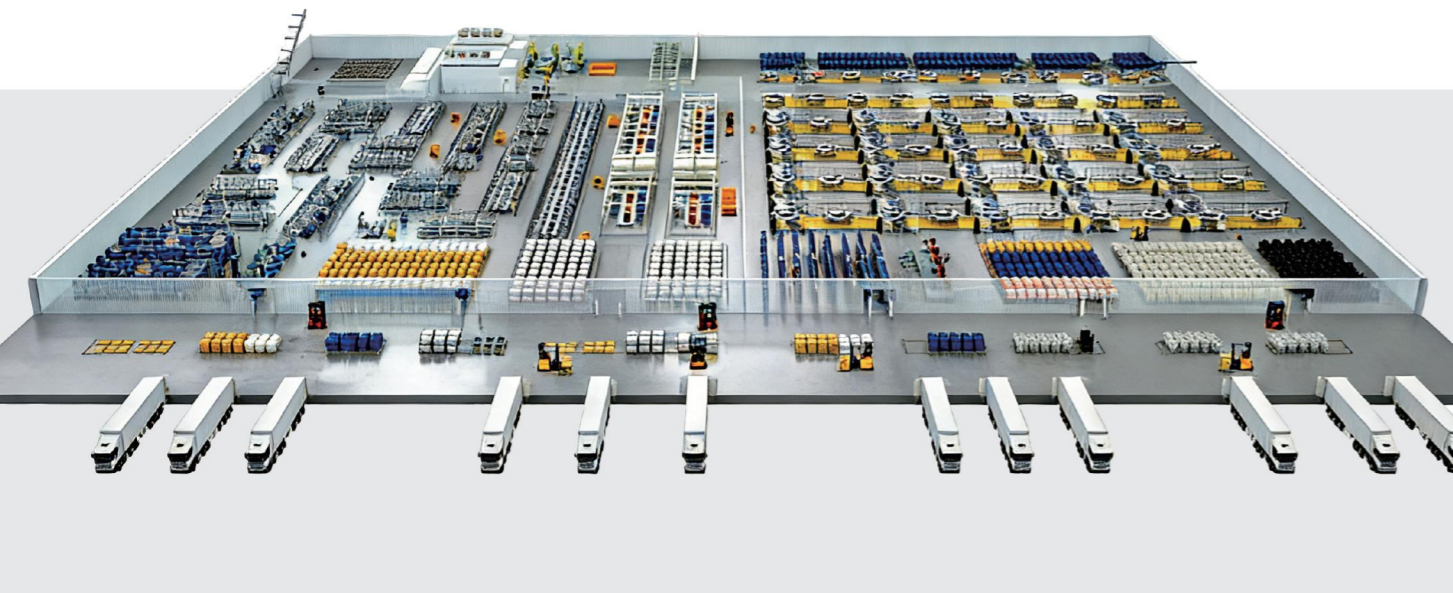


BUSINESS LAYOUT






Core Business

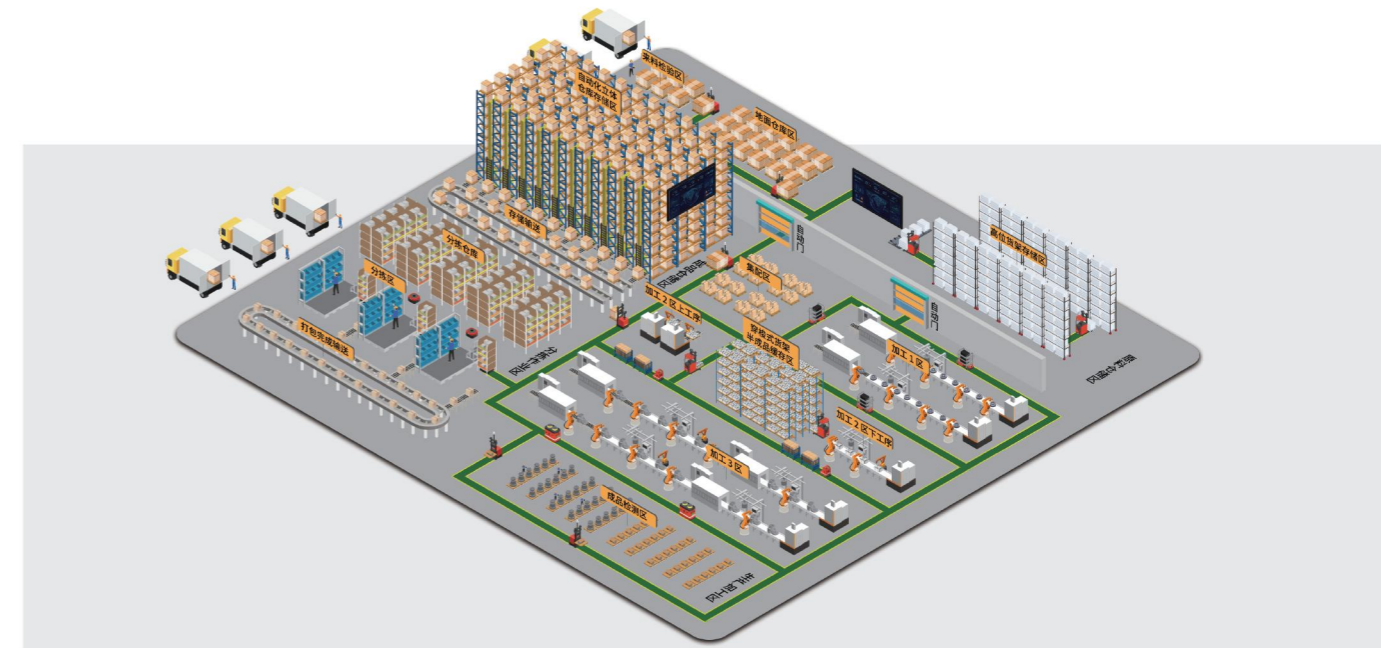
- 
Project Consulting Services
 Industry Analysis, Planning & Design, Logistics Solution Delivery...
- 
Intelligent Logistics Products
 Warehousing Robots, Mobile Robots, Intelligent Software Systems...
- 
Intelligent System Platform
 WMS, WCS/ACS, A-RCS/CCS, HDT HELI Digital Twins, Integrated Intelligent Management and Control Platform...

- 
Full-Stack Solution
 Intelligent Warehousing, Intelligent Handling, Intelligent Factory, Intelligent Park...
- 
Project System Integration
 Mature System Integration Solution System Docking and Application Customization Development...
- 
After-Sales O&M Services
 Regular Inspections, Technical Training, Equipment Maintenance, System Optimization...



Service Content

 <p>Blueprint Planning</p> <ul style="list-style-type: none"> Industry Analysis Project Research Strategic Requirements 	 <p>Project Consulting</p> <ul style="list-style-type: none"> Scenario Analysis Scenario Business Scenario Process 	 <p>Solution Planning</p> <ul style="list-style-type: none"> Data Analysis Solution Design Simulation
 <p>Intelligent Products</p> <ul style="list-style-type: none"> Warehousing Robots Mobile Robots Software System Platform 	 <p>Project Implementation</p> <ul style="list-style-type: none"> Installation & Commissioning System Integration & Debugging Project Delivery 	 <p>After-Sales O&M</p> <ul style="list-style-type: none"> Spare Parts Services Periodic Maintenance Upgrades, Iterations & Optimizations



HANDLING AGV

CBD15

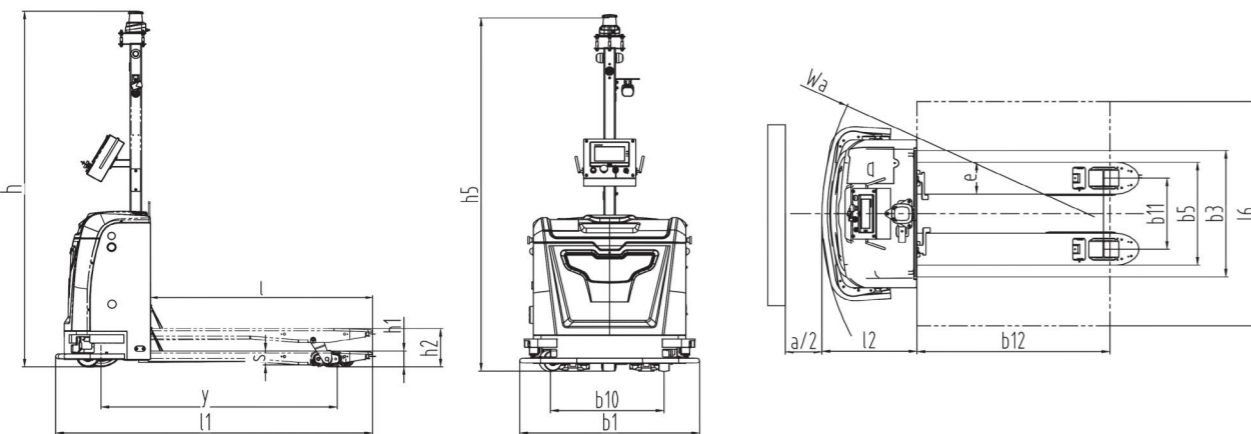


 Application Scenarios

Handling AGVs are commonly used for point-to-point transfer of materials between ground-level warehouses and production lines, and between different processes on production lines.

 Technical Highlights

- Simpler deployment with laser SLAM navigation technology
- Compact size, 42% weight reduction and 20% turning radius reduction compared to retrofitted models
- Load capacity 1.5 tonnes / 2 tonnes
- Servo control, higher precision



Technical Parameters			
Characteristics	Unit	Model Content	
1.01 Model		CBD15	CBD20
1.02 Configuration Code		AGV6A5LI	AGV6A5LI
1.03 Rated Load Capacity	Q (kg)	1500	2000
1.04 Load Center Distance	C(mm)	600	
1.05 Power Type		Lithium Battery	
1.06 Wheelbase	Y(mm)	1218	1218
Wheel			
2.01 Wheel Type		Polyurethane	
2.02 Number of Drive Wheels / Balance Wheels / Load Wheels		1/2/4	
2.03 Track Width (Load Wheel)	b ₃ (mm)	380	
2.04 Load Wheel Size	mm	Φ85x85	
2.05 Drive Wheel Size	mm	Φ230x75	
Dimensions			
3.01 Min. Fork Ground Clearance (Lower Limit)	H ₁ (mm)	85	
3.02 Max. Fork Ground Clearance (Upper Limit)	H ₂ (mm)	205	
3.03 Max. Fork Lifting Travel	mm	120	
3.04 Overall Fork Width	b ₅ (mm)	550 (Optional 600, 680)	
3.05 Inner Fork Width	mm	210	
3.06 Standard Fork Dimensions (L/W/T)	L/s/e(mm)	1150x170x75	1150x170x75
3.07 Body Length (with Forks)	L ₁ (mm)	1644	1644
3.08 Body Width	b ₁ (mm)	932	932
3.09 Min. Turning Radius	Wa(mm)	1453	1453
3.10 Right-Angle Stacking Aisle Width (1000×1200 pallet, 1200 parallel to forks, 200 side clearance)	Ast(mm)	2208	2208
3.11 Right-Angle Stacking Aisle Width (800×1200 pallet, 1200 parallel to forks, 200 side clearance)	Ast(mm)	2119	
3.12 Right-Angle Stacking Aisle Width (1200×1200 pallet, 1200 parallel to forks, 200 side clearance)	Ast(mm)	2300	
3.13 Min. Ground Clearance	m(mm)	15	
Performance Parameters			
4.01 Max. Travel Speed (Loaded/Unladen)	km/h	5/5	
4.02 Max. Lifting Speed (Loaded/Unladen)	mm/s	20/25	
4.03 Max. Lowering Speed (Loaded/Unladen)	mm/s	40/30	
4.04 Allowable Slope of the Ground	%	5	
Electrical Configuration			
5.01 Drive Motor / Lifting Motor / Steering Motor		AC1.6/DC0.8/AC0.4	
5.02 Battery Voltage	V	48	
5.03 Rated Capacity	Ah	40	
5.04 Brake		Electromagnetic/Regenerative	
5.05 Charging Method		Automatic/Manual	
Weight			
6.01 Battery Weight	kg	25	
6.02 Service Weight (with Battery)	kg	450	450

Note: Pictures and parameters are subject to the actual vehicle.

HANDLING AGV

CBD20

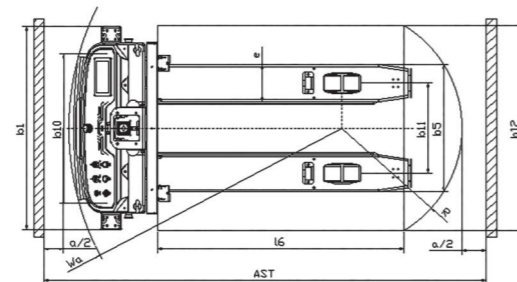
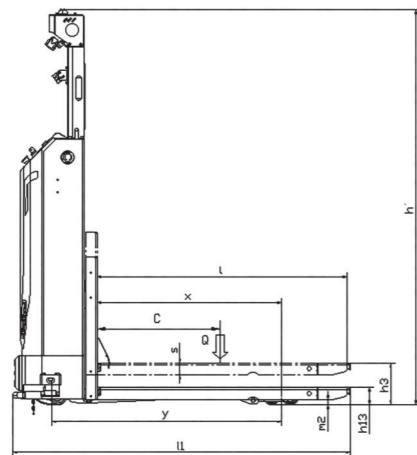


 Application Scenarios

The narrow-body pallet handling AGV is mainly used for point-to-point horizontal transportation. It is suitable for medium and short-distance handling in supermarkets, workshops and warehouses. Professional customized design can be provided according to customers' actual cargo types and handling working conditions.

 Technical Highlights

- Slim arm design and small turning radius enable easy navigation through narrow aisles and compact spaces.
- Equipped with a suspension drive system that automatically adjusts driving force under varying load conditions, the AGV can easily and stably traverse ramps and uneven gaps.
- Customizable fork design accommodates the handling of carriers in various dimensions.
- Equipped with a pallet in-position switch and an optional end recognition camera for precise pickup.



Technical Parameters		
Characteristics	Unit	Model Content
1.01 Model		CBD20-EBA20II
1.02 Power Type (Electric, Diesel, Petrol, LPG, Manual)		Electric
1.03 Operation Mode		Laser Navigation
1.04 Rated Load Capacity	Q (kg)	2000
1.05 Load Center Distance	C(mm)	600
1.06 Load Distance	X(mm)	900
1.07 Wheelbase	Y(mm)	1120
Weight		
2.01 Service Weight (with Battery)	kg	≈600
Wheels & Chassis		
3.01 Wheel Type (Front & Rear)		Polyurethane
3.02 Front Wheel Specification	ΦxW(mm)	Φ80x80
3.03 Rear Wheel Specification	ΦxW(mm)	Φ230x75
3.04 Balance Wheel Specification	ΦxW(mm)	Φ80x35
3.05 Number of Drive Wheels / Balance Wheels / Load Wheels (X = Drive Wheel)		1X,4/4
3.06 Front Track Width (Drive End)	b ₁₀ (mm)	648
3.07 Rear Track Width (Load End)	b ₁₁ (mm)	440
Dimensions		
4.01 Max. Fork Ground Clearance (Upper Limit)	h ₃ (mm)	205
4.02 Min. Fork Ground Clearance (Lower Limit)	h ₁₃ (mm)	85
4.03 Body Length	l ₁ (mm)	1650
4.04 Body Width	b ₁ (mm)	990
4.05 Overall Height (Incl. Navigator)	h' (mm)	1927
4.06 Fork Dimensions	s/e/l(mm)	60/180/1220
4.07 Overall Fork Width	b ₅ (mm)	620
4.08 Min. Ground Clearance	m ₂ (mm)	30
4.09 Stacking Aisle Width, 1000×1200 pallet (C600)	Ast(mm)	1918+300
4.10 Stacking Aisle Width, 800×1200 pallet (C600)	Ast(mm)	1835+300
4.11 Min. Turning Radius	Wa(mm)	1335
Performance		
5.01 Lifting Speed (Unladen/Loaded)	mm/s	35/30
5.02 Lowering Speed (Unladen/Loaded)	mm/s	30/42
5.03 Travel Speed (Unladen/Loaded)	m/s	1.5/1
5.04 Gradeability (Unloaded / Loaded)	%	5/3
5.05 Service Brake		Electromagnetic Brake
Electric Motor		
6.01 Drive Motor Power	kW	1.5
6.02 Steering Motor	kW	0.4
6.03 Pump Motor	kW	1.2
6.04 Battery Type		Lithium Battery
6.05 Battery Voltage / Capacity	V/Ah	48/60

Note: Pictures and parameters are subject to the actual vehicle.

HANDLING AGV

CBD30



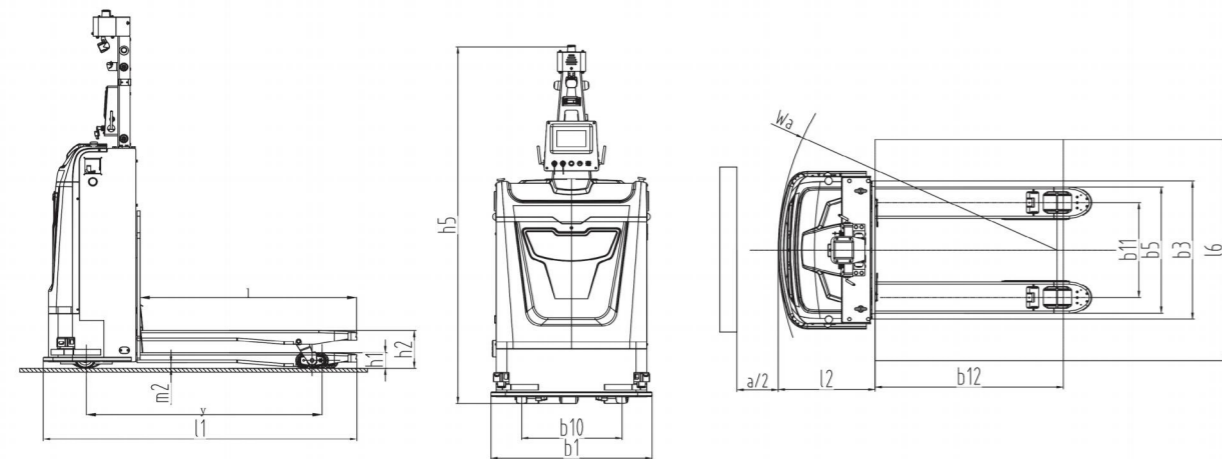
Application Scenarios

Handling AGVs are commonly used for point-to-point transfer of materials between ground-level warehouses and production lines, and between different processes on production lines. Professional customized design can be provided according to customers' actual cargo types and handling working conditions.



Technical Highlights

- Specialized vehicle design, compact body and flexible operation, meeting the requirements of various warehouse logistics operations.
- Comprehensive safety protection is achieved through obstacle-avoidance laser, fork-tip sensors, contour algorithm protection, anti-collision bumper, and audible and optical warning.
- Equipped with a pallet-in-position switch, and optionally an end-recognition camera, enabling precise pickup.
- Servo-integrated electric steering provides fast response and precise control.
- Drive wheel boosted floating design ensures reliable ground contact and high stability.
- Side automatic charging ensures safe and reliable charging.



Technical Parameters			
	Characteristics	Unit	Model Content
1.01	Model		CBD30
1.02	Configuration Code		AGV6A5LI
1.03	Rated Load Capacity	Q(kg)	3000
1.04	Load Center Distance	C(mm)	600
1.05	Power Type		Lithium Battery
1.06	Wheelbase	Y(mm)	1253
Wheels			
2.01	Wheel Type		Polyurethane
2.02	Number of Drive Wheels / Balance Wheels / Load Wheels		1/2/4
2.03	Track Width (Load Wheel)	b ₁₁ (mm)	510 (Optional 380, 430)
2.04	Load Wheel Size	mm	Φ85×85
2.05	Drive Wheel Size	mm	Φ254×100
Dimensions			
3.01	Min. Fork Ground Clearance (Lower Limit)	h ₁ (mm)	85
3.02	Max. Fork Ground Clearance (Upper Limit)	h ₂ (mm)	205
3.03	Max. Fork Lifting Travel	mm	120
3.04	Overall Fork Width	b ₅ (mm)	680 (Optional 550, 600)
3.05	Inner Fork Width (Incl. Cable Duct)	mm	326 (Optional 196, 246)
3.06	Standard Fork Dimensions (L/W/T)	l/s/e(mm)	1150x170x75
3.07	Body Length (with Forks)	L ₁ (mm)	1668
3.08	Body Width	b ₁ (mm)	855
3.09	Overall Height	h ₃ (mm)	1944
3.10	Min. Turning Radius	Wa (mm)	1482
3.11	Right-Angle Stacking Aisle Width (800×1200 pallet, 1200 parallel to forks, 200 side clearance)	Ast(mm)	2145
3.12	Right-Angle Stacking Aisle Width (1000×1200 pallet, 1200 parallel to forks, 200 side clearance)	Ast(mm)	2235
3.13	Right-Angle Stacking Aisle Width (1200×1200 pallet, 1200 parallel to forks, 200 side clearance)	Ast(mm)	2326
3.14	Min. Ground Clearance	m ₂ (mm)	10
Performance Parameters			
4.01	Max. Travel Speed (Loaded/Unladen)	km/h	5/5
4.02	Max. Lifting Speed (Loaded/Unladen)	mm/s	50/72
4.03	Max. Lowering Speed (Loaded/Unladen)	mm/s	58/41
4.04	Allowable Slope of the Ground	%	5
4.05	Positioning Accuracy	mm	±10
Electrical Configuration			
5.01	Drive Motor / Lifting Motor / Steering Motor		AC2.5/DC2.2/AC0.75
5.02	Battery Voltage	V	48
5.03	Rated Capacity	Ah	100
5.04	Brake		Electromagnetic/Regenerative
5.05	Charging Method		Automatic/Manual
Weight			
6.01	Battery Weight	kg	55
6.02	Service Weight (with Battery)	kg	750

Note: Pictures and parameters are subject to the actual vehicle.

STACKING AGV

CDD16

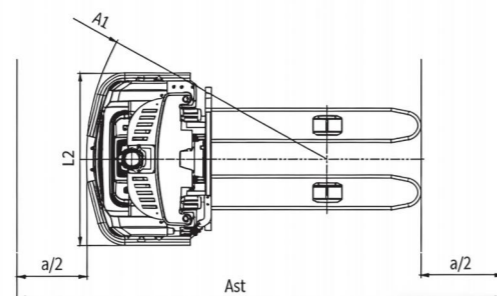
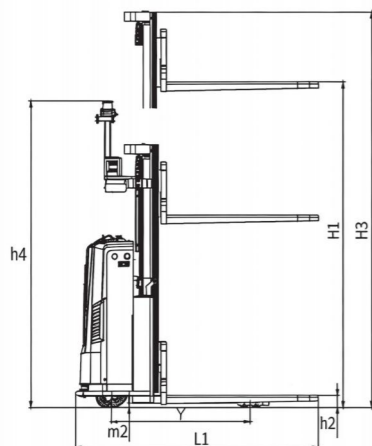


 Application Scenarios

Stacking AGVs are commonly used in pallet handling, production line docking, and line-side storage. They are suitable for narrow-aisle rack storage and narrow-aisle production line handling.

 Technical Highlights

- Rated load capacity of 1.6T and a Min. turning radius of 1340mm enable smooth operation in narrow aisles. Max. lift height reaches 4000mm, with customization available to accommodate different types of carriers.
- Equipped with a suspension drive system that automatically adjusts driving force under varying load conditions, the AGV can easily and stably traverse ramps and uneven gaps.
- The servo steering system provides higher steering control precision.
- HELI family-style exterior design with optimized appearance. The cover features a split design that large covers are universal and small covers can be flexibly adapted according to different control systems.
- Multiple safety protections include forward dual obstacle avoidance and a full-surround anti-collision bumper. Front top obstacle avoidance and rear bottom obstacle avoidance are also available as options, fully meeting the needs of AGV users.



Technical Parameters			
	Characteristics	Unit	Model Content
1.01	Model		CDD16
1.02	Configuration Code		AGV6A5LI
1.03	Power Type		Lithium Battery
1.04	Operation Mode		Unmanned
1.05	Rated Load Capacity	Q (kg)	1600
1.06	Load Center Distance	C (mm)	600
1.07	Wheelbase	Y (mm)	1043
Wheels			
2.01	Wheel Type		PU
2.02	Number of Drive Wheels / Balance Wheels / Load Wheels		1/2/4
Dimensions			
3.01	Standard Mast Lift Height	H ₁ (mm)	3000
3.02	Min. Fork Height	H ₂ (mm)	90
3.03	Standard Fork Dimensions (L/W/T)	(mm)	1150/185/55
3.04	Body Length	L ₁ (mm)	1832
3.05	Body Width	L ₂ (mm)	1010
3.06	Max. Overall Height (Mast Raised)	H ₃ (mm)	3500
3.07	Static Overall Height (Mast Lowered)	(mm)	2177
3.08	Min. Turning Radius	A ₁ (mm)	1340
3.09	Min. Right-Angle Stacking Aisle Width (800×1200 pallet, 1200 parallel to forks, Including Safety Scanner Warning Range)	Ast (mm)	2450
3.10	Min. Right-Angle Stacking Aisle Width (1200×1200 pallet, 1200 parallel to forks, Including Safety Scanner Warning Range)	Ast (mm)	2615
3.11	Min. Ground Clearance	m ₂ (mm)	30
3.12	Standard Navigator Height	H ₄ (mm)	2157
Performance			
4.01	Max. Travel Speed (Loaded/Unladen)	km/h	4/4
4.02	Max. Lifting Speed (Loaded/Unladen)	mm/s	100/150
4.03	Max. Lowering Speed (Loaded/Unladen)	mm/s	180/160
4.04	Allowable Slope of the Ground	%	5
4.05	Positioning Accuracy	mm	±10
Electrical Configuration			
5.01	Drive Motor / Lifting Motor / Steering Motor		AC1.5/DC3/AC0.4
5.02	Battery Voltage	V	24
5.03	Battery Capacity	Ah	173
5.04	Brake		Electromagnetic/Regenerative
5.05	Charging Method		Automatic/Manual
Weight			
6.01	Battery Weight	kg	30
6.02	Service Weight (with Battery)	kg	1110

Note: Pictures and parameters are subject to the actual vehicle.

STACKING AGV

CDD20



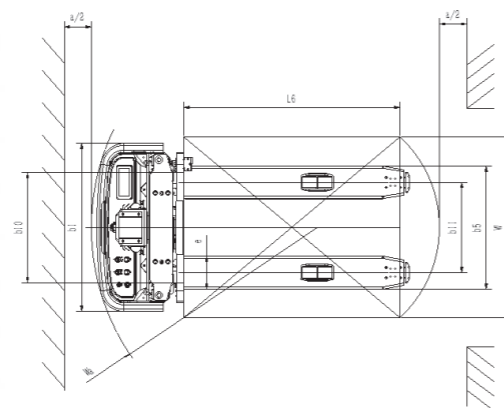
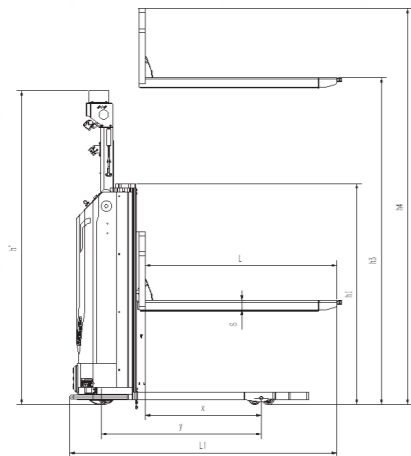
Application Scenarios

Stacking AGVs are commonly used in pallet handling, production line docking, and line-side storage. They are suitable for narrow-aisle rack storage and narrow-aisle production line handling.



Technical Highlights

- Rated load capacity of 2T, body width of 930mm and a Min. turning radius of 1250mm enable smooth operation in narrow aisles. Max. lift height reaches 3300mm, with customization available to accommodate different types of carriers.
- Equipped with a suspension drive system that automatically adjusts driving force under varying load conditions, the AGV can easily and stably traverse ramps and uneven gaps.
- Equipped with a pallet-in-position switch, and optionally an end-recognition camera, enabling precise pickup.
- Multiple safety protections, front dual-direction obstacle avoidance laser safety protection, and diffuse reflection photoelectric sensor mounted on the fork tips ensure safe pickup. Optional 3D vertical obstacle avoidance camera ensures safety in human-robot interaction scenarios.



Technical Parameters			
	Characteristics	Unit	Model Content
1.01	Model		CDD20-EDA20 II -30
1.02	Power Type (Electric, Diesel, Petrol, LPG, Manual)		Electric
1.03	Operation Mode		Laser Navigation
1.04	Rated Load Capacity	Q(Kg)	2000
1.05	Load Center Distance	C(mm)	600
1.06	Load distance	X(mm)	740
1.07	Wheelbase	Y(mm)	1020
Weight			
2.01	Service Weight (with Battery)	kg	1030
Wheels & Chassis			
3.01	Tire Type, Front / Rear		Polyurethane Tire
3.02	Front Wheel Specification	ΦxW(mm)	Φ80x70
3.03	Rear Wheel Specification	ΦxW(mm)	Φ230x75
3.04	Balance Wheel Specification	ΦxW(mm)	Φ80x35
3.05	Number of Drive Wheels / Balance Wheels / Load Wheels (x=Drive Wheel)		1X,4/4
3.06	Front Track Width (Drive End)	b ₁₀ (mm)	580
3.07	Rear Track Width (Load End)	b ₁₁ (mm)	500
Dimensions			
4.01	Overall Height (Mast Lowered)	h ₁ (mm)	2110
4.02	Lifting Height	h ₃ (mm)	3000
4.03	Max. Mast Height (Operating)	h ₄ (mm)	3575
4.04	Fork Ground Clearance (±5mm)	h ₁₃ (mm)	86
4.05	Body Length	l ₁ (mm)	1705
4.06	Body Width	b ₁ (mm)	930
4.07	Overall Height (Incl. Navigator)	h' (mm)	2150
4.08	Fork Dimensions	s/e/l(mm)	60/180/1220
4.09	Overall Fork Width	b ₅ (mm)	560/680
4.10	Min. Ground Clearance	m ₂ (mm)	30
4.11	Stacking Aisle Width, 1000×1200 pallet (C600)	Ast(mm)	1930+300
4.12	Stacking Aisle Width, 800×1200 pallet (C600)	Ast(mm)	1860+300
4.13	Min. Turning Radius	Wa(mm)	1250
Performance			
5.01	Lifting Speed (Unladen/Loaded)	mm/s	165/105 (Pump-Controlled Adjustable)
5.02	Lowering Speed (Unladen/Loaded)	mm/s	120/150 (Proportional Control)
5.03	Travel Speed (Unladen/Loaded)	m/s	1.5/1
5.04	Gradeability (Unladen/Loaded)	%	5/5
5.05	Service Brake		Electromagnetic
Electric Motor			
6.01	Drive Motor Power	kW	AC1.5
6.02	Drive Controller		Curtis
6.03	Steering Motor	kW	Servo Motor 0.4
6.04	Pump Motor	kW	DC3
6.05	Pump Control		Curtis
6.06	Lowering Control Method		Proportional Valve
6.07	Battery Type		Lithium Battery
6.08	Battery Voltage/Capacity	V/Ah	24/200
Others			
7.01	Drive Control Method		AC
7.02	Driver Ear Noise Level According to EN12053	dB(A)	75

Note: Pictures and parameters are subject to the actual vehicle.

REACH AGV

CQD16/20/30

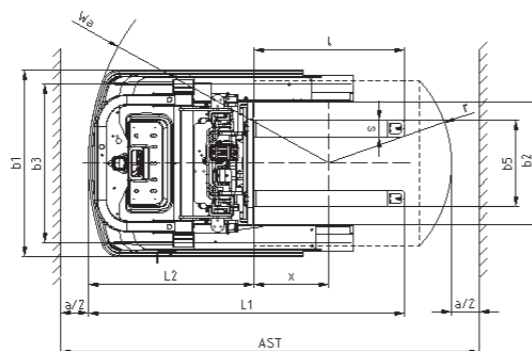
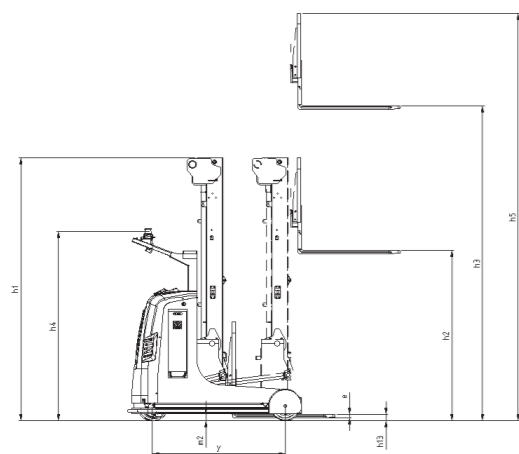


 Application Scenarios

Reach AGVs are commonly used in narrow aisle and indoor high-lift operation scenarios.

 Technical Highlights

- High vehicle maneuverability and trafficability, with a smaller right-angle stacking aisle width.
- Equipped with side automatic charging for higher charging reliability.
- Innovative mast structure provides good high-lift load capacity.
- LCD interactive smart dashboard allows users to easily monitor vehicle status.
- Automatic deceleration in curves and automatic detection of obstacles on the path ensure operational safety.



Technical Parameters					
Characteristics	Unit		Model Content		
1.01 Model			CQD16-AGV6A5LI	CQD20-AGV6A5LI	CQD30-AGV6A5LI
1.02 Power Type			Electric		
1.03 Operation Type			Automatic/Manual		
1.04 Navigation Method			Natural Navigation		
1.05 Load	lb.	Q (kg)	1600	2000	3000
1.06 Load Center Distance	in.	C (mm)	600	600	600
1.07 Wheelbase	in.	Y (mm)	1350	1465	1650
Weight					
2.01 Service Weight (with Battery)	lb.	(kg)	3820	3846	4660
2.02 Axle Load, Loaded, Drive End / Load End	lb.	(kg)	650/4650	752/6548	860/7940
2.03 Axle Load, Unladen, Drive End / Load End	lb.	(kg)	1920/1380	2532/2268	2920/2380
Wheels & Chassis					
3.01 Tire Type, Drive Wheel / Load Wheel			Polyurethane Tire		
3.02 Drive Wheel Size (Diameter × Width)	in.	(mm)	Φ343x114	Φ343x114	Φ343x135
3.03 Load Wheel Size (Diameter × Width)	in.	(mm)	Φ285x100	Φ330x100	Φ330x135
3.04 Balance Wheel Size (Diameter × Width)	in.	(mm)	/	/	/
3.05 Number of Drive Wheels / Balance Wheels / Load Wheels (x = Drive Wheel)	in.	(mm)	1/2		
3.06 Front Track Width (Drive End)	in.	b ₃ (mm)	1160	1144	1178
3.07 Rear Track Width (Load End)	in.	(mm)	/	/	/
Dimensions					
4.01 Min. Overall Height (Mast Lowered)	in.	h ₁ (mm)	2280	2230	2230
4.02 Navigator Scanning Height	in.	h ₄ (mm)	2245		
4.03 Free Lift Height	in.	h ₂ (mm)	1540	1540	1130
4.04 Max. Lift Height	in.	h ₃ (mm)	8500	8500	8500
4.05 Max. Overall Height (Mast Raised)	in.	h ₅ (mm)	4203	4367	4367
4.06 Fork Height (Fork Lowered)	in.	h ₁₃ (mm)	40	40	50
4.07 Body Length	in.	l ₁ (mm)	2250	2293	2458
4.08 Body Width	in.	b ₁ (mm)	1360	1360	1438
4.09 Fork Dimensions	in.	s/e/l (mm)	122x40x1150	122x40x1150	125x50x1150
4.10 Load Backrest Outer Width	in.	b ₂ (mm)	886	886	886
4.11 Overall Fork Width	in.	(mm)	244-724	244-724	250-724
4.12 Ground Clearance at Wheelbase Center	in.	m ₂ (mm)	80	80	80
4.13 Aisle Width, Pallet 1000(W) x 1200(L)	in.	Ast (mm)	2731	2785	2945
4.14 Aisle Width, Pallet 1200(W) x 1200(L)	in.	Ast (mm)	2791	2848	3010
4.15 Turning Radius	in.	Wa (mm)	1637	1745	1925
Performance Parameters					
5.01 Travel Speed (Loaded/Unladen)	mph	km/h	6/7	6/7	6/7
5.02 Lifting Speed (Loaded/Unladen)	fpm	mm/s	240/450	210/450	210/450
5.03 Lowering Speed (Loaded/Unladen)	fpm	mm/s	350/450	350/450	300/350
5.04 Max. Gradeability (Loaded/Unladen)		%	5/5	5/5	5/5
5.05 Brake Type			Electromagnetic Brake		
5.06 Navigation Accuracy	in.	mm	±10	±10	±10
5.07 Positioning Accuracy	in.	mm	±10	±10	±10
5.08 Repeat Positioning Accuracy	in.	mm	/	/	/
5.09 Attitude Accuracy	in.	mm	/	/	/
Electric Motor					
6.01 Drive Motor Rated Power (S2 60 min)	hp	kW	6	8	8
6.02 Lift Motor Rated Power (S3 15%)	hp	kW	11	12.5	15.5
6.03 Max. Permissible Battery Dimensions	in.	mm	/	/	/
6.04 Battery Voltage / Nominal Capacity (K20)		V/Ah	80/173	80/202	80/280
6.05 Battery Weight	lb.	kg	220	220	430
Other Data					
7.01 Drive Control Type			AC	AC	AC
7.02 Noise Level		dB(A)	≤70	≤70	≤70

Note: Pictures and parameters are subject to the actual vehicle.

SMALL REACH AGV

CQD12/15/16E

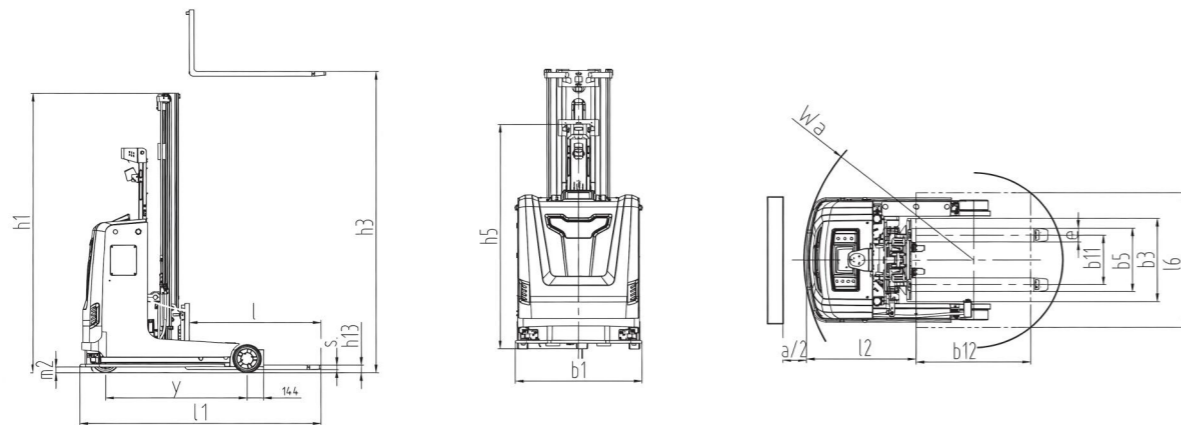


 Application Scenarios

Small reach AGVs are commonly used in narrow-aisle stacking, automatic production line docking, and other scenarios. They feature a load capacity of 1.2 to 1.6 tonnes, a compact body, and a small turning radius, delivering excellent right-angle stacking performance. Multiple optional configurations and customization are available.

 Technical Highlights

- Three-point support structure design, a small turning radius and strong maneuverability, meeting the needs of warehousing logistics operations in narrow aisles and compact spaces.
- Cast support legs, low center of gravity and excellent stability
- Comprehensive safety protection is achieved through obstacle-avoidance laser, fork-tip sensors, 3D obstacle avoidance, contour algorithm protection, anti-collision bumper, and audible and optical warning.



Technical Parameters					
Characteristics	Unit		Model Content		
1.01 Model			CQD12-AGV1C1LI	CQD15-EDQA15	CQD16-AGV1C1LI
1.02 Power Type			Lithium Battery	Lithium Battery	Lithium Battery
1.03 Operation Type			Auto/Teach Pendant	Auto/Teach Pendant	Auto/Teach Pendant
1.04 Navigation Method			Laser	Laser	Laser
1.05 Load	in.	Q (kg)	1200	1500	1600
1.06 Load Center Distance	in.	C (mm)	500	600	500
1.07 Front Overhang	in.	X (mm)	364	548	504
1.08 Wheelbase	in.	Y (mm)	1035	1220	1235
Weight					
2.01 Service Weight (with Battery)	in.	kg	2130	2290	2300
2.02 Axle Load, Loaded, Drive End / Load End	in.	kg	/	/	/
2.03 Axle Load, Unladen, Drive End / Load End	in.	kg	/	/	/
Wheels & Chassis					
3.01 Tire Type, Drive Wheel / Load Wheel			Polyurethane	Polyurethane	Polyurethane
3.02 Drive Wheel Size (Diameter × Width)	in.	mm	Φ250×100	Φ250×100	Φ250×100
3.03 Load Wheel Size (Diameter × Width)	in.	mm	Φ250×95	Φ250×85	Φ250×95
3.04 Balance Wheel Size (Diameter × Width)	in.	mm	/	/	/
3.05 Number of Drive Wheels / Balance Wheels / Load Wheels (x = Drive Wheel)	in.	mm	1x-0/2	1x-0/2	1x-0/2
3.06 Front Track Width (Drive End)	in.	b ₁₀ (mm)	/	/	/
3.07 Rear Track Width (Load End)	in.	mm	974	961	974
Dimensions					
4.01 Min. Overall Height (Mast Lowered)	in.	h ₁ (mm)	2045	2040	1970
4.02 Navigator Scanning Height	in.	h ₅ (mm)	2047	2050	2047
4.03 Free Lift Height	in.	h ₂ (mm)	/	/	/
4.04 Max. Lift Height	in.	h ₃ (mm)	2000	3000	5000
4.05 Max. Overall Height (Mast Raised)	in.	mm	2835	3972	5835
4.06 Body Length	in.	l ₁ (mm)	2106	2190	2106
4.07 Fork Vertical Face Length	in.	l ₂ (mm)	955	958	955
4.08 Body Width	in.	b ₁ (mm)	1106	1238	1106
4.09 Fork Dimensions	in.	s/e/l (mm)	40/122/1150	40/122/1220	40/122/1150
4.10 Load Backrest Outer Width	in.	b ₃ (mm)	740	840	740
4.11 Overall Fork Width	in.	b ₅ (mm)	244-680	244-680	244-680
4.12 Ground Clearance at Wheelbase Center	in.	m ₂ (mm)	50	50	50
4.13 Aisle Width, Pallet 1200(W) x 1000(L)	in.	Ast (mm)	2170+200	2257+200	2261+200
4.14 Aisle Width, Pallet 800(W) x 1200(L)	in.	Ast (mm)	2221+200	2270+200	2286+200
4.15 Turning Radius	in.	Wa (mm)	1296	1506	1481
Performance Parameters					
5.01 Travel Speed (Loaded/Unladen)	mph	km/h	6/7	7/7	6/7
5.02 Lifting Speed (Loaded/Unladen)	fpm	m/s	0.13/0.16	0.13/0.16	0.13/0.16
5.03 Lowering Speed (Loaded/Unladen)	fpm	m/s	0.19/0.17	0.17/0.13	0.19/0.17
5.04 Max. Gradeability (Loaded/Unladen)		%	3/5	6/8	3/5
5.05 Brake Type			Electromagnetic/Regenerative		
5.06 Navigation Accuracy	in.	mm	±5	±10	±5
5.07 Positioning Accuracy	in.	mm	±5	±10	±5
5.08 Repeat Positioning Accuracy	in.	mm	±5	±10	±5
5.09 Energy Consumption (VDI Cycle)		kWh/h	/	/	/
Electric Motor					
6.01 Drive Motor Rated Power (S2 60 min)	hp	kW	3	2.5	3
6.02 Lift Motor Rated Power (S3 15%)	hp	kW	3	3	3
6.03 Max. Permissible Battery Dimensions	in.	mm	/	/	/
6.04 Battery Voltage / Nominal Capacity (K20)		V/Ah	48V/100Ah	24V/200Ah	48V/100Ah
6.05 Battery Weight	in.	kg	55	70	55
Other Data					
7.01 Drive Control Type			AC	AC	AC
7.02 Noise Level		dB(A)	≤70	≤75	≤70

Note: Pictures and parameters are subject to the actual vehicle.

COUNTERBALANCED AGV

CPD20/35



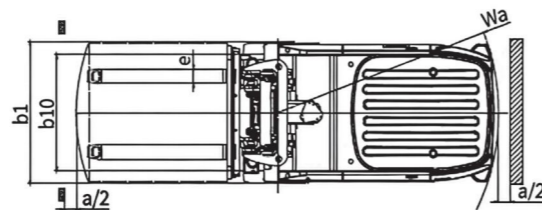
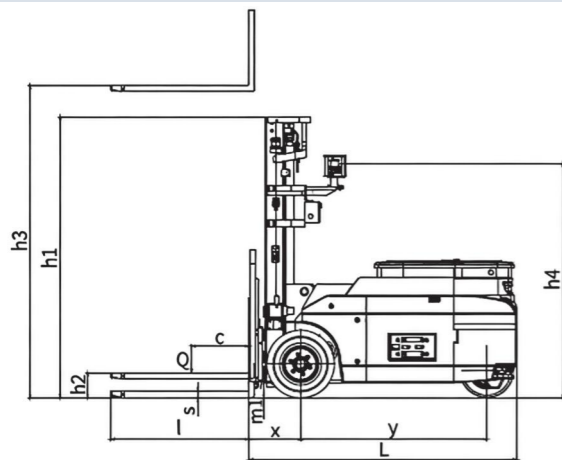
Application Scenarios

Counterbalanced AGVs are suitable for indoor and outdoor transport operations in various scenarios, such as logistics warehousing systems, automated factories, workshops, and warehouses.



Technical Highlights

- Self-manufactured electric steering axle, three-point electric steering, a small turning radius and good trafficability.
- Imported ZAPI controller ensures superior stability, safety and precision.
- Multiple attachment interfaces are reserved to meet special handling needs in various operating conditions.
- Equipped with lift pump control and lowering proportional valve for precise lift and lower control.
- Front wheel dual drive, strong power and high operational efficiency
- Equipped with HELI's self-developed control system, simple and efficient deployment
- Load capacity of 2-3.5t, and a wide range of options to meet the requirements of different operating scenarios.



Technical Parameters					
Characteristics		Unit		Model Content	
1.01	Model			CPD20	CPD35
1.02	Power Type			Electric	
1.03	Operation Type			Auto / Teach Pendant	
1.04	Navigation Method			Laser	
1.05	Load	ib.	Q(kg)	2000	3500
1.06	Load Center Distance	in.	C(mm)	500	500
1.07	Load Length	in.	X(mm)	361	446
1.08	Wheelbase	in.	Y(mm)	1400	1615
Weight					
2.01	Service Weight (with Battery)	ib.	kg	3300	5300
2.02	Axle Load, Loaded, Drive End / Steering End	ib.	kg	4650/650	7940/860
2.03	Axle Load, Unladen, Drive End / Steering End	ib.	kg	1380/1920	2380/2920
Wheels & Chassis					
3.01	Tire Type, Drive Wheel / Load Wheel			Rubber Tire	
3.02	Drive Wheel Size	in.	mm	161/4×6×111/4	23×10-12
3.03	Steering Wheel Size	in.	mm	140/55-9	200/50-10
3.04	Number of Drive Wheels / Steering Wheel (x = Drive Wheel)	in.	mm	2x/2	2x/2
3.05	Track Width (Drive End)	in.	b ₁₀ (mm)	933	975
3.06	Track Width (Steering End)	in.	mm	162	272
Dimensions					
4.01	Min. Overall Height (Mast Lowered)	in.	h ₁ (mm)	2025	2430
4.02	Navigator Scanning Height	in.	h ₄ (mm)	2030	2030
4.03	Free Lift Height	in.	h ₂ (mm)	90	160
4.04	Standard Lift Height	in.	h ₃ (mm)	3000	3000
4.05	Max. Overall Height (Mast Raised)	in.	h ₅ (mm)	4230	4230
4.06	Fork Height (Fork Lowered)	in.	h ₁₃ (mm)	50	50
4.07	Body Length	in.	l ₁ (mm)	3130	3489
4.08	Body Width	in.	b ₁ (mm)	1180	1262
4.09	Fork Dimensions	in.	s/e/l(mm)	122×40×1070	125×50×1070
4.10	Load Backrest Outer Width	in.	b ₃ (mm)	1148	1148
4.11	Overall Fork Width	in.	b ₅ (mm)	244-927	250-1079
4.12	Min. Ground Clearance (at Mast)	in.	m ₁ (mm)	128	135
4.13	Aisle Width, Pallet 1200(W) x 1000(L)	in.	Ast(mm)	3485	3685
4.14	Aisle Width, Pallet 800(W) x 1200(L)	in.	Ast(mm)	3613	3813
4.15	Turning Radius	in.	Wa(mm)	1720	2021
Performance Parameters					
5.01	Travel Speed (Loaded/Unladen)	mph	km/h	7/7	7/7
5.02	Lifting Speed (Loaded/Unladen)	fpm	m/s	0.4/0.58	0.31/0.44
5.03	Lowering Speed (Loaded/Unladen)	fpm	m/s	0.5/0.4	0.51/0.43
5.04	Max. Gradeability (Loaded/Unladen)		%	10/10	10/10
5.05	Brake Type			Electro-Hydraulic Brake	Electro-Hydraulic Brake
Electric Motor					
6.01	Drive Motor Rated Power (S2 60 min)	hp	kW	5.5×2	10×2
6.02	Lift Motor Rated Power (S3 15%)	hp	kW	16.5	25.5
6.03	Battery Voltage / Nominal Capacity (K20)		V/ Ah	80/150	80/404
6.04	Battery Weight	lb.	kg	360	420
Other Data					
7.01	Drive Control Type			AC	AC
7.02	Noise Level		dB (A)	≤70	≤70

Note: Pictures and parameters are subject to the actual vehicle.

COUNTERBALANCED AGV

CPD15/20/30



Application Scenarios

Counterbalanced AGVs are suitable for logistics warehousing systems, automated factories, workshops, and warehouses. It can be used for carriers such as Tianzi boards and Euro pallets in indoor handling scenarios.



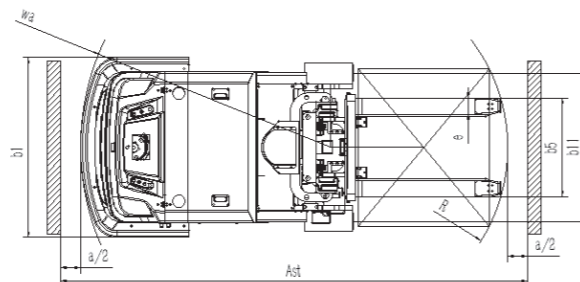
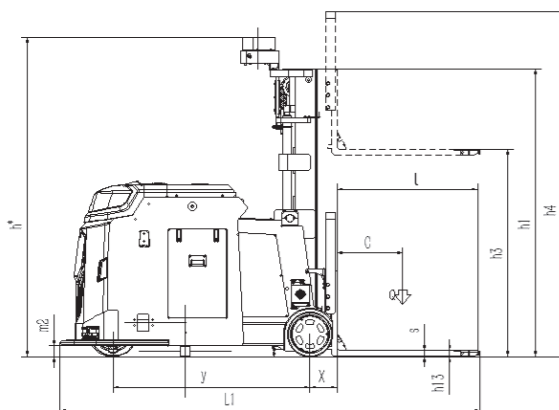
Technical Highlights

- Side-pull battery design for easy battery replacement
- Equipped with lifting pump control and lowering proportional valve for ensuring lifting & lowering more stable and accurate.
- Multiple attachment interfaces are reserved to meet special handling needs in various operating conditions.
- Adopts servo steering motor and vertical drive gearbox, achieving high vehicle parking positioning accuracy.

Technical Parameters

Characteristics	Unit	Model Content		
1.01 Model		CPD15-EDB15II-30	CPD20-EDB20II-30	CPD30-EDB30II-30
1.02 Power Type (Electric, Diesel, Petrol, LPG, Manual)		Electric	Electric	Electric
1.03 Operation Type		Laser Navigation	Laser Navigation	Laser Navigation
1.04 Rated Load Capacity	Q(Kg)	1500	2000	3000
1.05 Load Center Distance	C(mm)	500	500	500
1.06 Load Distance	X(mm)	155	155	207
1.07 Wheelbase	Y(mm)	1000	1400	1500
Weight				
2.01 Service Weight (with Battery)	kg	≈2800	≈2900	≈4600
Wheels & Chassis				
3.01 Tire Type, Front / Rear		Polyurethane Tire	Polyurethane Tire	Polyurethane Tire
3.02 Front Wheel Specification	∅×w(mm)	∅310X120	∅310X120	∅382X142
3.03 Rear Wheel Specification	∅×w(mm)	∅267X114	∅267X114	∅343X150
3.04 Balance Wheel Specification	∅×w(mm)	/	/	/
3.05 Number of Drive Wheels / Balance Wheels / Load Wheels (x=Drive Wheel)		1X,0/2	1X,0/2	1X,0/2
3.06 Front Track Width (Drive End)	b ₁₀ (mm)	/	/	/
3.07 Rear Track Width (Load End)	b ₁₁ (mm)	1020	1020	1130
3.08 Fork Forward/Backward Tilt Angle	α/β (°)	/	/	/
Dimensions				
4.01 Min. Overall Height (Mast Lowered)	h ₁ (mm)	2110	2110	2195
4.02 Lifting Height	h ₃ (mm)	3000	3000	3000
4.03 Max. Overall Height (Mast Raised)	h ₄ (mm)	3970	3970	4060
4.04 Fork Ground Clearance (±5mm)	h ₁₃ (mm)	45	45	50
4.05 Body Length (with Safety Bumper)	l ₁ (mm)	2530	2930	3200
4.06 Body Width (with Safety Bumper)	b ₁ (mm)	1205	1205	1370
4.07 Overall Height (with Navigation)	h'(mm)	2145	2145	2435
4.08 Fork Dimensions	s/e/l(mm)	40/122/1070	40/122/1070	45/125/1070
4.09 Overall Fork Width	b ₂ (mm)	680	680	680
4.10 Min. Ground Clearance	m ₂ (mm)	50	50	85
4.11 Stacking Aisle Width, 1000×1200 pallet (C500)	Ast(mm)	2600+300	2985+300	3250+300
4.12 Stacking Aisle Width, 800×1200 pallet (C600)	Ast(mm)	2715+300	3100+300	3365+300
4.13 Min. Turning Radius	Wa(mm)	1300	1685	1900
Performance				
5.01 Lifting Speed (Unladen/Loaded)	mm/s	165/105 (Pump-Controlled Adjustable)	165/105 (Pump-Controlled Adjustable)	320/230 (Pump-Controlled Adjustable)
5.02 Lowering Speed (Unladen/Loaded)	mm/s	85/150 (Proportional Control)	85/150 (Proportional Control)	250/330 (Proportional Control)
5.03 Travel Speed (Unladen/Loaded)	m/s	1.5/1	1.5/1	2/1.9
5.04 Gradeability (Unladen/Loaded)	%	5/5	5/5	5/5
5.05 Brake Type		Electromagnetic	Electromagnetic	Electromagnetic
Electric Motor				
6.01 Drive Motor Power	kW	AC3	AC3	AC8
6.02 Drive Controller		Curtis	Curtis	Curtis
6.03 Steering Motor	kW	Servo Motor 0.75	Servo Motor 0.75	Servo Motor 1.5
6.04 Pump Motor	kW	DC3	DC3	AC15
6.05 Pump Control		Curtis	Curtis	Curtis
6.06 Lowering Control Method		Proportional Valve	Proportional Valve	Proportional Valve
6.07 Battery Type		Lithium Battery	Lithium Battery	Lithium Battery
6.08 Battery Voltage/Capacity	V/Ah	24/200	24/200	48/300
Other Data				
7.01 Drive Control Type		AC	AC	AC
7.02 Driver Ear Noise Level According to EN12053	dB(A)	75	75	75

Note: Pictures and parameters are subject to the actual vehicle.



THREE-WAY STACKING AGV

CDME16J



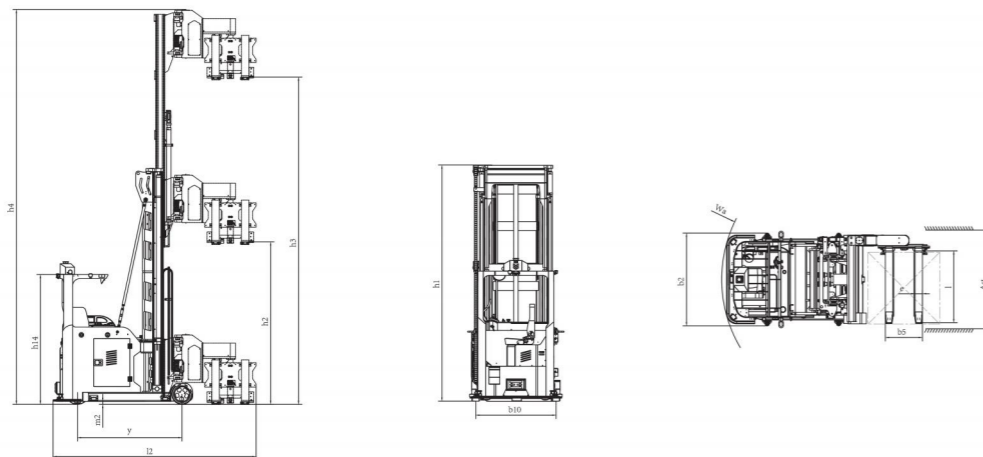
Application Scenarios

The narrow-aisle three-way stacking AGV uses a 180° rotation and lateral shifting of its forks to stack, load and unload materials on both sides of the aisle. When picking up materials, the AGV body does not need to turn, making operation simpler and safer, improving work efficiency. It is suitable for medium- to high-level narrow-aisle stacking.



Technical Highlights

- Equipped with a servo-driven three-way fork head for safe, reliable, smooth, and efficient operation
- Imported brand Curtis controller and servo controller for greater stability, safety, and precision
- High-strength imported mast and high-margin strength design for more stable and safer operation
- Equipped with all-wheel braking for more stable operation at high level
- Customizable design to meet customer requirements for different pallets, racking aisle widths, and other working conditions



Technical Parameters		
Characteristics	Unit	Model Content
1.01 Model		CDME16J-80S
1.02 Power Type (Electric, Diesel, Petrol, LPG, Manual)		Electric
1.03 Operation Type		Laser Navigation
1.04 Rated Load Capacity	Q(Kg)	1600
1.05 Load Center Distance	C(mm)	600
1.06 Wheelbase	Y(mm)	1750
Weight		
2.01 Service Weight (with Battery)	kg	7120
Wheels & Chassis		
3.01 Tire Type		Polyurethane Tire
3.02 Front Wheel Specification	Φxw(mm)	Φ400*160
3.03 Drive Wheel Specification	Φxw(mm)	Φ343*130
3.04 Balance Wheel Specification	Φxw(mm)	/
3.05 Front Track Width	b10(mm)	1345
Dimensions		
4.01 Mast lowered height (Excluding Navigator)	h ₁ (mm)	3960
4.02 Lifting Height	h ₃ (mm)	8000
4.03 Max. Overall Height (Mast Raised)	h ₄ (mm)	9200
4.04 Overhead Guard Height / Navigator Height	h ₁₄ (mm)	2175/2280
4.05 Fork Ground Clearance	H ₃ (mm)	50
4.06 Body Length	l ₂ (mm)	3400
4.07 Body Width	b ₁ (mm)	1550
4.08 Fork Dimensions	s/e/l(mm)	50/125/1200
4.09 Overall Height (with Navigation)	b ₃ (mm)	410-620 (Customizable)
4.10 Min. Ground Clearance (Wheelbase Center)	m ₂ (mm)	50
4.11 Stacking Aisle Width, 1200×1200 Pallet (1200 Across Forks)	Ast(mm)	1650
4.12 Main Aisle Width	mm	3840+400
4.13 Min. Turning Radius	Wa(mm)	2240
Performance		
5.01 Lifting Speed (Unladen/Loaded)	m/s	0.275/0.215
5.02 Lowering Speed (Unladen/Loaded)	m/s	0.220/0.260
5.03 Max. Travel Speed (Unladen/Loaded)	m/s	2.2/1.9
5.04 Service Brake		Electromagnetic Brake
Electric Motor		
6.01 Drive Motor Power	kW	8AC
6.02 Drive Controller		Curtis
6.03 Steering Motor	kW	Servo Motor 1
6.04 Pump Motor	kW	15AC
6.05 Pump Control		Curtis
6.06 Lowering Control Method		Proportional Valve
6.07 Battery Type		Lithium Battery
6.08 Battery Voltage/Capacity	V/Ah	48/300
6.09 Charger	V/A	48/150
Other Data		
7.01 Drive Control Type		AC
7.02 Driver Ear Noise Level According to EN12053	dB(A)	75

Note: Pictures and parameters are subject to the actual vehicle.

TOWED AGV

QYD50S

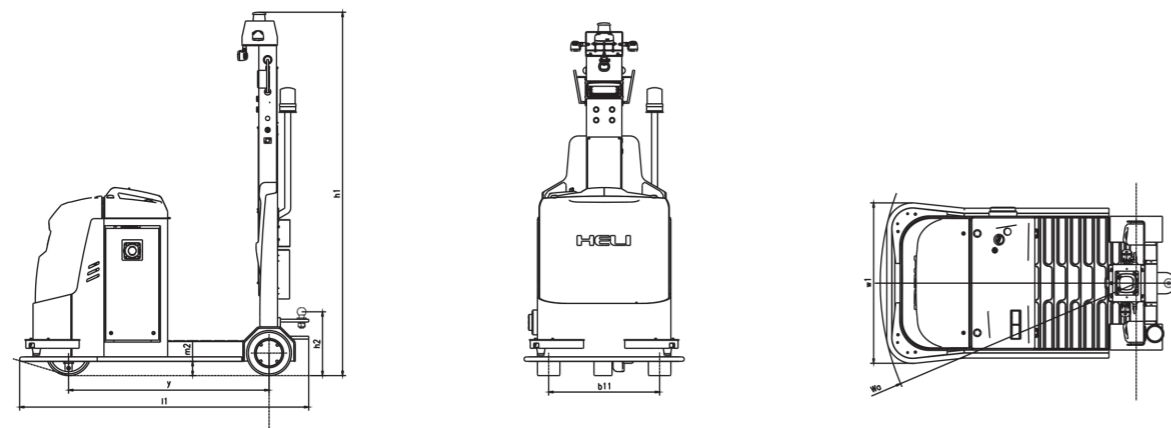


 Application Scenarios

Towed AGVs are commonly used for indoor point-to-point material transfer.

 Technical Highlights

- Adopts laser SLAM navigation technology, with optional NDC reflective navigation.
- Motor drive and electromagnetic brake for reliable power and fast braking
- Rated towing capacity: 5 tonnes



Technical Parameters			
	Characteristics	Unit	Model Content
1.01	Model		QYD50S-AGVLI001
1.02	Power Type		Electric
1.03	Operation Type		Handle / Remote / Automatic
1.04	Navigation Method		Laser SLAM
1.05	Towing Capacity	lb. kg	5000
1.06	Max. Traction Force	kN	2.9
1.07	Wheelbase	in. Y (mm)	1130
Weight			
2.01	Service Weight (with Battery)	lb. kg	920
2.02	Axle Load, Loaded, Drive End / Load End	lb. kg	/
2.03	Axle Load, Unladen, Drive End / Load End	lb. kg	/
Wheels & Chassis			
3.01	Tire Type, Drive Wheel / Load Wheel	in. mm	Solid Tire
3.02	Front Wheel	in. mm	10x4x6.5
3.03	Rear Wheel	in. mm	10x5x6.5
3.04	Front Track Width	in. mm	0
3.05	Rear Track Width	in. b ₁₁ (mm)	630
Dimensions			
4.01	Body Dimensions: L x W x H	in. l ₁ × b ₁ × h ₁ (mm)	1630x845x2050
4.02	Ground Clearance at Wheelbase Center	in. m ₂ (mm)	80
4.03	Turning Radius	in. W _a (mm)	1445
4.04	Trailer Coupling Height	in. h ₂ (mm)	360
Performance Parameters			
5.01	Travel Speed, Loaded/Unladen	mph km/ h	6/8
5.02	Max. Gradeability, Loaded/Unladen	%	4/10
5.03	Service Brake		Electric Brake
5.04	Parking Brake		Electromagnetic Brake
Electric Motor			
6.01	Drive Motor Rated Power (S2 60 min)	kW	3
6.02	Steering Motor Rated Power (S3 15%)	kW	0.6
6.03	Battery Voltage / Nominal Capacity (K20)	V/Ah	48V/150Ah
6.04	Battery Weight	kg	100
Other Data			
7.01	Drive Control Type		AC
7.02	Noise Level	dB (A)	≤70

Note: Pictures and parameters are subject to the actual vehicle.

TOWED AGV

QYD100

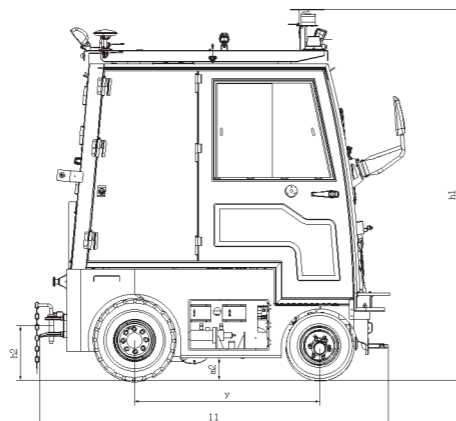
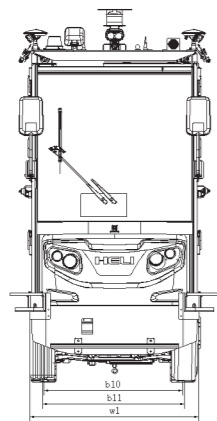


 Application Scenarios

The ride-on towed AGV features motor and axle drive with a towing capacity of 10 tonnes. It can be coupled to various types of trailers and is suitable for material transportation in warehouses and production lines, baggage handling at airports, etc.

 Technical Highlights

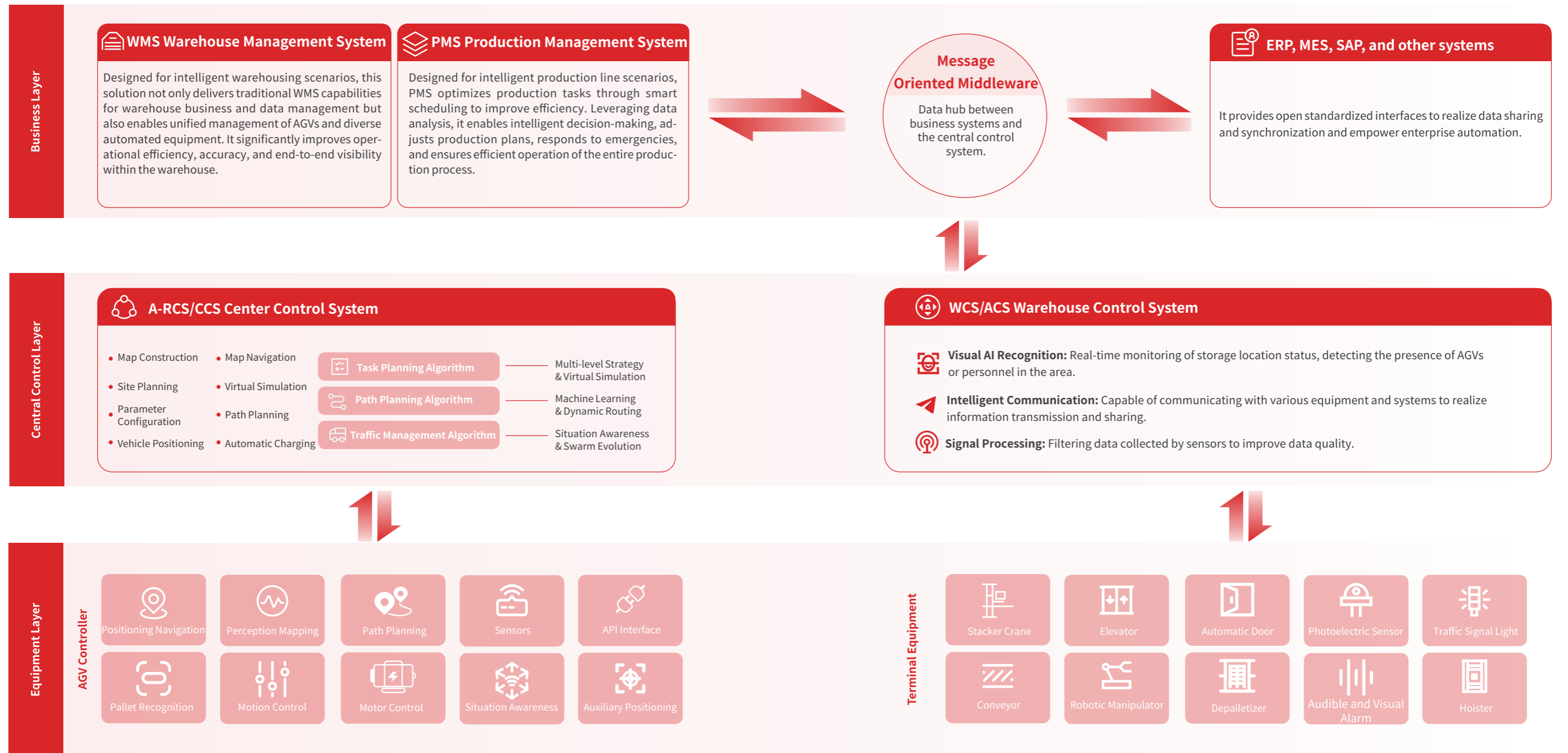
- Adopts laser SLAM navigation technology and supports multiple safety protection such as contact-type anti-collision bumper.
- Motor drive, hydraulic power-assisted brake and negative brake for strong power and fast braking
- Rated towing capacity: 10 tonnes
- Self-developed Vehicle Central Control Unit (VCU) with interactive functions
- Two operation modes: manual driving and unmanned automatic driving



Technical Parameters			
Characteristics	Unit		Model Content
1.01 Model			QYD100
1.02 Power Type			Electric
1.03 Operation Type			Manual/Jog/Automatic
1.04 Navigation Method			Laser SLAM
1.05 Towing Capacity	lb.	Q (kg)	10000
1.06 Max. Traction Force		kN	11
1.07 Wheelbase	in.	Y (mm)	1200
Weight			
2.01 Service Weight (with Battery)	lb.	kg	1960
2.02 Axle Load, Loaded, Drive End / Load End	lb.	kg	/
2.03 Axle Load, Unladen, Drive End / Load End	lb.	kg	/
Wheels & Chassis			
3.01 Tire Type, Drive Wheel / Load Wheel			Solid Tire
3.02 Front Wheel	in.	mm	16x6-8
3.03 Rear Wheel	in.	mm	6.00-9
3.04 Front Track Width	in.	b ₁₀ (mm)	910
3.05 Rear Track Width	in.	b ₁₁ (mm)	920
Dimensions			
4.01 Body Dimensions: L x W x H	in.	l ₁ × b ₁ × h ₁ (mm)	2260x1070x2400
4.02 Ground Clearance at Wheelbase Center	in.	m ₂ (mm)	150
4.03 Turning Radius	in.	Wa (mm)	1980
4.04 Traction Pin Height	in.	h ₂ (mm)	350
Performance Parameters			
5.01 Travel Speed, Loaded/Unladen	mph	km/h	11/15
5.02 Max. Gradeability, Loaded/Unladen		%	5/20
5.03 Service Brake			Hydraulic Assisted Brake Electric Brake
5.04 Parking Brake			Negative Brake
Electric Motor			
6.01 Drive Motor Rated Power (S2 60 min)	hp	kW	8.2
6.02 Steering Motor Rated Power (S3 15%)	hp	kW	1.35
6.03 Battery Voltage / Nominal Capacity (K20)		V/Ah	80V/280Ah
6.04 Battery Weight	lb.	Kg	40
Other Data			
7.01 Drive Control Type			AC
7.02 Noise Level		dB(A)	≤70

Note: Pictures and parameters are subject to the actual vehicle.

INTELLIGENT PLATFORM



HELI

HELI 合力宇锋

COOPERATIVE CLIENTS



BAOSTEEL 宝钢股份

远大医药(中国) GRANDPHARMA(CHINA)

EVE 亿纬锂能

JAC 江淮汽车



中国航天

国家电网 STATE GRID



amazon



中国烟草 CHINA TOBACCO



诺和诺德

天能股份

SF EXPRESS 顺丰速运

MAERSK

CAI NIAO 菜鸟

阳光电源 SUNGROW



小林製薬

国轩高科 GOTIION HIGH-TECH

P&G

浦林成山 PRINX CHENGSHAN

华润医药 CR PHARMA

蒙牛 MENENIU

GREE

国家能源集团 CHN ENERGY

Atlas Copco

Giti

心连心

古井集团 GUJING GROUP

美的 Midea

TCL

广药集团

Continental

中国中车 CRRC

雪花啤酒 SNOW

迎驾贡酒 国人的迎宾酒

CHANGHONG 长虹

OPPLE 欧普照明



BYD

中粮 COFCO 自然之源 智慧之选

Continental

WEICHAI 潍柴

Win 云图控股 WINTRUE

九州通 JOINTOWN

YASKAWA