



IPLUSMOBOT

Automate Your Future with Next Mobile Innovation



IPLUSMOBOT

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Intelligent Mobile Robots

Leading Logistics Innovation
for Smart Manufacturing

www.iplusmobot.com



Product Features

-  End-to-end Autonomous Material Transporting
-  High-speed Human-following
-  Dynamic Transportation in Human-vehicle-mixed Environment
-  Customization Ability
-  Hybrid Navigation Technology

A Further Step Towards Smart Manufacturing

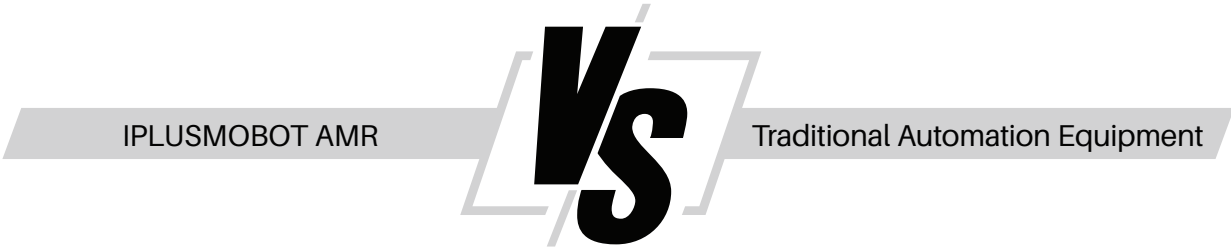
Innovation in Factory Logistics with Mobile Robot

IPLUSMOBOT is one of the global leading companies in the autonomous mobile robot field, ranking the first of China industrial logistics natural navigation AMR market occupancy. IPLUSMOBOT was founded in 2016, the headquarter is in Hangzhou and its subcompanies have been established in Japan and Shenzhen(China). It provides logistics automation, digital and intelligentized products to manufacturing industry, helps enterprises increase the configuration and operation efficiency, as well as circulation resources. So far, IPLUSMOBOT has served over 1000 customers from various industries such as Semiconductor, FPD, Electronics, Lithium Battery, Photovoltaic, Automobile, Aviation, House Appliance, Pharmaceutical, Energy, Food etc.





IPLUSMOBOT AMR VS Traditional Automation Equipment



Economical implementation

The system is complex and the implementation period is long

Easy extension with experienced customized ability

If the path is changed, the ground QR code/magnetic strip needs to be re-deployed

Easy Maintain

The QR code is easy to be damaged and needs to be replaced / maintained regularly

Flexible and robust hybrid navigation

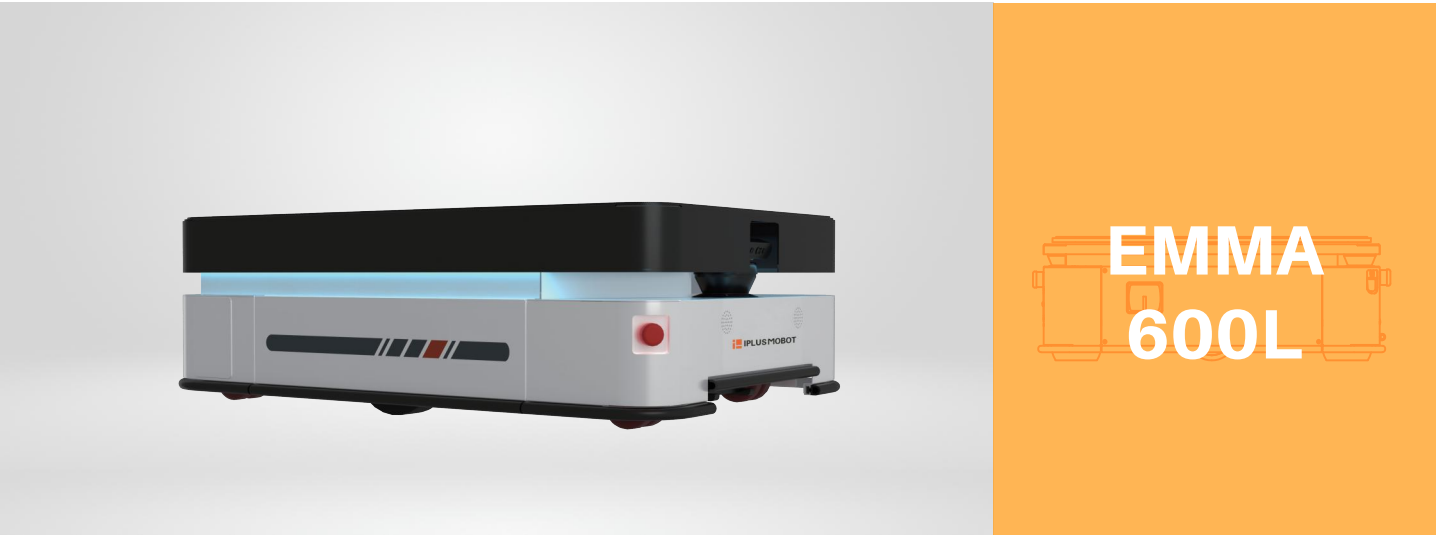
Single navigation mode


Utmost accuracy

Difficult to dock with production line, not easy to fulfill customization requirements


Proven reliability: more than 500 projects

Limited warehousing or equipment docking experience







Laser+vision+inertia
Hybrid Navigation




400
Payload(kg)




±2mm/0.2°
Docking Accuracy



75
Optional Lift(mm)



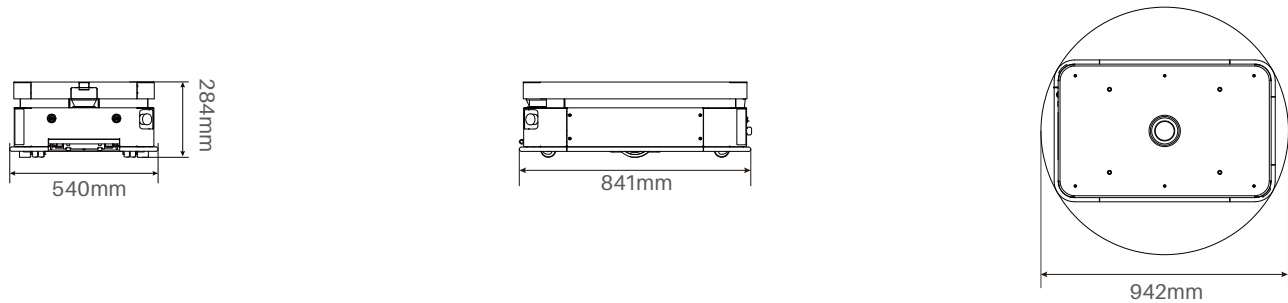
≥700
Aisle Wdth(mm)




8
Runtime (H)


Basic Parameters	Dimension (l*w*h) 841*540*284mm Weight 150kg Differential drive	Sensor	Front laser (Rear laser optional) Bottom camera Top camera	Battery	Lithium-ion 48v 31.5Ah Charge time 1.5h Runtime ≥8h
Performance	Rated payload 400kg Docking accuracy ±2mm/0.2°		Position accuracy ±10mm/1° Min. aisle width 700mm		Max speed 1.5m/s Laser fov 210°
Safety System	Laser obstacle avoidance Sound and light alarm		Bumper Optional 3D camera		Emergency stop

EMMA400L Drawing







Laser+vision+inertia
Hybrid Navigation




600
Payload(kg)




±2mm/0.2°
Docking Accuracy



60
Optional Lift(mm)



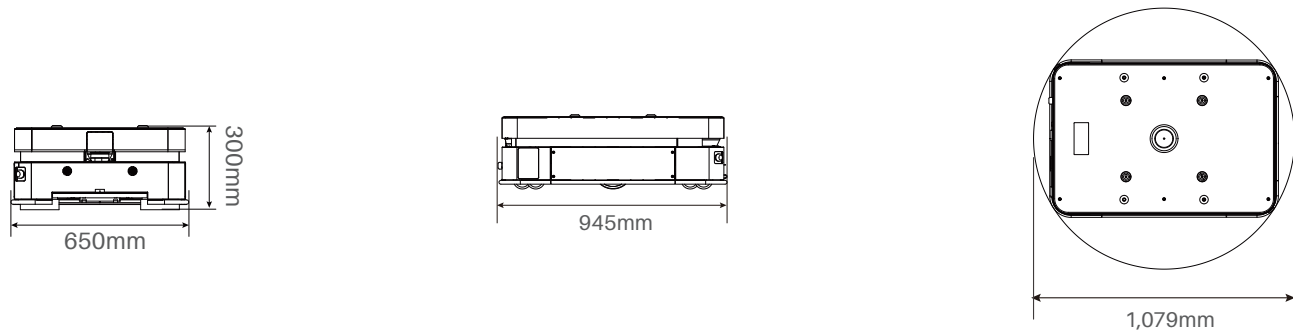
≥950
Aisle Width(mm)




8
Runtime (H)


Basic Parameters	Dimension (l*w*h) 945*650*300mm Weight 190kg Differential drive	Sensor	Front laser (Rear laser optional) Bottom camera Top camera	Battery	Lithium-ion 48v 31.5Ah Charge time 1.5h Runtime 8h
Performance	Rated payload 600kg Docking accuracy ±2mm/0.2°		Position accuracy ±10mm/1° Max speed 1.5m/s		Laser fov 210°
Safety System	Laser obstacle avoidance Sound and light alarm		Bumper Optional 3D camera		Emergency stop


EMMA600L Drawing









Laser+vision+inertia
Hybrid Navigation


1,000
Payload(kg)


±2mm/0.2°
Docking Accuracy

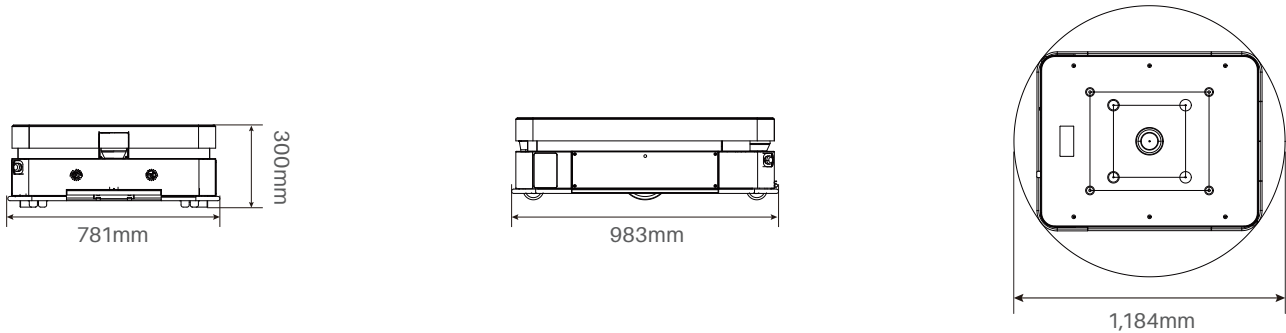

60
Optional Lift(mm)



≥1,100
Aisle width(mm)



8
Runtime(H)


Basic Parameters	Dimension (l*w*h) 983×781×300mm	Sensor	Front laser (Rear laser optional)	Battery	Lithium-ion 48v 38.5Ah
	Weight 290kg		Bottom camera		Charge time 1.5h
	Differential drive		Top camera		Runtime 8h
Performance	Rated payload 1,000kg	Position accuracy ±10mm/1°			Laser fov 210°
	Docking accuracy ±2mm/0.2°	Max speed 1.5m/s			
Safety System	Laser obstacle avoidance	Bumper			Emergency stop
	Sound and light alarm	Optional 3D camera			


EMMA1000L Drawing






Laser+vision+inertia
Hybrid Navigation


1,500
Payload(kg)


±2mm/0.2°
Docking Accuracy

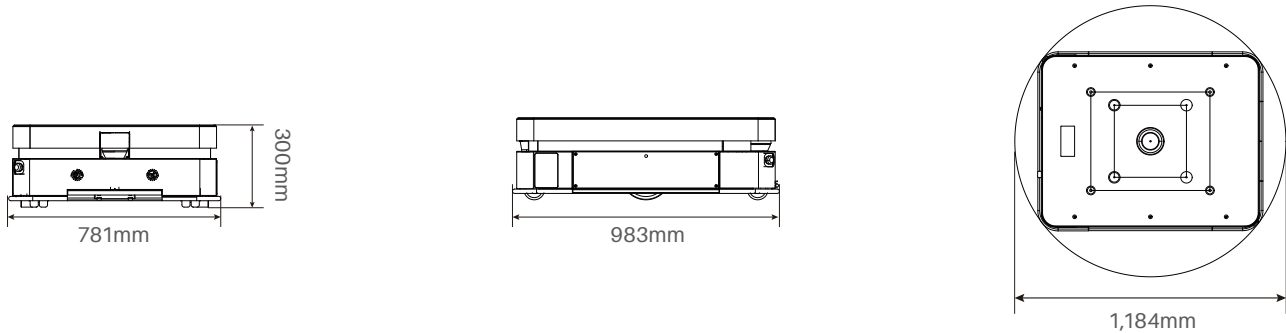

60
Optional Lift(mm)


≥1,100
Aisle width(mm)



8
Runtime(H)

Basic Parameters	Dimension (l*w*h) 983×781×300mm	Sensor	Front laser (Rear laser optional)	Battery	Lithium-ion 48v 38.5Ah
	Weight 290kg		Bottom camera		Charge time 1.5h
	Differential drive		Top camera		Runtime 8h
Performance	Rated payload 1,500kg		Position accuracy ±10mm/1°		Laser fov 210°
	Docking accuracy ±2mm/0.2°		Max speed 1.2m/s		
Safety System	Laser obstacle avoidance		Bumper		Emergency stop
	Sound and light alarm		Optional 3D camera		


EMMA1500L Drawing









Laser+vision+inertia
Hybrid Navigation




≥1,000
Payload(kg)
(Customized)




±2mm/0.2°
Docking Accuracy



Chassis+carrier
Operating type




360°omni-direction
Drive mode




8
Runtime (H)

Basic Parameters	Customized dimension	Sensor	Laser * 2	Battery	Lithium-ion 48v 80Ah (Customized)
	Omnidirectional		Bottom camera		Runtime 8h
			Top camera		
Performance	Payload(Customized)		Position accuracy ±10mm/1°		Laser fov 360°
	Docking accuracy ±2mm/0.2°				
Safety System	Laser obstacle avoidance		3D camera(Optional)		Emergency stop
	Sound and light alarm		Bumper		







Laser+vision+inertia
Hybrid Navigation




1,400
Payload(kg)




±10mm/1°
Docking Accuracy



1,600
Lift Height(mm)



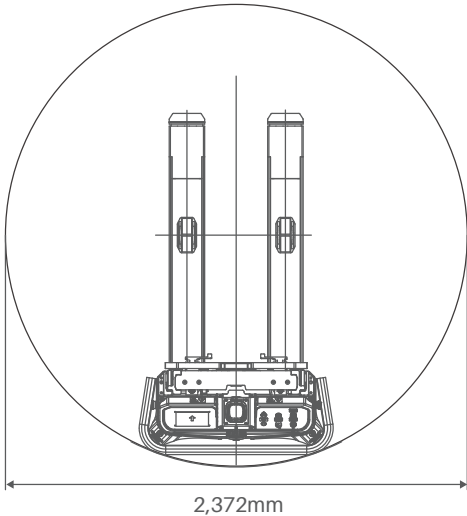
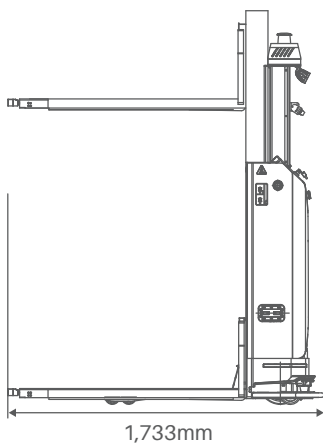
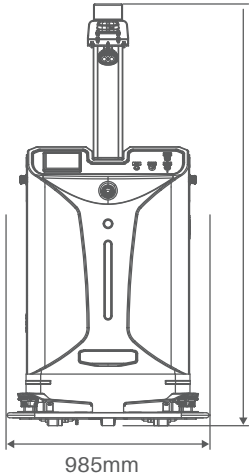
2,120
Aisle Width(mm)

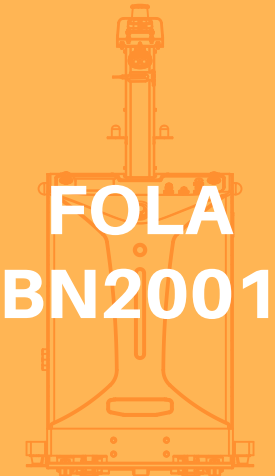


8
Runtime (H)

Basic Parameters	Weight 680kg	Battery	Lithium-ion 24v 180Ah	Safety System	Laser obstacle avoidance + sound & light alarm + safety edge + deep visual obstacle + emergency stop
	Dimensions (l*w*h)1,733*985*2,036mm		Runtime >8h		
	Touch screen 7"		Charge time 2h		
Performance	Rated payload 1,400 kg		Docking accuracy ±10mm/1°		No-load speed 1.5m/s
	Lift height 1,600mm		Max. Site area>100,000m²		Full load speed1.3m/s
	Load center 600mm		Max. drop of the passable gap: 10mm		Full load slope-climbing ability 3%
	Aisle width 2,120mm		Max. width of the passable gap: 30mm		No-load slope-climbing ability 5%

FOLA DN1416 Drawing





FOLA
BN2001



Laser+vision+inertia
Hybrid Navigation



2,000
Payload(kg)



±10mm/1°
Docking Accuracy



120
Lift Height(mm)



2,100
Aisle Width(mm)

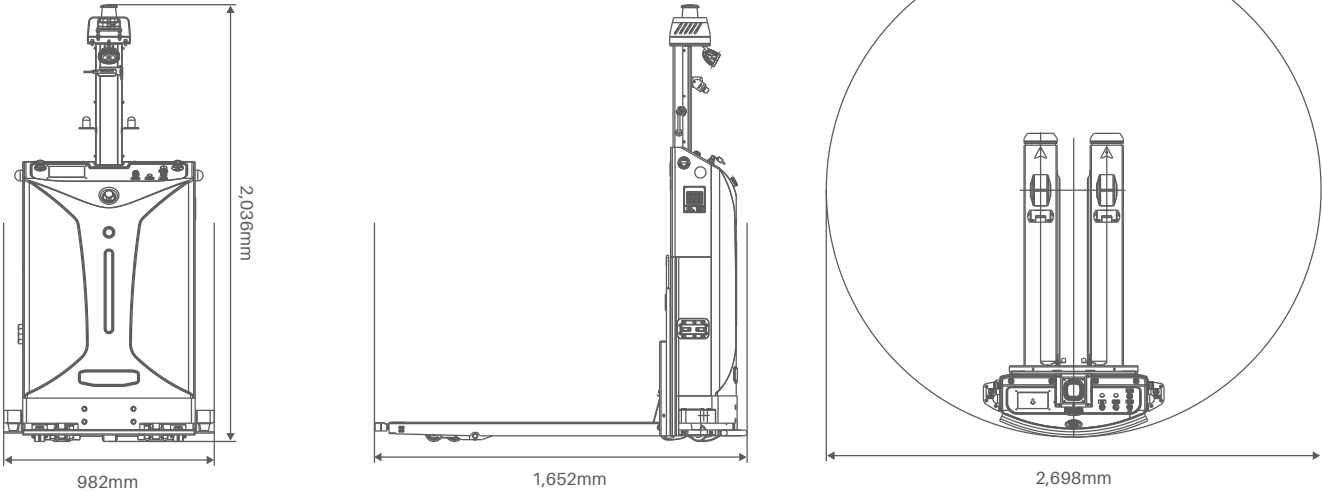


8
Runtime(H)

Basic Parameters	Weight 585kg	Battery	Lithium-ion 24v 180Ah Runtime>8h Charge time 2h	Safety System	Laser obstacle avoidance + sound & light alarm + safety edge + deep visual obstacle + emergency stop
	Dimensions (l*w*h)1,652*982*2,036mm				
	Touch screen 7"				

Performance	Rated payload 2,000 kg	Docking accuracy ±10mm/1° Max. Site area> 100,000m2 Max. drop of the passable gap: 10mm Max. width of the passable gap: 30mm	No-load speed 1.5m/s Full load speed 1.3m/s Full load max. Gradability3% No-load max. Gradability 5%
	Lift height 120mm		
	Load center 600mm		
	Aisle width 2,100mm		

FOLA BN2001 Drawing



FOLA
QN1416



Laser+vision+inertia
Hybrid Navigation



1,400
Payload(kg)



±10mm/±1°
Docking Accuracy



1,600
Lift Height(mm)



2,410
Aisle Width(mm)

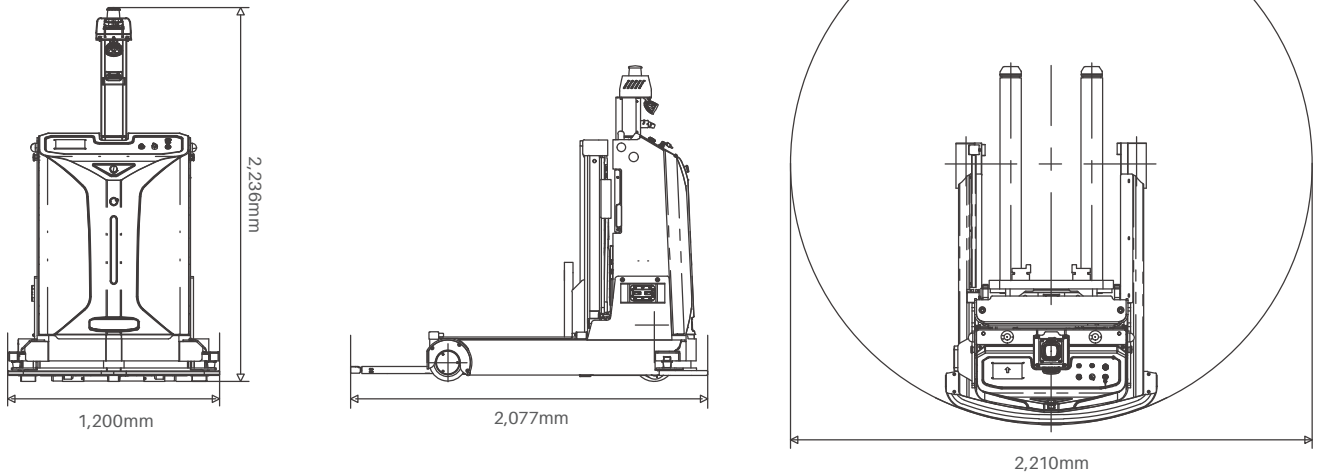


6
Runtime (H)







Basic Parameters	Weight 1,890kg	Battery	Lithium-ion 24v 180Ah Runtime >6h Charge time 2h	Safety System	Laser obstacle avoidance + sound & light alarm + safety edge + deep visual obstacle + emergency stop
	Dimension (l*w*h) 2,077*1,200*2,236mm				
	Touch screen 7"				

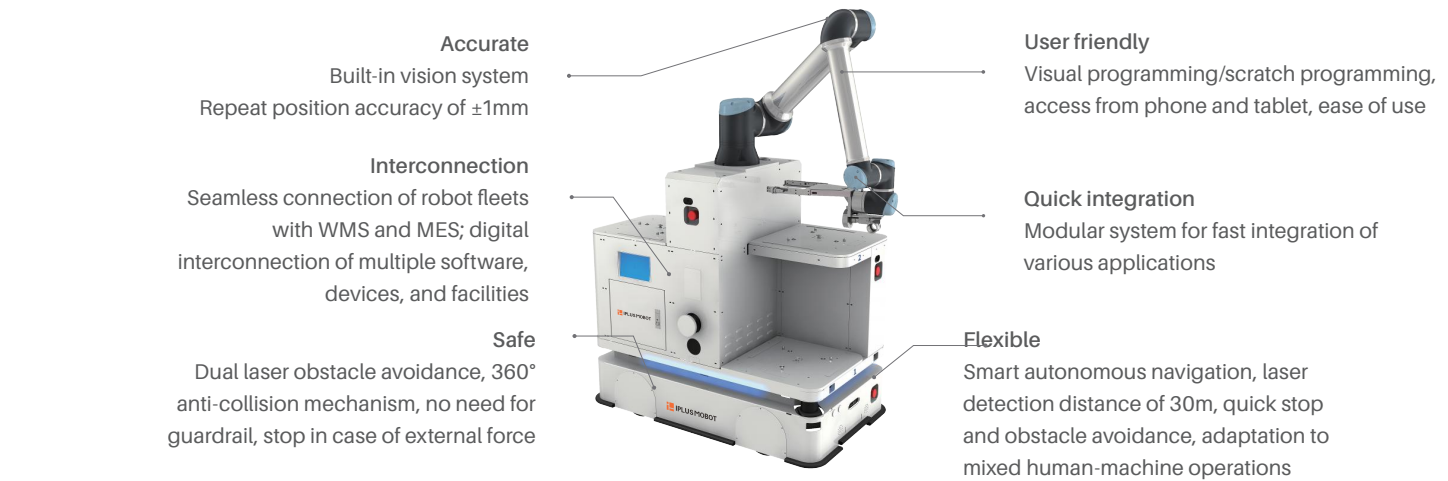
Performance	Rated payload 1,400 kg	Docking accuracy ±10mm/±1° Max. Site area> 100,000m² Max. drop of the passable gap: 10mm Max. width of the passable gap: 30mm	No-load speed 1.5m/s Full load speed 1.35m/s Full load max. Gradability 3% No-load max. Gradability 5%
	Lift height 1,600mm		
	Load center 500mm		
	Aisle width 2,410mm		

FOLA QN1416 Drawing





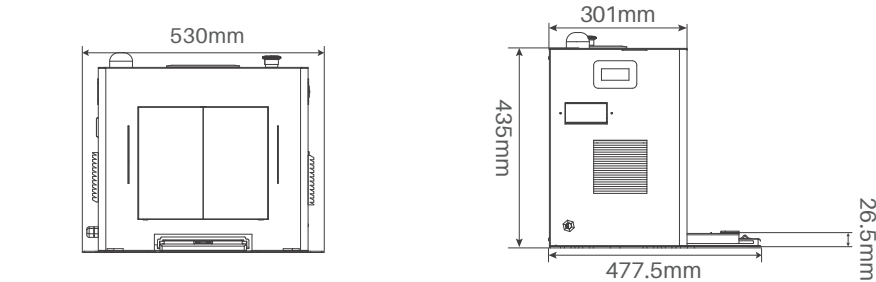
					
Laser+QR code +Reflector Hybrid Navigation	12kg Collaborative Robots Payload(kg) (Customized)	≤0.5 Machine Vibration(g)	≤1340mm Rotation Radius	±1mm Position Accuracy	≥8 Runtime (H)
Basic Parameters	Dimension (l*w*h) 1200×692×1130mm Bidirectional weight 260kg	Battery Lithium-ion 48v 70Ah Charge time 2h Runtime ≥8h	Safety System	Standard dual lasers; front/rear 3D cameras; bumper; lasers for vertical protection; single-point laser (optional); hole detection; sound and light alarm.	
Performance	Manipulator rated load 12kg (Customized) Machine vibration ≤0.5g Repeat position accuracy ±1mm	Noise ≤75db Ground flatness 10mm/m ²		Max. slope 5% Max. width of the passable gap: 35mm Max. drop of the passable gap: 10mm	
Communication	IEEE 802.11 a/g/b/n/ac/ax 2.4/5GHz,5G optional				



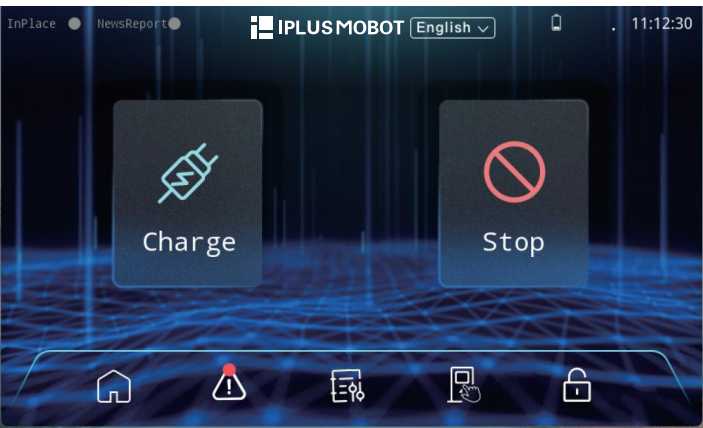
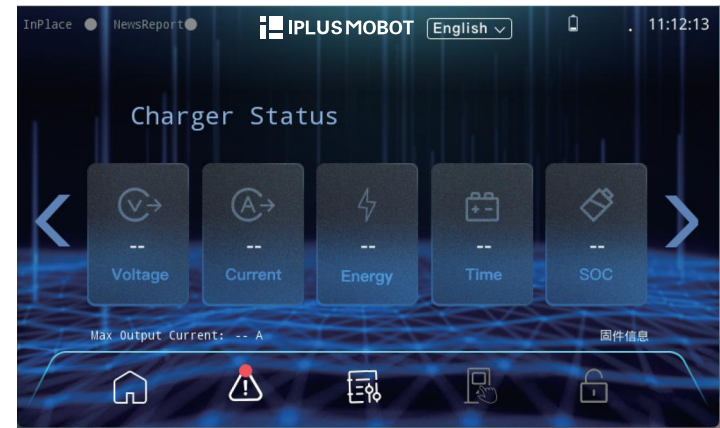
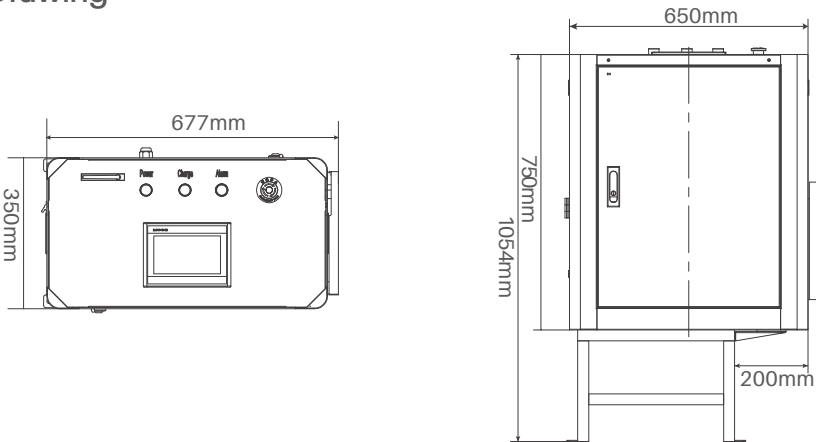
		
2D Laser+vision+inertia Hybrid Navigation	±5mm/1° Repeatability	3/≥6 Charge/Runtime(H)
		
1,000 Payload(kg)	500-2,020 Optional Lift(mm)	Omni directional Bottom
		
Laser+vision+inertia Hybrid Navigation	±2mm/0.2° Loading and unloading Repeatability	2.5/8 Charge/Runtime(H)
		
≥20,000 100 sets fleet daily task cycles	Class 5 Dust free	1.5m/s Max speed
		
2D Laser+vision+inertia Hybrid Navigation	±2mm/0.5° Docking accuracy	≤3/≥10 Charge/Runtime(H)
		
100 Payload(kg)	200-1,100 Optional Lift(mm)	M-XL Rack/trolley size
		
3D Laser+GNSS+vision+inertia Hybrid Navigation	1.5cm horizontally 1.5cm vertically Dedicated docking accuracy	2.5cm horizontally 2.5cm vertically Parking accuracy
		
1,000,000m ² Max. Site area	10km/h speed	100 Payload(T)



EMMA Charge Station Drawing

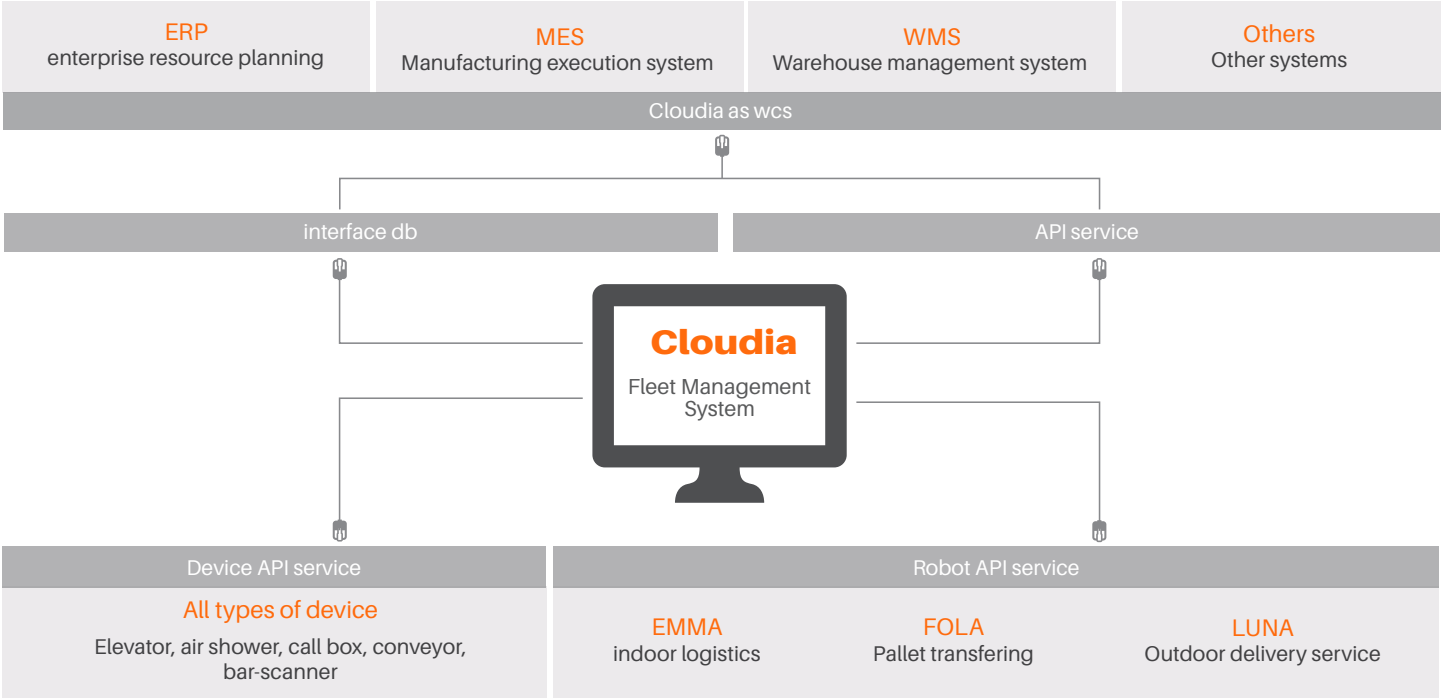


FOLA Charge Station Drawing



The powerful and elegant fleet control software Cloudia will help multiple robots work in a more efficient and collaborative way. With the advanced scheduling and planning algorithms, the system will assign different tasks to the right destination at the right time, minimize the idle time for each equipment of the warehouse/factory and save the overall logistics cost. Cloudia can also easily integrate with an existing Warehouse Management System(WMS), Manufacturing Execution System (MES) or Enterprise Resource Planning (ERP) for further automation so that all the tasks and movements can be organized as a whole to gain further efficiencies.

Cloudia



Main Functions

Real-time status visualization

Multiple-AMR transportation tracking and real-time status display, real-time task status display,real-time display of external devices, real-time display of system status and statistical reports

Smart management of operation and maintenance

Convenient multiple maps management, smart and reliable traffic control, efficient material delivery, remote anomaly alert, software permission management

Logistics management digitization

Whole-logistics-process digitization, high transportation efficiency, efficient material delivery, remote anomaly alert, software permission management

Product Advantages

High-performance

The algorithm of task scheduling and traffic control is powerful, and the dispatch task of large-scale fleet of thousands of units can be easily accomplished.

Real-time

Real-time display of task status and real-time summary of data

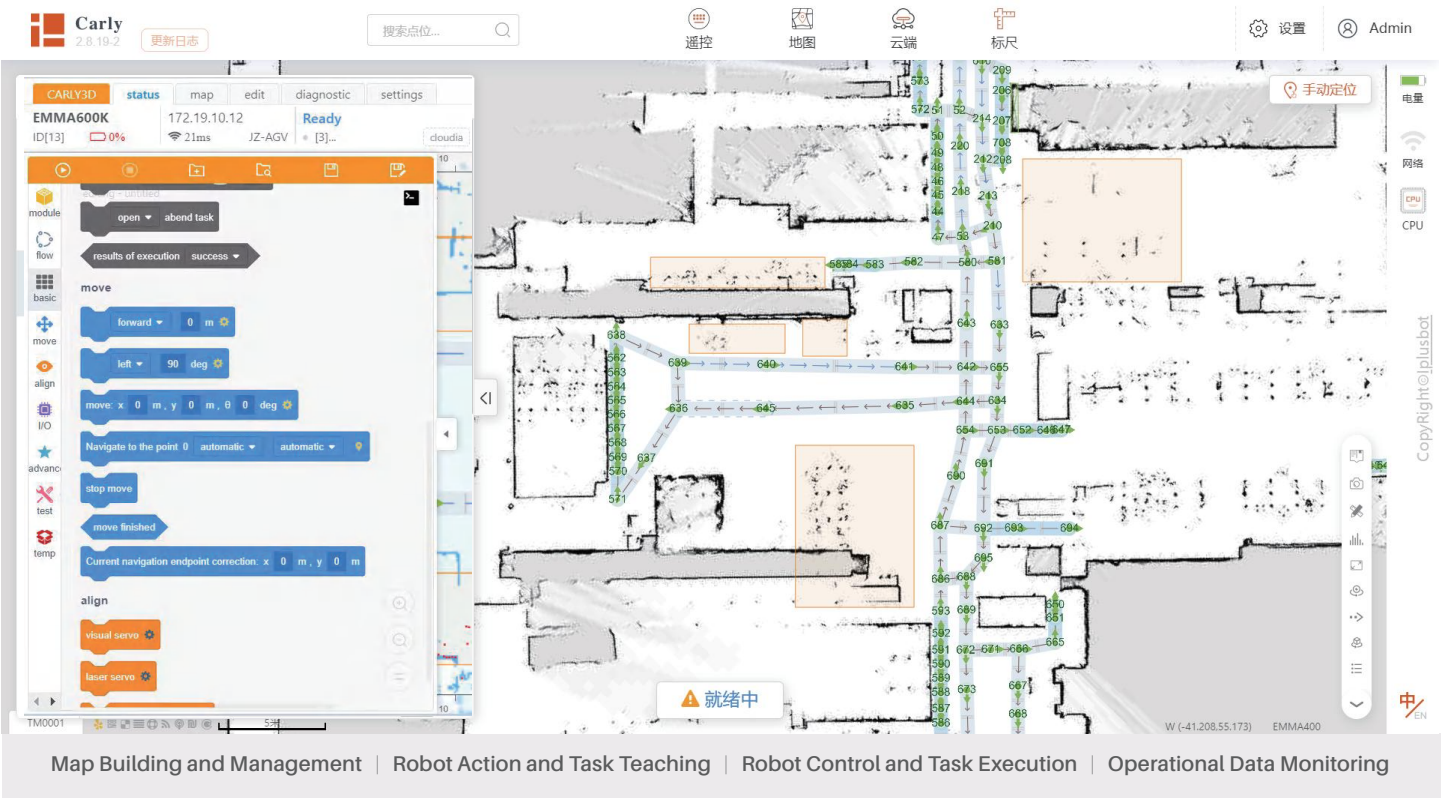
Closed loop

Seamless integration with WMS/MES/ERP system

CARLY

CARLY (Customizable Action and Robot business Logic for deployment) is a robot control and operation teaching software launched by IPLUSMOBOT. Users can enter the robot IP in the browser to access directly and check the current status of the specified robot in real time. CARLY supports various integrated stand-alone operations such as instant control, map building management, line editing, action programming and debugging, history replay, and encyclopedia teaching. In addition to the operating interface, carly also includes a sophisticated backend system to ensure the robot runs intelligently and securely at all times.

Main Functions



Product Features

Intelligent Algorithm

Built-in state-of-the-art laser SLAM + vision + IMU fusion positioning algorithm

Stable and safe

Adopt automatic plus manual multiple security strategy. Conform to CE certification standards and perfectly adapt to human-robot collaboration scenarios.

Easy to use

100% graphical interface operation, intuitive and easy to use, with modular programming to teach the robot

Operation data visualization

Real-time visualization of robot operation data. Support historical data visual review.