



● Quicktron Intelligent Robot Warehouse overseas



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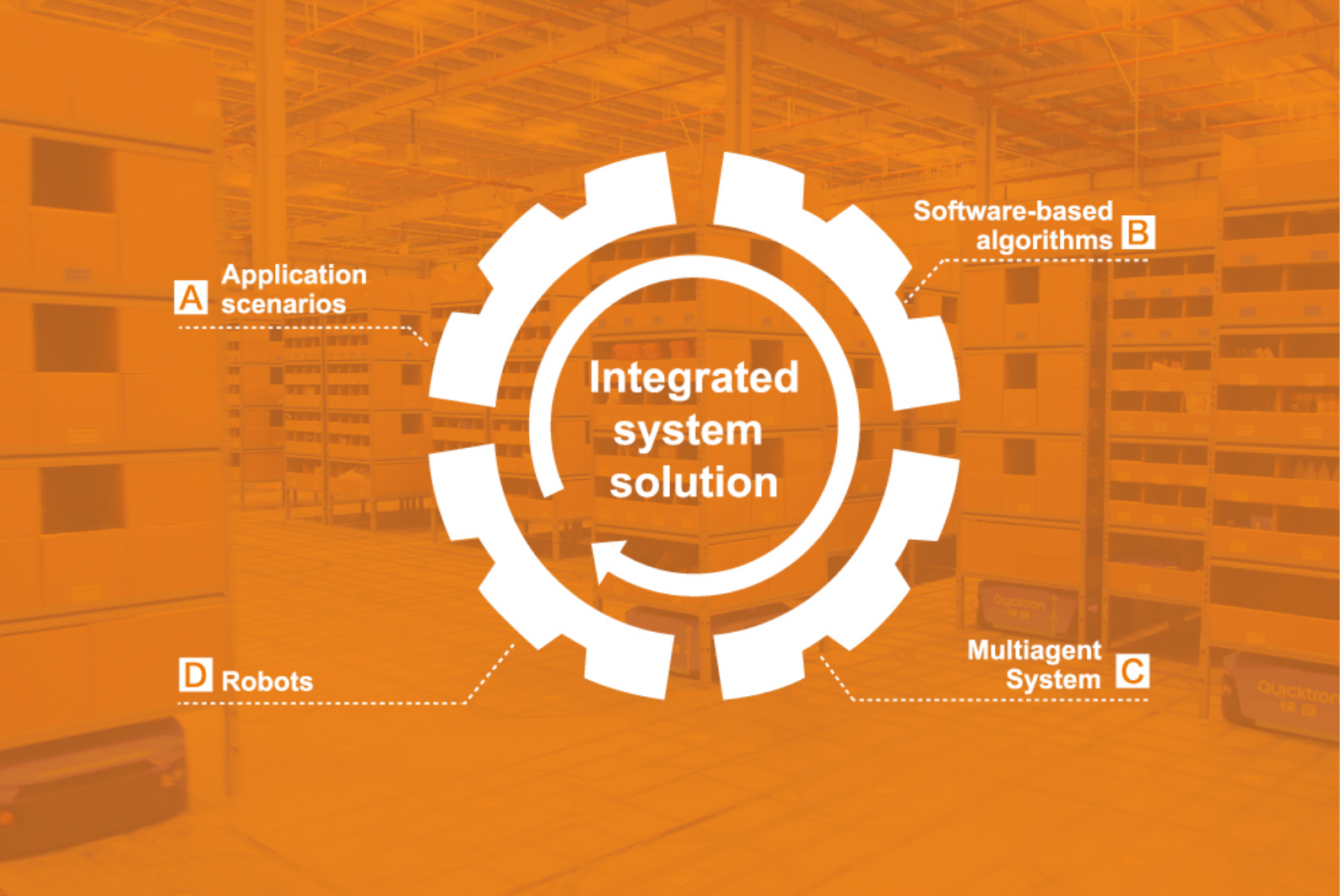
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Intelligent Warehousing Leader

With AI-driven trump , your warehousing will be faster and more efficient

Quicktron



A Application scenarios

QuickTron abstracts the common features of customers from complex scenarios in perspectives of industrial properties, operational procedures, commodity types, operational modes, warehouse area and system docking. Thanks to the rich experience and professional planning capacity, it offers customized comprehensive system robot solutions with greater flexibility and efficiency.



Commodity Types

Shoes, clothes, chemicals for daily use, makeup, supermarkets, outlets, fashion department store, medicine, 3C products



Industrial feature

E-commerce platforms, new retail, 3rd Party Logistics (3PL), update of traditional industries, intelligent manufacturing



Operational modes

Daily operation, promotion, JIT



Operation procedures

Massive SKU management, supporting multiple order structures



Warehouse area

1000 – 5000*20



System integration

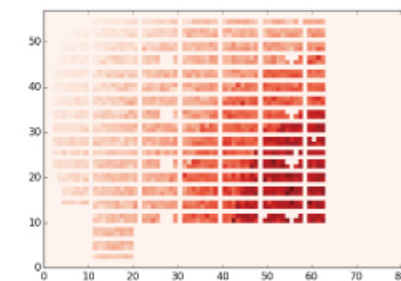
ERP, WMS, WCS, conveying line, Mechanical arm, stacker

B Software-based algorithms



Scheduling algorithms

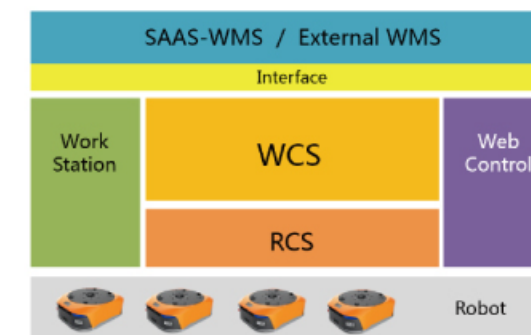
- Intelligent scheduling + dynamic optimization;
- Conceptual analysis + correlation mining;
- Data mining + machine learning;
- Distributed clustering + task balancing



RCS

- Intelligent simulation + path planning;
- Smooth action + improved efficiency;
- Independent obstacle avoidance + automatic recovery;
- Accurate tasking + efficient implementation

C Multiagent System



Hardware-based algorithms

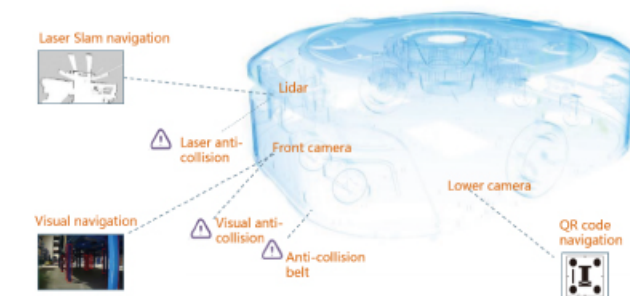
- Sensitive perception to environment
- Machine vision
- Auto drive

Motion control

- Motion control algorithm
- Multi-sensor fusion algorithm
- Remote real-time control

D Robots

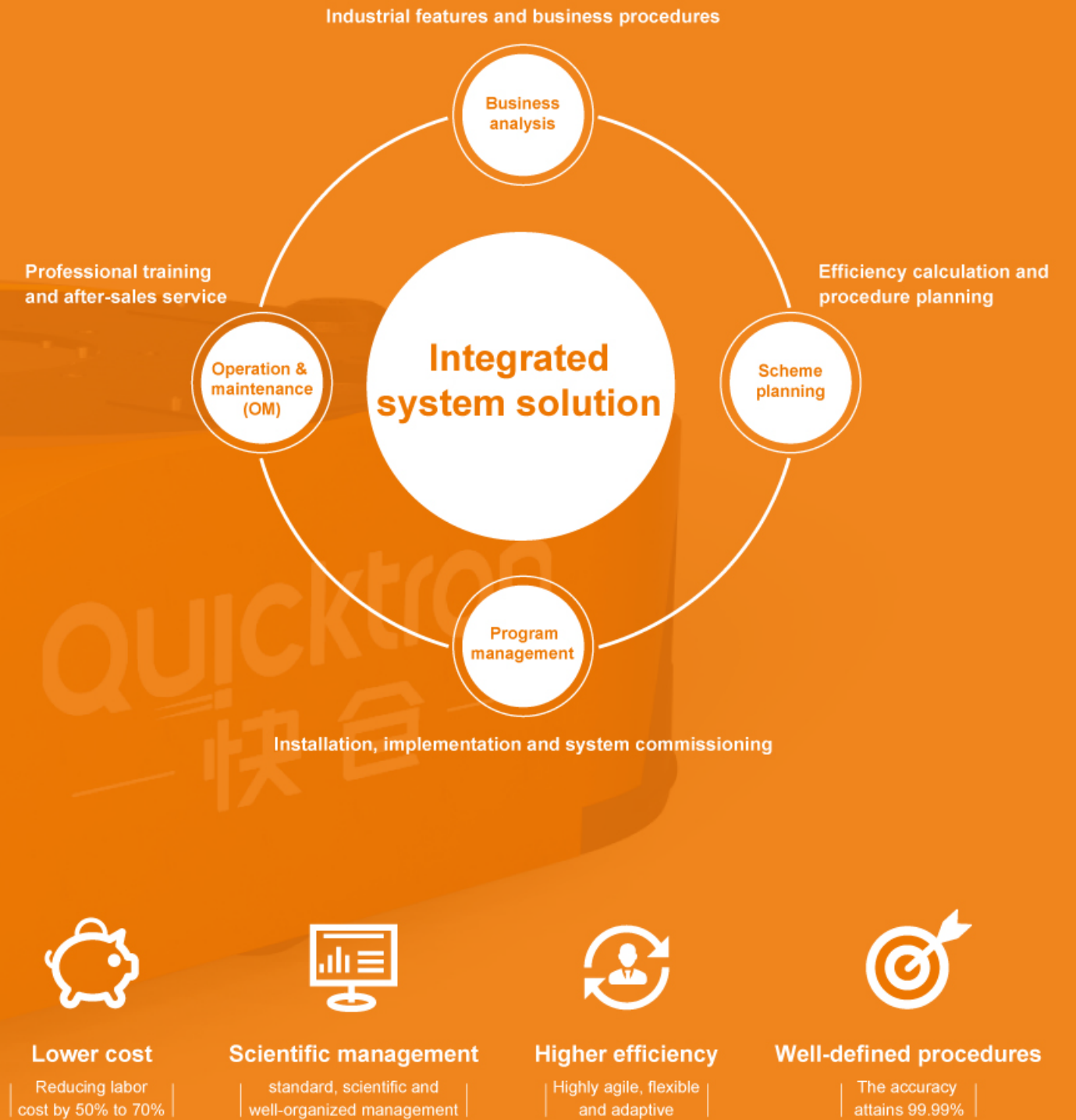
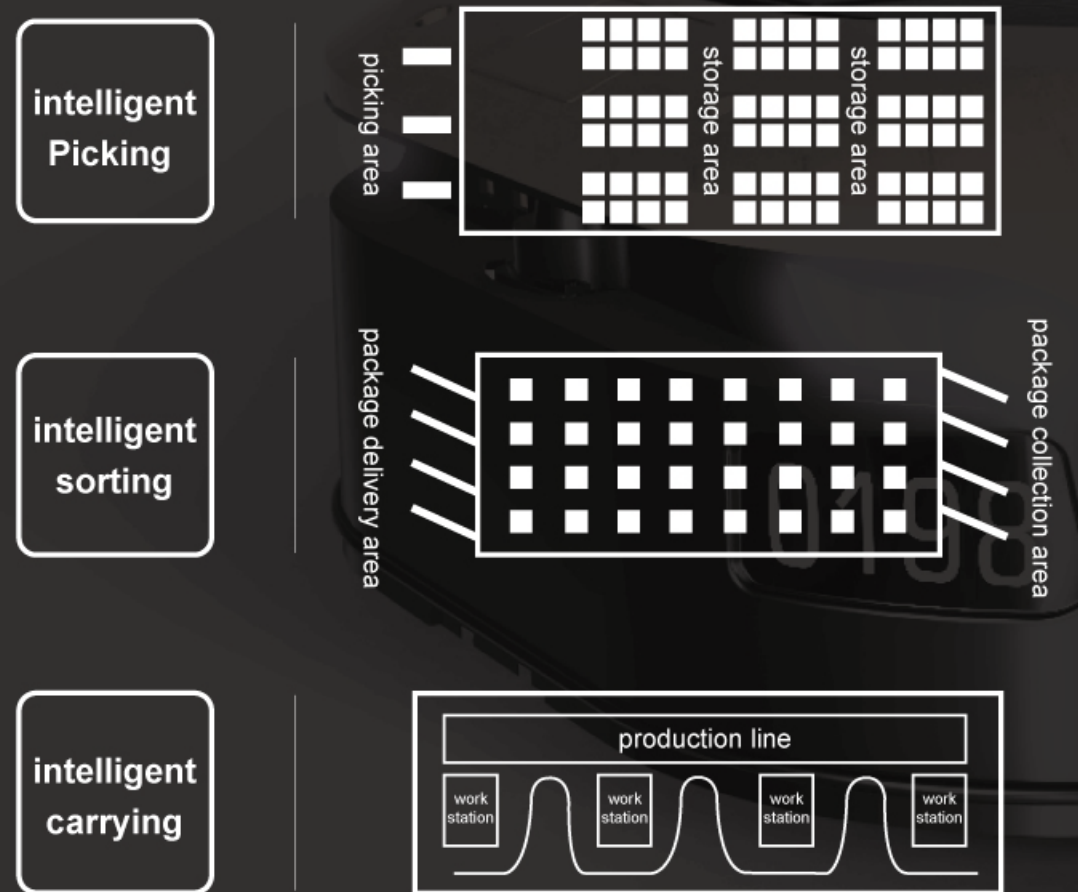
- Stable performance
- Multi-agent collaboration
- 7 x 24 availability
- Multiple-obstacle avoidance
- Completely independent R&D



QuickTron

Intelligent Warehouse Robot Leader

QuickTron is committed to indoor intelligent driving and freeing human beings from handling . Based on the users' business scenario, an efficient and flexible“intelligent robots system solution - intelligent picking, intelligent sorting and intelligent carrying” is provided for customers through disruptive industrial ideas and highly integrated software and hardware, to realize fully automatic operation in the field of logistics and warehouse.



Intelligent Picking System Solution

ZHUQUE M60 / XUANWU M100



Quicktron

Intelligent Picking System Solution

Based on various hardware and software systems, the QuickTron Intelligent Picking System Solution consists of mobile robots, mobile racks, replenishment and picking stations, Warehouse Management System (WMS) and Robots Control System (RCS). Centering on AI-algorithm-based software system, the solution is well qualified for all warehouse operations, including racking, goods sorting, replenishment, returning, inventory counting and etc.

Rack capable being moved to any designated operator

During all operational procedures involving the sorting area (including racking, replenishment, sorting, inventory counting and returning), it is unnecessary for any staff to access the sorting area. It will suffice for them to wait in the work station and the system will designate an AGV robot to move the required rack to the work station. Once the staff have completed its operation under system guidance, the rack will be moved back to the sorting area.

More application scenarios

E-commerce medicine, new retail, 3PL, costume, manufacturing industry



Labor cut
down by 60%



Scientific
management



Accuracy rate
99.9%



Flexibility



ZHUQUE M60

size(L*W*H)(mm)	915*715*300(mm)
dead-weight	180kg
rated load capacity	600kg
size of rack(L*W*H)(mm)	900*900(mm)
communication mode	WIFI / IEEE802.1b/g
max running speed	1.5 m/s
stop accuracy	≤ 5mm
navigation	visual 2D code+inertial+slam
obstacle avoidance	LIDAR+Anticollision bar
battery capacity	26Ah
battery life	8h (fully loaded)
charge time	≤ 1.5h (after totally discharged)

XUANWU M100

size(L*W*H)(mm)	1110*810*300(mm)
dead-weight	260kg
rated load capacity	1000kg
size of rack(L*W*H)(mm)	1200*1200/1100(mm)
communication mode	WIFI / IEEE802.1b/g
max running speed	1.2 m/s
stop accuracy	≤ 5mm
navigation	visual 2D code+inertial+slam
obstacle avoidance	LIDAR+Anticollision bar
battery capacity	40Ah
battery life	8h (fully loaded)
charge time	≤ 1.5h (after totally discharged)

Intelligent Sorting System Solution

ZHUQUE QS40 / QS10



Intelligent Sorting System Solution

With the fast development of e-commerce, customers impose increasingly higher requirement of timeliness on package sorting. QuickTron independently developed QS40 and QS10 smart sorting robots which can visually identify the information on package labels. The robots can figure optimized paths for themselves before unloading any package at the right discharge port. Its sorting speed and accuracy witness significant improvement when compared to manual practice.



- Maximum speed – 2.5m/s;
- Up to 40kg package can be sorted and delivered;
- Two packages can be sorted and delivered at the same time;
- Intelligent power management enables 8-hour service without discontinuity;
- The intelligent sorting mode of “delivery over motion” supports enhanced efficiency.

More application scenarios

Package sorting in logistics industry and express industry;
Manufacturing industry – Material movement;

ZHUQUE QS40

size (L*W*H)(mm)	970*800*830(mm)
dead-weight	210kg
rated load capacity	40kg
size of parcel	800*700*150
max running speed	1.5m/s
parcel amounts	up to 2
navigation	visual 2D code+inertial
obstacle avoidance	LIDAR+Anticollision bar

ZHUQUE QS10

size (L*W*H)(mm)	600*540*1390(mm)
dead-weight	60kg
rated load capacity	10kg
size of parcel	400*400*150
max running speed	2.5m/s
parcel amounts	up to 1
navigation	visual 2D code+inertial
obstacle avoidance	LIDAR

Intelligent Carrying System Solution

ZHUQUE Slam Intelligent Robot



Intelligent Carrying System Solution

QuickTron natural navigation AGV is supported by industrial-level high-precision laser positioning technology and autonomous planning capacity. It can operate soundly without magnetic stripe or beacon, and adapt itself to its surroundings by fast learning. The robot can complete predetermined transportation efficiently in a scenario with the presence of people and machine operation.



- It can be widely used in all article transportation industries;
- It can offer cutting-edge solution in the manufacturing industry;
- avoid obstacle smartly with human and machines on the site;
- Autonomous and highly efficient through collaboration of multiple robots

More application scenarios

Manufacturing industry Minor “3C” Medicine Automobile E-commerce

ZHUQUE Slam Intelligent Robot

size (L*W*H)(mm)	906*710*300(mm)
dead-weight	180kg
rated load capacity	600kg
max running speed	1.2m/s
laser sensor	10m
end positioning accuracy	+/-1cm
scanning range	270°
emergency stop	2
battery capacity	28Ah
battery life	8h(fully loaded)

E-merchant Platform



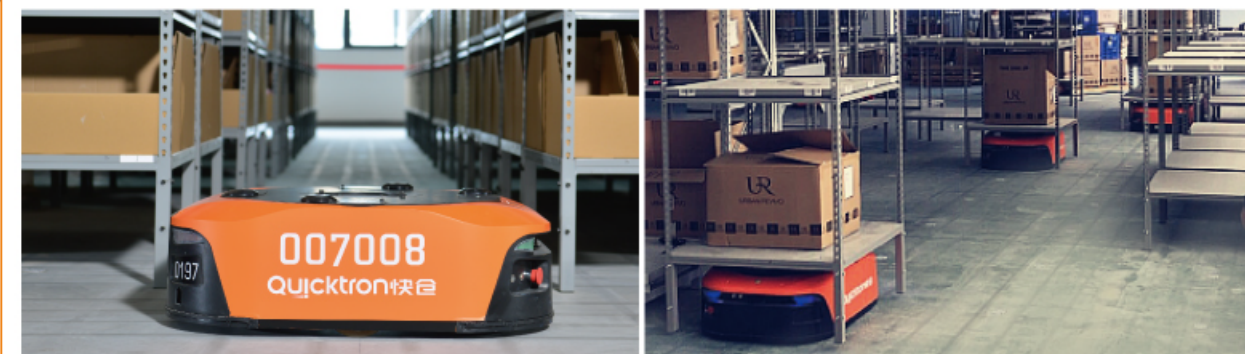
Manufacturing industry



3PL



Costume



Medicine



New retail

