



TRANSFORMING INDUSTRIES WITH
ROBOTICS

- SARVA

PRODUCT CATALOG



SARVA ROBOTICS

www.sarvarobotics.in

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About SARVA.

Transforming Industries with Robots



SARVA was founded in 2022 and has already had a significant impact on society around the world. Sarva works with other companies that specialise in robot integration, industrial robots, humanoid robots, and automation robots. Regardless, we collaborate with hardware and software vendors. Sarva is developing heavy industry solutions for businesses that use heavy machinery and robots. Sarva also, on the other hand, focuses on a variety of creative sectors, including education & training for recruitment, transportation, media, defence industries, public robots, and medical sectors

Our Customers



FOXCONN

ASUS

SAMSUNG



Haier

oppo

Celestica™

FLEXTRONICS X

JABIL



PCI

SONY

TOTO®
Perfection by Design

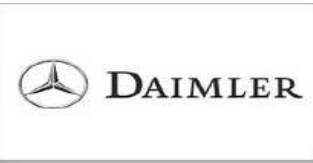


WIK

muRata

WD Western Digital®

YAMAHA



PEPPERL+FUCHS

Minebea
Passion to Exceed Precision

EMERSON

THALES

UTC Aerospace Systems

Carsem

ROHM
SEMICONDUCTOR

NXP

ST
life.augmented

siltronic
perfect silicon solutions

ESQUEL GROUP

Continental



JIA HSIIN

NANYANG
TECHNOLOGICAL
UNIVERSITY

SCH
SINCE 1982

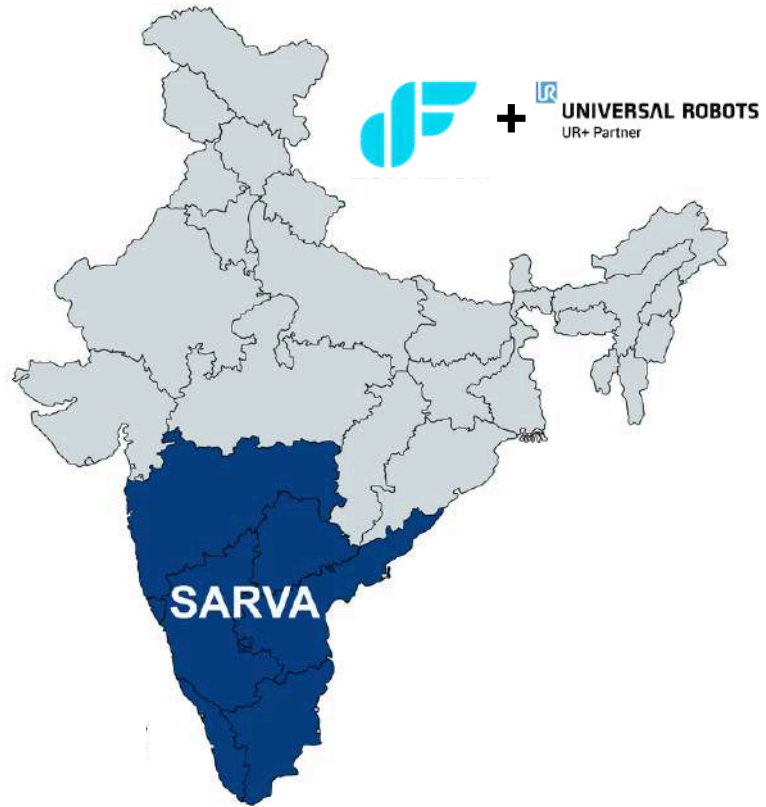
SAP
Vietnam Co., Ltd

GLS

PERODUA

ASM

OUR TERRITORY



Our APPROACH.



We Collect

Complete transparency between inputs and outputs from hundreds of different machines and data sources



We Study

We will send a team out to your factory to collect information about your setup and machines.



We Analyse

By using the platform to understand the root causes of your quality and downtime issues.



We Deliver

Easily share customs, queries, and insights with your team. And understand the impact of Change.

PRODUCTS

Product View.



ZALPHA ARV



ZETHA



ZAMMA



ZALPHA



TITAN
@Sarva



SARVA



FLEET

Product View.



SMALL ROBOT



HANDLING



WELDING



COBOTS



SCARA

Product View.



PLC



HMI



SERVO DRIVE



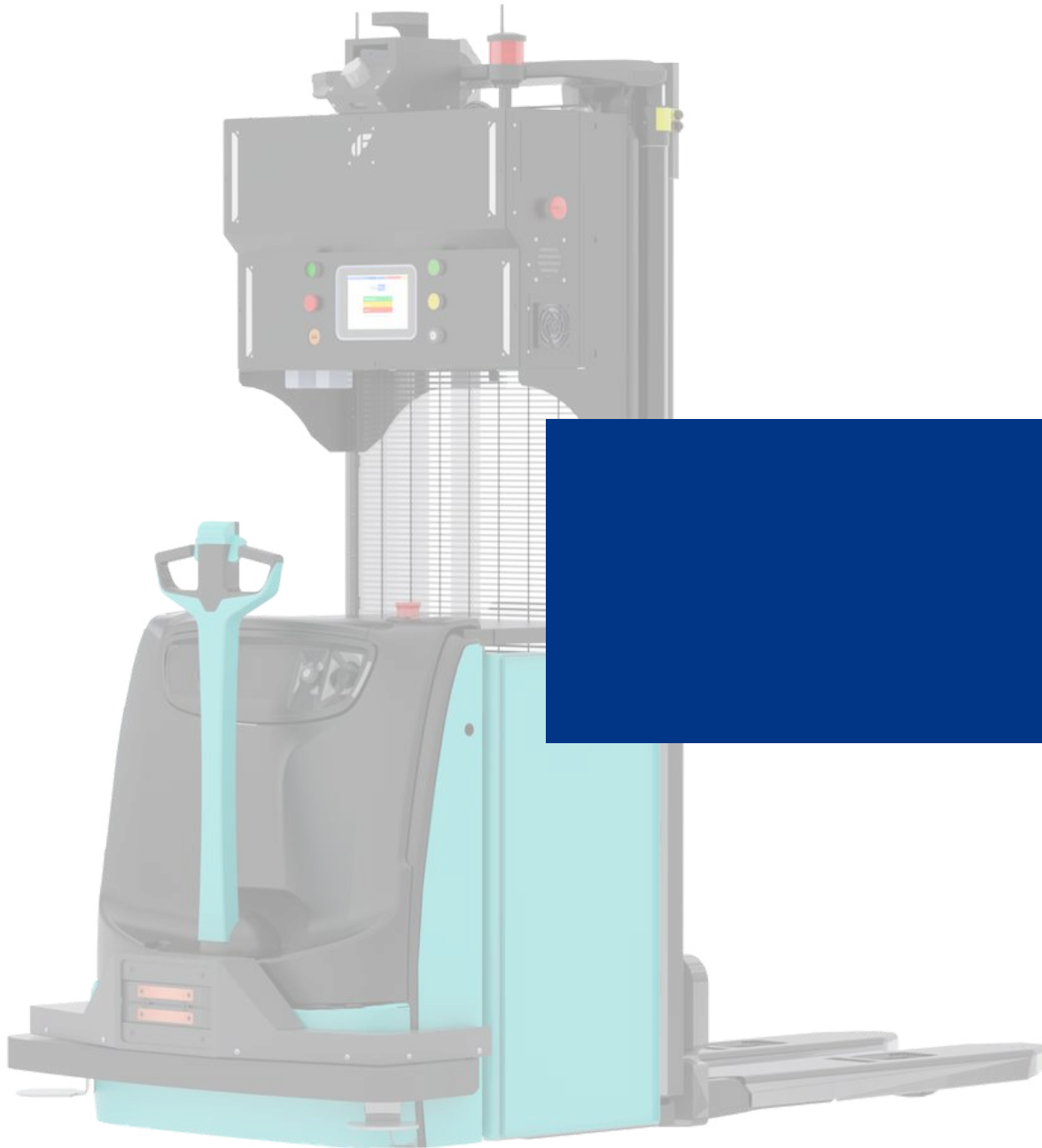
V-BOX



INVERTOR



MODELS



ZAMMA

SL-TS-L16



SL-TS-L20







SL-TS-C12



The Zamma Series AMR is our material handling intralogistics warehouse Autonomous Mobile Robot, a solution for businesses looking to improve their operations with pallet handling using advanced automation.







1.6 STACKER
TONNE AMR
ZAMMA-S-TS-C12

-  Lift up to 1.6 Tonne
-  Lifting height reaching 3.2 m
-  Support minimum aisle width of 3.0 m
-  Support open pallet type







2.0 STACKER
TONNE AMR
ZAMMA-S-TS-C20

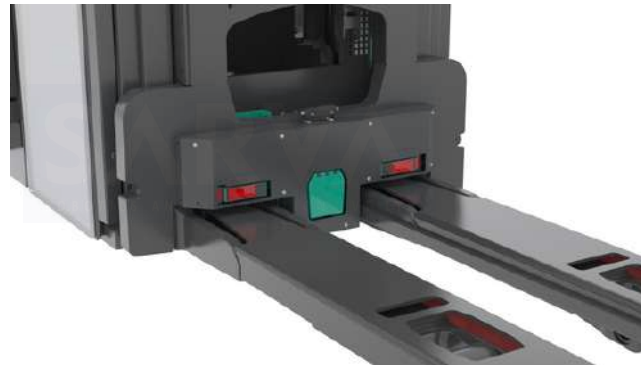
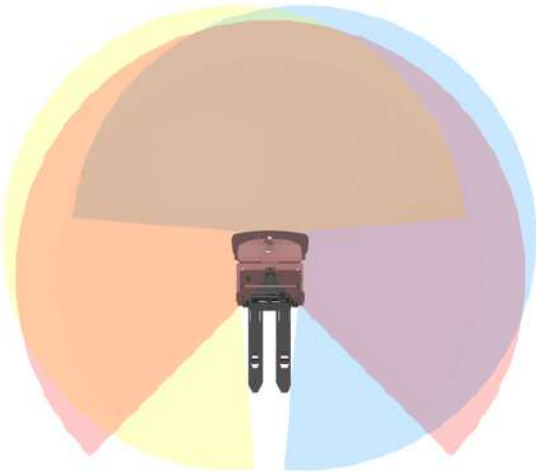
-  Lift up to 2.0 Tonne
-  Lifting height reaching 3.5 m
-  Support minimum aisle width of 3.0 m
-  Support open pallet type



1.2 COUNTERBALANCED
TONNE STACKER AMR
ZAMMA-S-TS-C12

-  Lift up to 1.2 Tonne
-  Lifting height reaching 3.5 m
-  Support minimum aisle width of 4.0 m
-  Support both open and close pallet type

ZAMMA



	ZAMMA-S-TS-L16	ZAMMA-S-TS-L20	ZAMMA-S-TS-C20
AMR Dimension	Length : 1950 mm Width : 800 mm Height : 1915 mm <small>(Lowered & not including P&F)</small>	Length : 2068 mm Width : 810 mm Height : 1915 mm <small>(Lowered & not including P&F)</small>	Length : 2080 mm Width : 1000 mm Height : 1515 mm <small>(Lowered & not including P&F)</small>
Lifting Height	3200 mm	3500 mm	3500 mm
Fork Spread	(560 - 680) mm	(560 - 680) mm	(255 - 926)
Payload	1600 kg	2000 kg	mm 1200 kg
Aisle Width	3000 mm	3000 mm	4000 mm
Maximum Gradeability	With Load : 10 % Without Load : 24 %	With Load : 8 % Without Load : 24 %	With Load : 8 % Without Load : 24 %
Battery	Li-ION Battery, 24 V, 208 AH	Li-ION Battery, 24 V, 208 AH	Li-ION Battery, 24 V, 345 AH
Fork Carriage Length	1500 mm		
Navigation System	Laser-based Natural Feature Navigation <small>(with Marker for precision)</small>		
Navigation Direction	Forward, Reverse, Left, Right		
Maximum Speed <small>(without load)</small>	1.6 ms- 1 (6 kmh- 1)		
Stopping Accuracy	Laser Sensor : ± 50 mm, ±2° <small>(Natural Feature)</small> Marker : ± 10 mm, ±2°		
Running Time	5 h		
Charging	< 2 h Manual Charge : Through cable Auto Charge : Dock charging through charging station		
Safety	Emergency Switch (2 Unit) Safety Grade LiDAR (2 Unit) Obstacle Sensor (1 Unit)		
User Interface	7" Capacitive Touchscreen Physical Button		
WiFi Frequency	802.11 ac/a/b/g/n, 2.4GHz / 5GHz Dual-Band WiFi Open WPA & WPA2 Personal WPA & WPA2 Enterprise		
Operating System	Standalone (NavWiz) Fleet Management System (DFleet)		



ZALPHA ARV

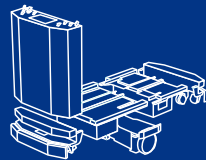
Zalpha-E-TB- 03-UR3/5/10



The Automated Robot Vehicle (ARV) is a fusion of Zalpha Trackless Autonomous Mobile Robots (AMRs) and the Universal Robots Collaborative Robot Arm, tailored for flexible operations like picking and inspections.



INTEGRATION OPTION

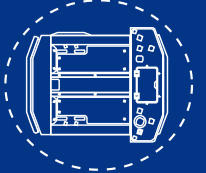


Modular and configurable

i4.0
Industry 4.0 enable



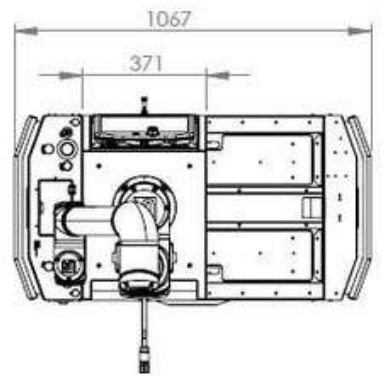
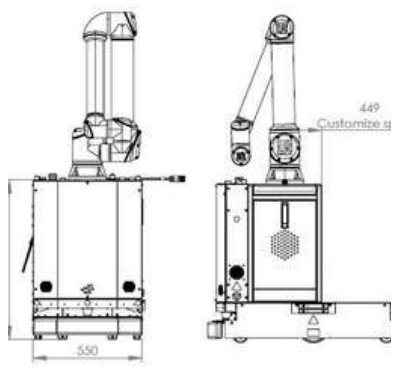

I/O
Integration Friendly



Robust Industrial Design

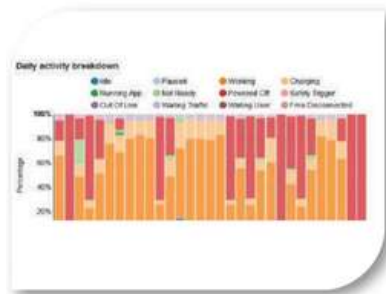
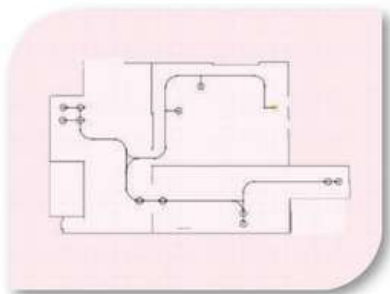


AMR BASE SIZE



ZALPHA ARV

@S@S@rva



SPECIFICATIONS

GENERAL

Product Model	ZALPHA-E-TB-PH-UR3/5/10
Navigation Method	Laser-based Natural Feature / Magnetic Strip Guidance
Load Dimension	L: 1360mm x W: 960mm

PAYLOAD

Direct Load	Up to 300kg
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PERFORMANCE

Running Time (100% to 10%)	10 hours
Maximum Speed	1 m/s (3.6km/h)
Maximum Gradeability	3% (1.72 degree)
Stopping Accuracy	Natural Feature: $\pm 50\text{mm} \pm 2^\circ$ / Marker: $\pm 10\text{mm} \pm 1^\circ$
Drive Method & Travelling Direction	2 Wheel Differential Drive / Forward, Reverse, $90^\circ/180^\circ$ Turn
Traversable Gap & Step	5mm, 5mm

POWER AND SYSTEM

Battery Type	LiFePo4 Battery, 130Ah
Charging Method & Charging Time	Automatic & Manual Charging / 2 hours
WiFi Frequency	802.11 ac/a/b/g/n, 2.4GHz / 5GHz Dual-Band WiFi
Operating System	Standalone (NavWiz), Fleet Management System (DFleet)

FEATURE AND INTERFACE

Safety Indicators	Color LED Lighting, Music Playback & Alarm
Safety Features	5m Adjustable Range Laser Sensor, 2X Bumper Switch, 1x Emergency Switch, 1X External Safety Input / Output,
User Interface	7 Inch Capacitive Touchscreen / Physical Button
Integration Interface	[Port] General USB port x1, LAN Port x1 / [API] REST, Modbus, Webhooks



TITAN

TITAN-S-TS-15



our Titan AMR with its high payload capabilities and advances navigation and safety technology will help to streamline your operations, boosting productivity, and saving valuable resources. Customize the AMR by equipping Titan AMR with pallet lifting module to cater for your unique facility specifications and business needs.



i4.0
Industry 4.0 enable

1.5 tonne payload

Robust Industrial Design

High Safety rated

4.3o
Gradeability

Maximum speed 2m/s (7.2km/h)

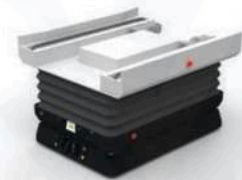
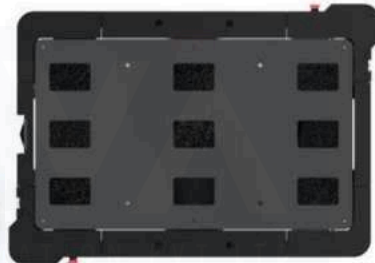
AMR BASE SIZE

H: 330mm



W: 960mm

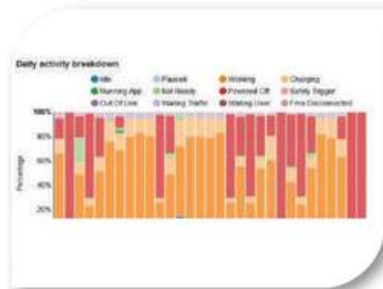
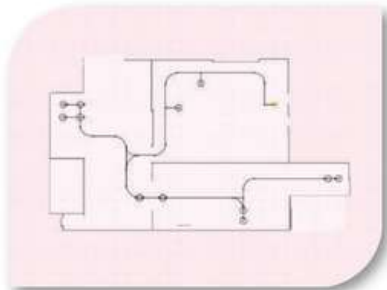
L: 1360mm



TITAN

SPECIFICATIONS

@Sarva



GENERAL

Product Model

TITAN - S - TS - 15

Navigation Method

Laser-based Natural Feature (with Marker / Magnetic Strip Guidance)

Load Dimension

L: 1360mm x W: 960mm

PAYLOAD

Direct Load

Up to 1.5 tonne / 1500kg

PERFORMANCE

Running Time (100% to 10%)

12 hours

Maximum Speed

1 m/s (3.6km/h) with load / 2 m/s (7.2km/h) without load

Maximum Gradeability

7.5% (4.3o)

Stopping Accuracy

Natural Feature: + 100mm + 2o / Marker: + 50mm + 1o

Drive Method & Travelling Direction

2 Wheel Differential Drive / Forward, Reverse, 90o /180o Turn

Transversible Gap & Step

90mm, 15mm

POWER AND SYSTEM

Battery Type

LiFePo4 Battery, 48V, 64Ah

Charging Method & Charging Time

Automatic & Manual Charging / 3 hours

WiFi Frequency

802.11 ac/a/b/g/n, 2.4GHz / 5GHz Dual-Band WiFi

Operating System

Standalone (NavWiz), Fleet Management System (DFleet)

FEATURE AND INTERFACE

Safety

Color LED Lighting, Music Playback & Alarm

Indicators

2x Emergency Switch, 2x Front 3D Camera, 2x Safety Grade Laser Scanner,

Safety Features

1x External Safety Input/Output, Motion Safety

User Interface

5 inch Capacitive Touchscreen, Physical Button

Integration Interface

[Port] General USB port x1, LAN Port x1 / [API] REST, Modbus, Webhookst

*Specifications may vary and are subject to revisions

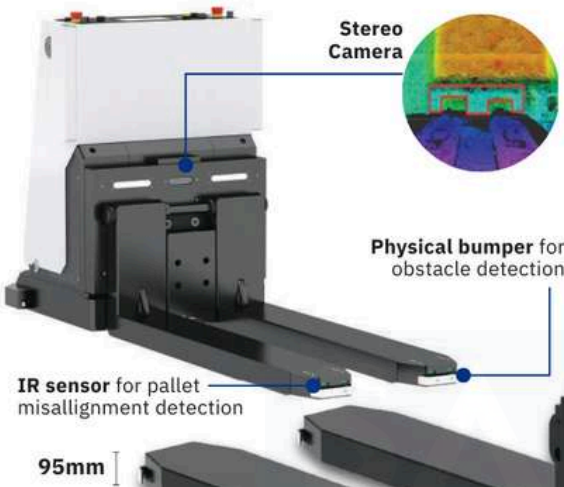


ZETHA



Zetha series is an AMR based pallet handling series that is designed for on-floor loading. This system is conceptualized, developed and manufactured in response to the general needs of material handling industries around the world.

SMART PALLET DETECTION



Adjustable Height
Max: 2162mm
Min: 2012mm

AMR BASE SIZE



SIL2
Safety
Integrated
Level
SIL2 LIDAR

i4.0
Industry 4.0 enable

I/O
Integration Friendly

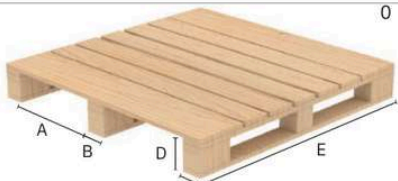
Robust Industrial
Design

AUTOMATIC CHARGING

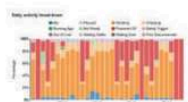
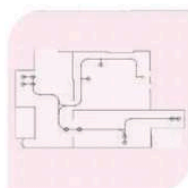


PALLET SIZE

DIMENSIONS	MIN (mm)	MAX (mm)
A	205	-
B	80	150
C	80	150
D	100	-
E	-	120
		0



SYSTEM SOFTWARES



SPECIFICATIONS

GENERAL

Product Model	ZETHA - S - TS - 10
Navigation Method	Laser-based Natural Feature (with
Fork Dimension	Marker) L: 1200mm x W: 197mm x H:
Lifting Height	95mm
	90mm

PAYLOAD

Direct Load	Up to 1 tonne / 1000kg
-------------	------------------------

PERFORMANCE

Running Time (100% to 10%)	12 hours
Maximum Speed	1 m/s (3.6km/h)
Maximum Gradeability	2% (1.15o)
Stopping Accuracy	Natural Feature: + 100mm + 2o / Marker: + 50mm + 1o
Drive Method & Travelling Direction	2 Wheel Di erential Drive / Forward, Reverse, 90o/180o
Minimum Width for Pivoting	turn 2655mm

POWER AND SYSTEM

Battery Type	LiFePo4 Battery, 25.6V, 130Ah
Charging Method & Charging Time	Automatic & Manual Charging / 3 hours
WiFi Frequency	802.11 ac/a/b/g/n, 2.4GHz / 5GHz Dual-Band WiFi
Operating System	Standalone (NavWiz), Fleet Management System (DFleet)

FEATURE AND INTERFACE

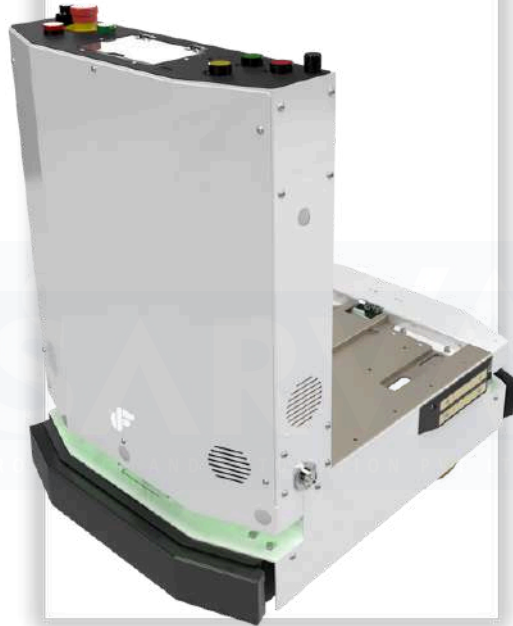
Safety	Color LED Lighting, Music Playback & Alarm
Indicators	2x Emergency Switch, 1x Front 3D Stereo Camera, 1x Safety Grade Laser
Safety Features	Scanner, 1x External Safety Input/Output, 1x LiDAR, 1x Front & Rear Bumper
User Interface	7 inch Capacitive Touchscreen, Physical Button
Integration Interface	[Port] General USB port x1, LAN Port x1 / [API] REST, Modbus, Webhooks

*Specifications may vary and are subject to revisions



ZALPHA

ZALPHA-S



ZALPHA-E

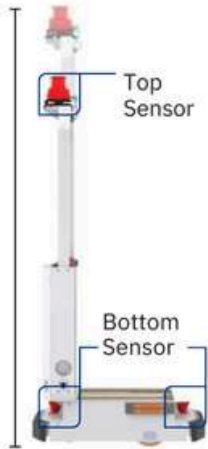


ZALPHA-L



Zalpha series modular design comes with 3 chassis options allowing flexibility in various industries application. The standard model AMR comes with a smaller footprint than the extended model AMR which allows more space on the AMR but both comes with a tall control panel. The lowbed model comes with similar footprint to the extended model .

ADJUSTABLE LiDAR



Adjustable Height
Max: 2000mm
Min: 1662mm



NAVIGATION OPTION



Magnetic Strip
Guidance Navigation



Laser Natural
Based Feature
Navigation



AMR BASE OPTION

STANDARD



EXTENDED



LOW BED



SPECIFICATIONS

GENERAL

Product Model	ZALPHA - [S] [E] [L] - [MG] [TS] [TB] - 03
Navigation Method	[MG]: Magnetic Strip Guidance / [TS]: Laser-based Natural Feature (with pole) [TB]: Laser-based Natural Feature (without pole)

PAYLOAD

Direct Load	Up to 300kg
-------------	-------------

PERFORMANCE

Running Time (100% to 10%)	12 hours
Maximum Speed	1 m/s (3.6km/h)
Maximum Gradeability	3% (1.72o)
Stopping Accuracy	[MG]: $\pm 10\text{mm} \pm 2\sigma$ / [TS]: Natural Feature: $\pm 100\text{mm} \pm 2$, Marker: $\pm 50\text{mm} \pm 1\sigma$
Drive Method & Travelling Direction	2 Wheel Differential Drive / Forward, Reverse, 90o/180o
Transversible Gap & Step	turn 30mm, 3.2mm

POWER AND SYSTEM

Battery Type	LiFePo4 Battery, 25.6V, 65Ah
Charging Method & Charging Time	Automatic & Manual Charging / 3 hours
WiFi Frequency	802.11 ac/a/b/g/n, 2.4GHz / 5GHz Dual-Band WiFi
Operating System	Standalone (NavWiz) / Fleet Management System (DFleet)

FEATURE AND INTERFACE

Safety Indicators Color LED Lighting / Music Playback & Alarm

Safety Features 5m Adjustable Range Laser Sensor, 2x Bumper Switch, 1x Emergency Switch,

1x External Safety Input/Output,

[MG] 1x Laser, [TB] 2x LiDAR, [TS] 1x Laser, 1x LiDAR

User Interface 7 inch Capacitive Touchscreen / Physical Button

Integration Interface [Port] General USB port x1, LAN Port x1 / [API] REST, Modbus, Webhooks

[I/O] 8 Input & 8 Output, NPN

*Specifications may vary and are subject to revisions

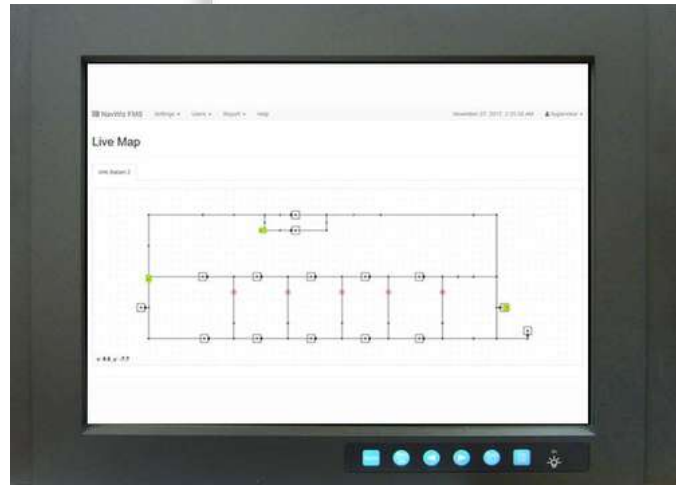




@Sarva



DFLEET-MG-S-01



DFLEET-TS-S-01

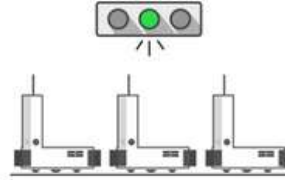


Fleet Management System (DFleet) helps to manage and optimize the robot's task assignment, organize fleet movements, establish routes and monitor traffic. It also help to balance your AMRs battery life and manage charging activities.



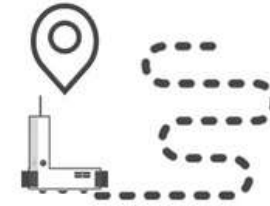
Simple setup and configuration

FMS can control multiple AGVs on one system. Task template and mapping layout are shared and need to be configured once on FMS.



Comprehensive traffic control

Schedule and control traffic of AGVs to prevent collision and misrouting.



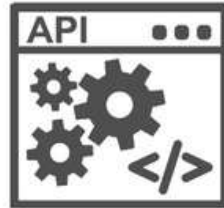
Real-time tracking

Track and monitor AGVs from time to time. Users are able to view AGV current information such as battery percentage, location and current task in FMS.



Customizable Interface

Interface to control AGV system can be designed specifically to meet customer's desire and requirement.



Simple and reliable Integration

REST API for NavWiz FMS allows third-party developers to integrate NavWiz FMS data to apply in individual software application.



Immediate alerts

Send instant alerts sound for critical incidents such as emergency stop, bumper receives impact, blocking obstacle, etc. until required actions are taken.



Task planning & execution

Multiple AGVs can collaborate and distribute task based on desired assignment policy.



Task analytics

FMS will provide comprehensive data on task counter, task duration, task completion and daily task of AGVs.

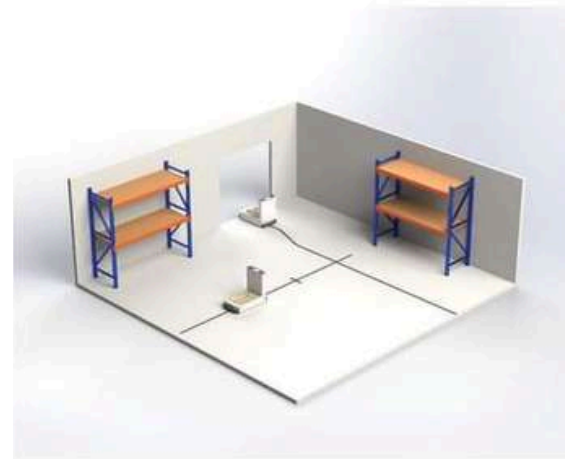
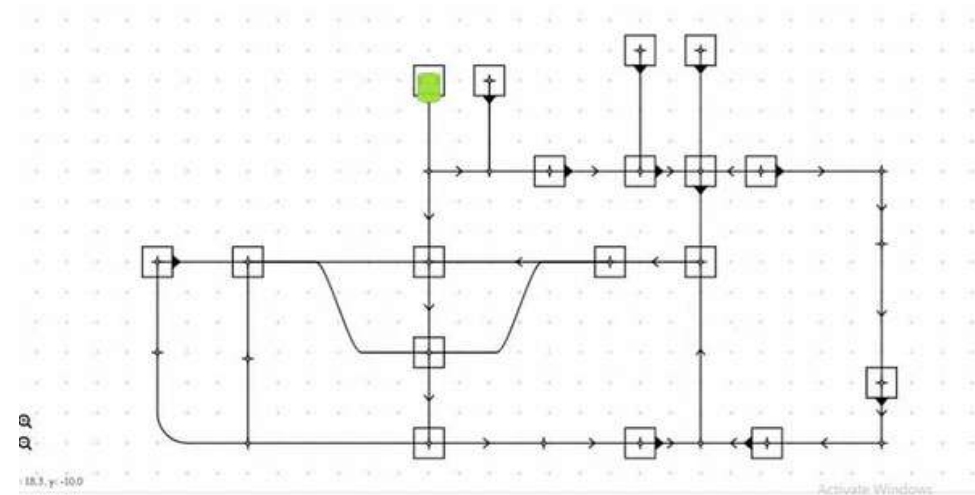


FLEET MANAGEMENT SYSTEM (FMS)

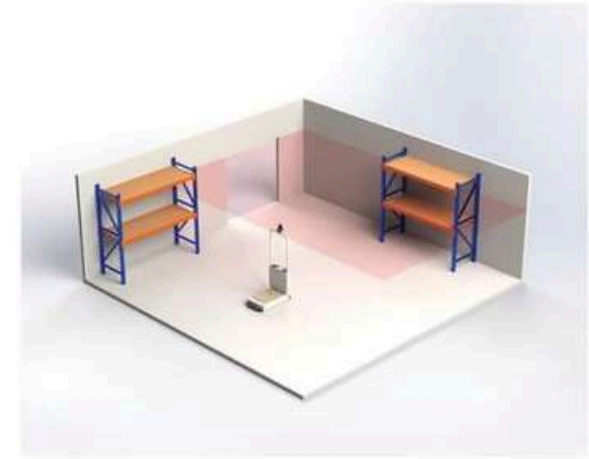
@Sarva

FEATURES

- ü MAPPING
- ü PATH PLANNING
- ü PLANNING
- ü SCHEDULING
- ü NAVIGATION
- ü REALTIME BATTERY AND RUN TIME
- ü JOYSTICK CONTROLES
- ü ROBOT STATUS INDICATION
- ü REALTIME ALERTS
- ü MULTIPLE MAPPING AND PLANNING



Magnetic Strip
Guidance Navigation



Laser Based Natural
Feature Navigation

Our Interface

@Sarva

Lift mate



Conveyor mate

Towing mate



Tug mate

Shelf mate



INDUSTRIAL ROBOTS



@Sarva

ADVANCED FEATURES

Collision detection

The motor current or feedback torque is used to detect the collision, so as to ensure the human-machine safety.

Drag teaching

Manually pull the robot to the specified position or move along a specific trajectory to complete the teaching.

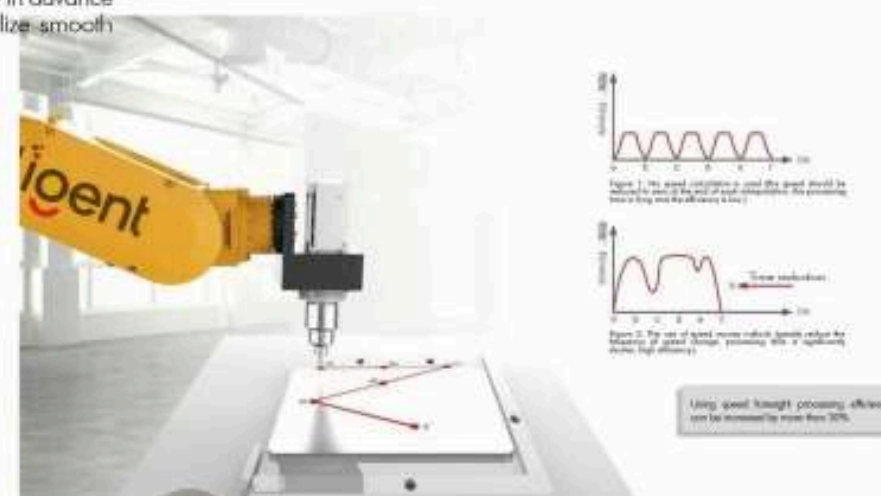
Trajectory memory

Record the trajectory of TCP, and solve the problem that the robot deviates from the original teaching path when it is suspended and restarted.



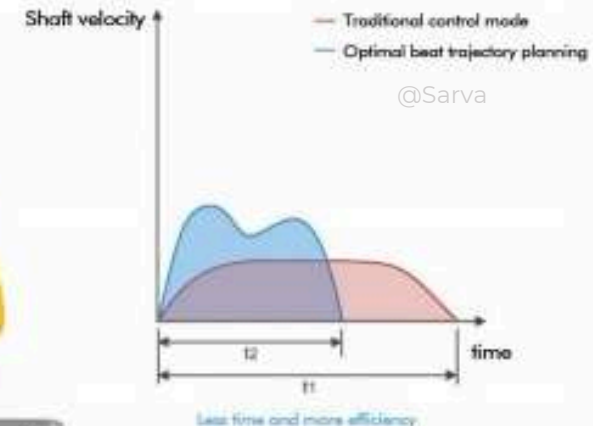
Speed look-ahead control

Find the inflection point of trajectory in advance and make speed planning to realize smooth transition at high speed.





ADVANCED FEATURES



High absolute positioning accuracy

Optimal beat trajectory planning technology.

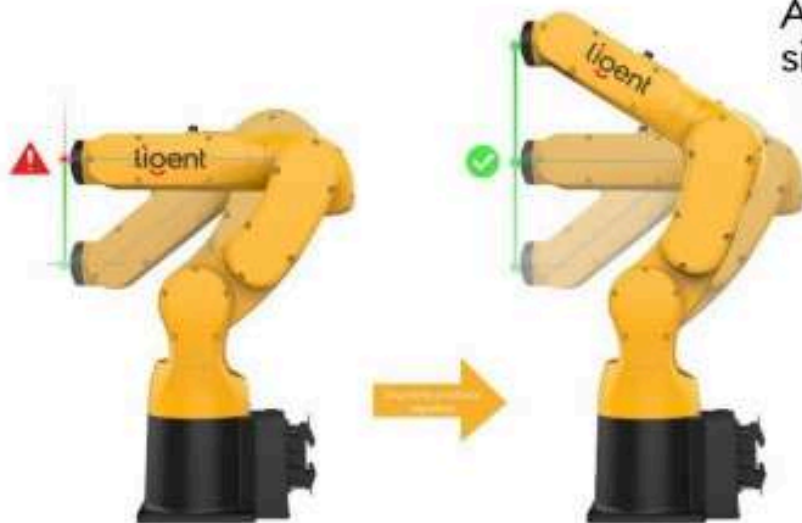
Optimize acceleration to achieve a shorter beat.

Avoidance of wrist singularity.

Solve the problem of excessive joint movement speed around the wrist singularity.

Multi-robot linkage

One controller operates multiple robots, realizing coordinated movement and saving hardware cost.





ADVANCED FEATURES

Spiral interpolation

By setting the parameters such as rotation times, rotation direction, pitch and speed, the spiral trajectory teaching can be easily completed, and the operation is simple, saving more than 40% teaching programming time.

External shaft linkage

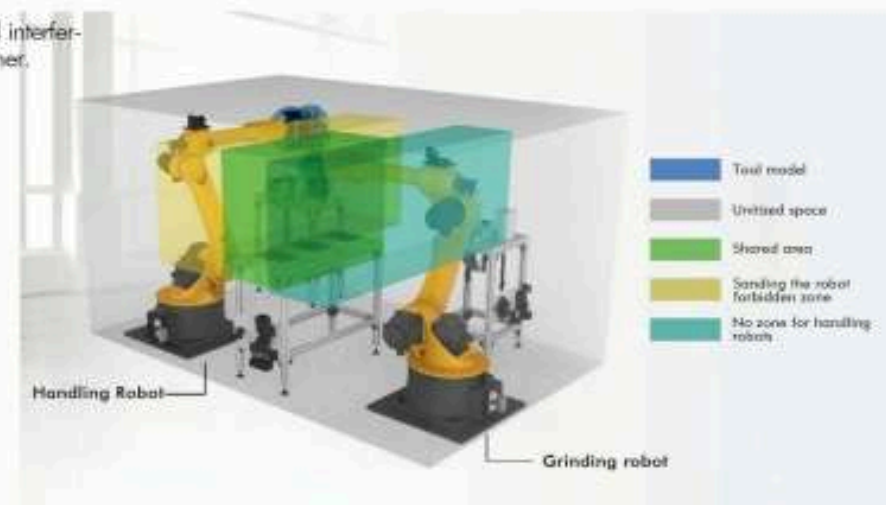
The required posture or position can be achieved through the coordinated movement of the positioner, guide rail and other equipment with the robot.

Dynamic tracking of conveyor belt

The robot dynamically tracks and grabs the moving target workpiece on the conveyor belt.

Safe area control

Restrict the TCP motion area to avoid interference when multiple robots work together.





COBOTS

CO03-624EA



CO06-914EA



CO12-1304EA



CO03-624EC



CO08-820EC



CO06-914EC



Collaborative robots are lightweight, space-saving and can be easily redeployed to multiple applications without changing the production layout. Customers can easily and quickly switch cobots into new processes, using their flexibility to automate virtually any job, including small batches or quick changeovers. Collaborative robots are capable of performing repetitive tasks using the same program over and over again.



SCARA ROBOT

SR3SC-400



SR6SC-600



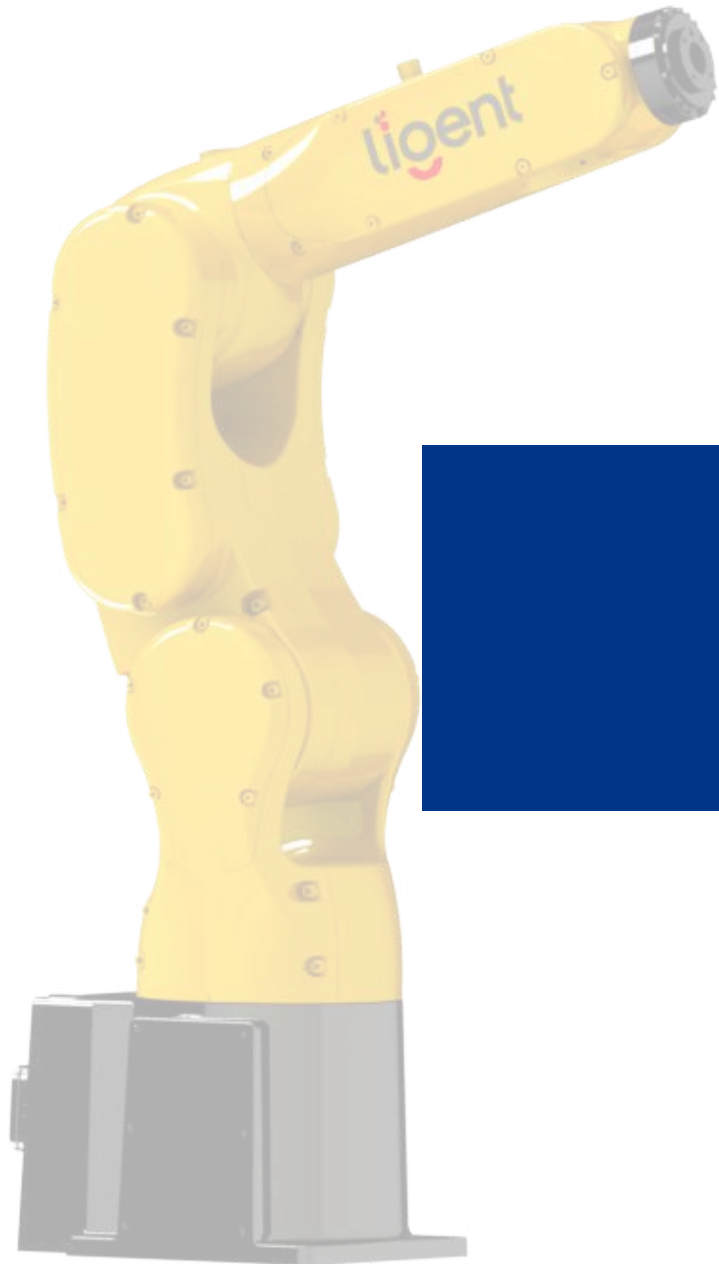
SR6SC-750



SR12SC-820



Arm span from 400mm to 820mm,
Load from 3kg to 12kg,
Widely widely used in 3C electronics, assembly, vision



SMALL 6 AXIS



High rigidity, no deformation or loss of accuracy in harsh environments, everything is under control



HANDLING ROBOT

ST10-1650



ST10-K2032



ST15-C1538



ST20-1735



ST20-2150



ST25-C1760



ST30-1850



ST50-2185



ST50-C2220



ST80-2600



ST120-2269



ST130-C2700



ST180-C3200



ST210-2650



ST210-C3200



ST500-3100



ST500-C3200



ST1600-C4000



Rich in categories, loads from 3KG to 1600KG,
The number of axes is 4 axes or 6 axes,
It is widely used in various industries such as CNC numerical
control system, food industry, metal processing industry, etc.



WELDING ROBOT

ST6-1400



ST6-2080



SK6-1440



SK12-2010

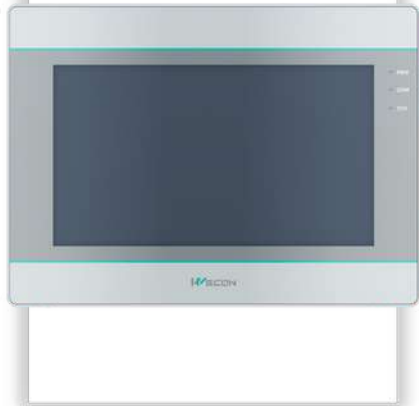


Support 0.2 mm thin plate welding,
Fast beat, hollow robot, support TIG/MIG/MAG welding,
And widely used in welding work in industries such as automobiles, shelves, furniture, etc.



HMI

PI3000ig Series



PI3000i Series



PI3000ie Series



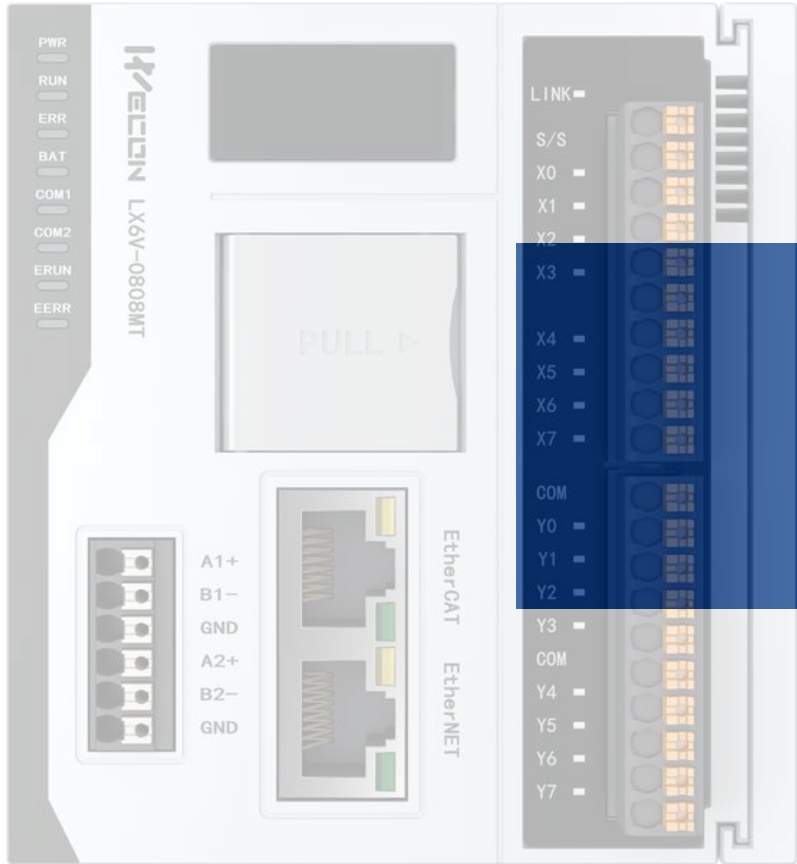
PI8000ig Series



PI8000 Series



HMI has been widely recognized by the market for economical and practical, fast response speed, high configuration, multiple options etc.



PLC

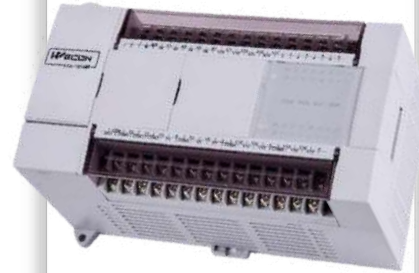
**LX6V & LX6S
& LX6C**



LX5V



LX5S



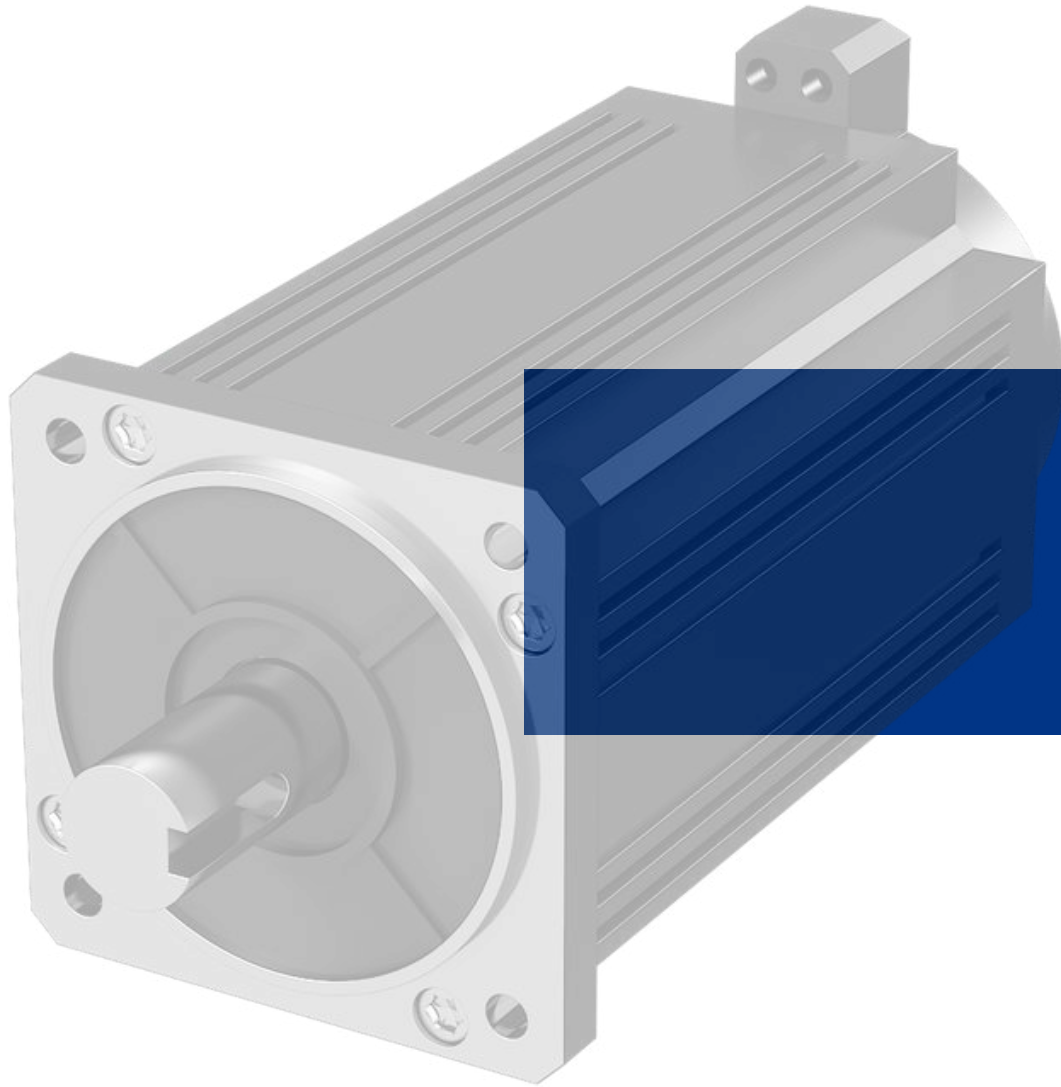
LX3V



**Expansion
module**



PLC has the features of high precision, fast speed, strong stability etc. In addition to its own various peripheral interfaces, it can also expand various types of expansion modules and expand BD boards to meet different industrial applications.



SERVO

VD3E Series



VD2 Series



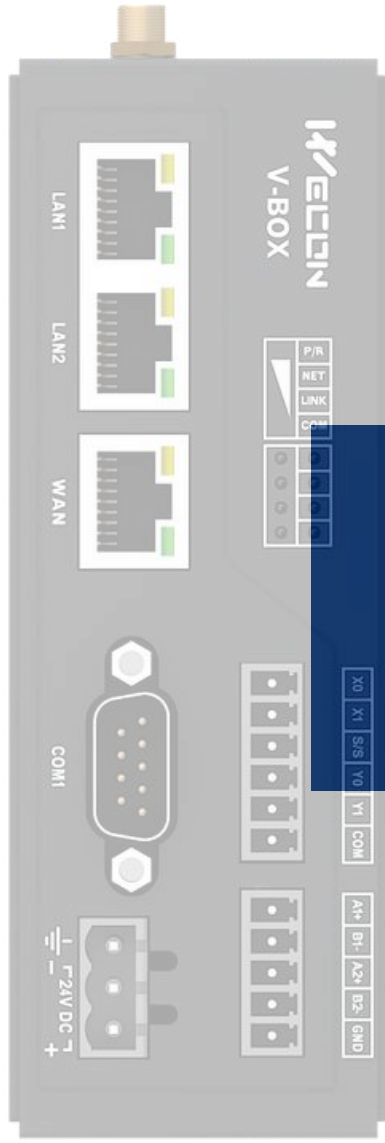
VD2F Series



Servo Motor

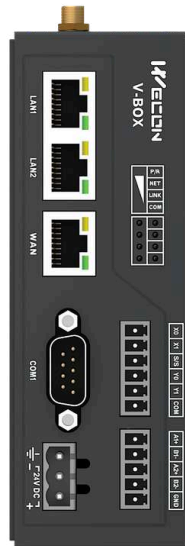


Servo Drives has the features of high response, easy debugging, strong protection etc. It also support virtual I/O function, internal multi-stage speed command, internal multi-stage position command, etc



V-BOX (IIOT)

H Series



E Series



RE Series



IloT Gateway (V-BOX) is the basic hardware of Wecon IloT platform(V-NET). It is an indispensable equipment about information exchange and protocol conversion for the communication between the IoT cloud platform and the system.



INVERTER

VM Series



VB Series



INVERTER Independent R&D Product Platform, Outstanding Performance on Various Industrial Automation Control Occasions.

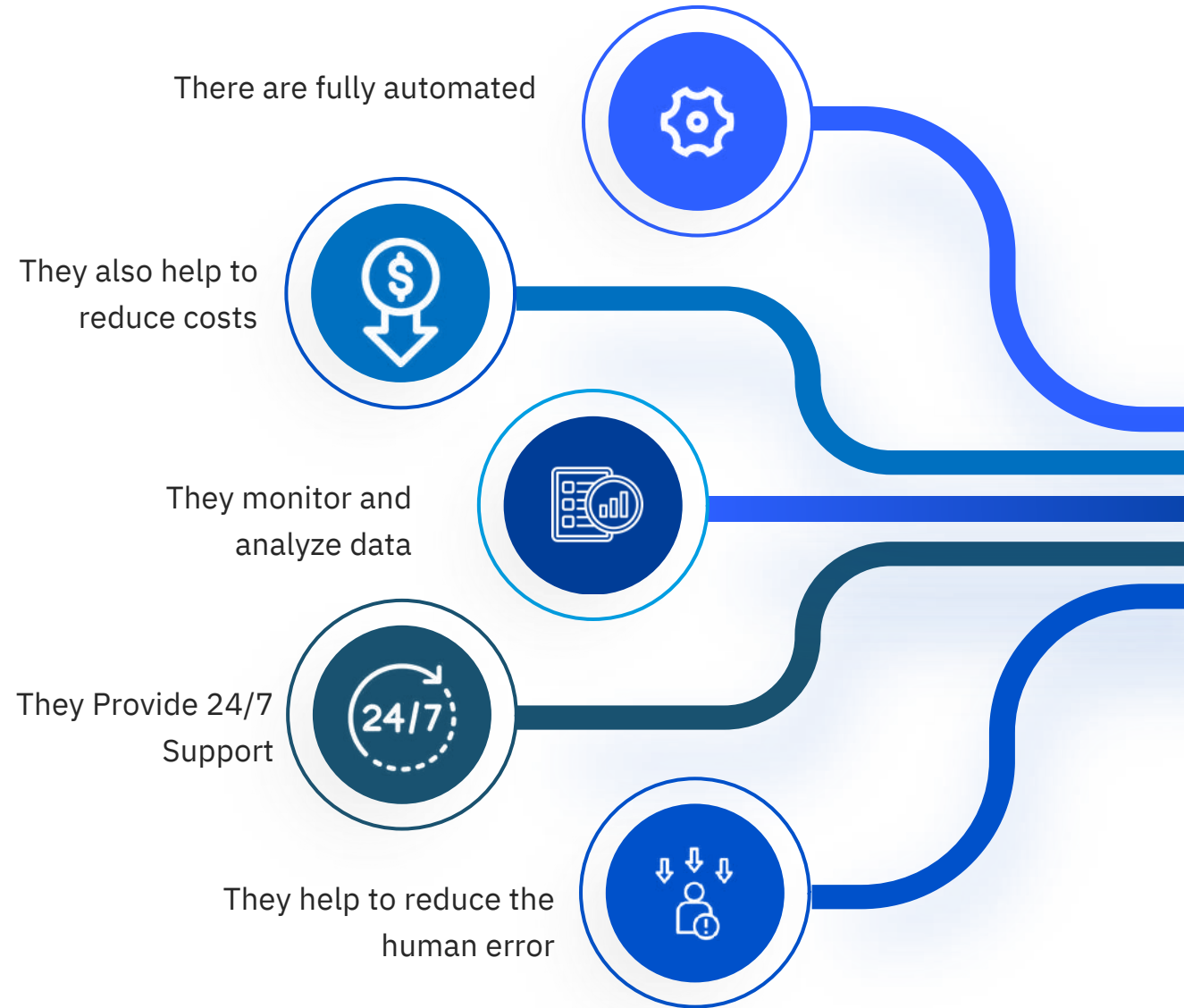


APPLICATIONS



Conclusion

There is no doubt that robots and controls are having a major impact on the industry. They are becoming increasingly sophisticated and can do more and more tasks that were once done by human workers. This is having a major impact on the economy.



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