

Zebra Robotics Automation™

Zebra OEM Base

Highly extensible and versatile, Zebra's fully autonomous Zebra OEM Base is a safe and cost-effective solution to accelerate the development of automated products and solutions for a wide range of applications.



Zebra OEM Base

Build Your Own Custom Automated Solution

Our Zebra OEM Base AMR brings the speed, adaptability, safety, and flexibility of the Zebra Robotics Platform to individuals and companies looking to develop automated solutions for a wide range of applications across various industries including healthcare, lab environments, hospitality, agriculture, retail, offices and more.

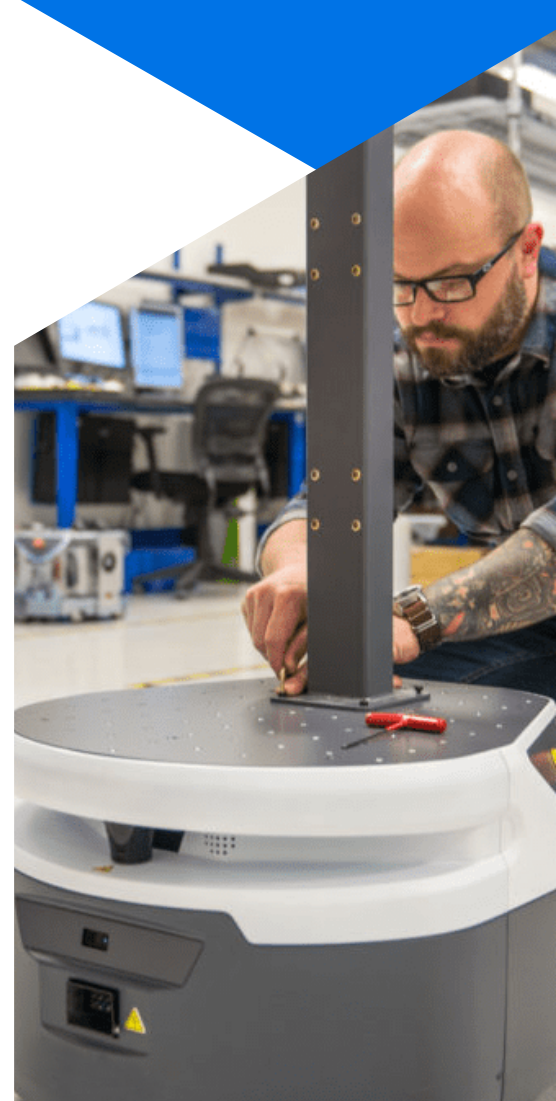
Zebra Base Features

- Collaborative fully autonomous mobile robot base
- Modular top plate with 73-threaded mount points
- Auxiliary access via top surface to 2 power ports, direct communication bus, Ethernet, and USB 3.0 ports
- Side interface panel with Ethernet, USB 3.0, and DisplayPort
- Indicators providing Wi-Fi™, power, battery, runstop status
- Zebra Symmetry™ software for precise and reliable movement and position
- REST API and PartnerAPI for task and function customizability
- Additional post accessory for increasing mounting height
- Available charge dock for autonomous charging
- CE, ANSI/RIA R15.08, and UKCA compliant

Zebra OEM Base Specifications

Weight	68 kg (150 lbs)
Height	359 mm (14 in.)
Base Footprint	528 mm (20.8 in.) wide, 573 mm (22.6 in.) long
Payload	100 kg (220 lbs)
Maximum Speed	1.75 m/s
Turning Radius	Turn in place
Battery	Deka 8G22NF Sealed Lead Acid
Nominal Continuous Runtime	9 hrs
Charging	Autonomous docking
Charge Time	3 hrs to 90%
2D Laser Sensor	SICK TiM 571, 25 m, 220°

3D Depth Cameras	2x Intel RealSense D435
Processor	Intel Core i7-9700E
RAM	32GB
Hard Drive	256GB SSD
Wireless	Intel AX200 802.11.ax and Bluetooth® 5.1
Side Interface Panel	DisplayPort, 2x USB 3.0, Ethernet
Audio	4x Speakers, 10W per channel
Environment	Indoor
Traversable Aisle	95 cm (37.4 in.)
Traversable Gap	15 mm (0.59 in.)
Torque for M5 Mounting Points	3.6 N-m (31.9 in.-lb.)



Turn Your Mobile Automation Vision Into Reality

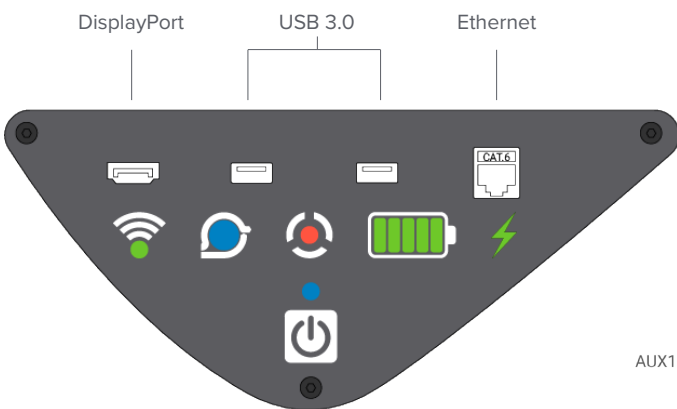
Create your own customized automated solution

Autonomous mobile robots have become great enablers for individuals and companies looking to develop automated products and solutions that operate safely amongst people. Zebra OEM Base was designed as a highly extensible platform to help accelerate these development efforts. Integrators and software partners can take advantage of Zebra's hardware and software extensibility features to quickly bring up custom automated solutions.



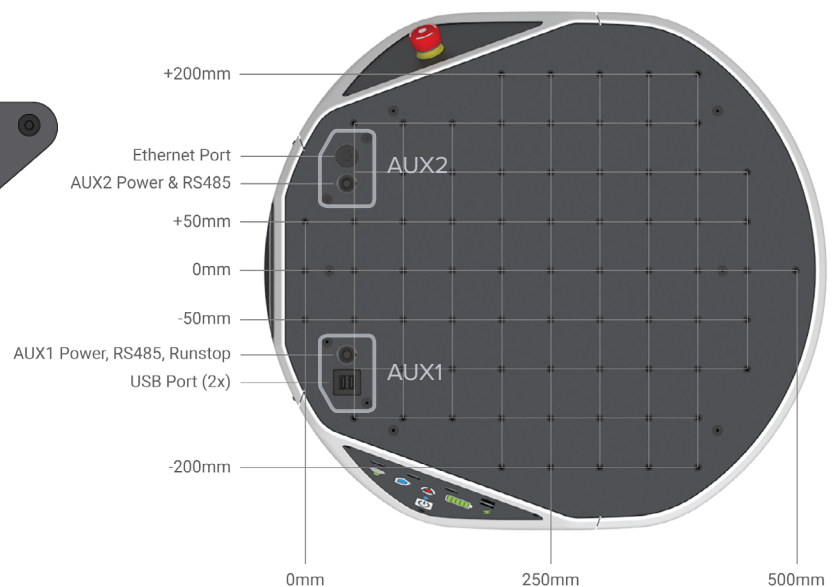
Zebra OEM Base Side Interface Panel

Interfacing with the Zebra OEM Base is direct and easy. The access and status panel features a DisplayPort interface to connect a screen, as well as (2) USB 3.0 ports and an Ethernet port. Battery, charge, wireless, runstop, and Zebra Symmetry status are also provided via LED indicators on the panel.



Zebra OEM Base Top Surface

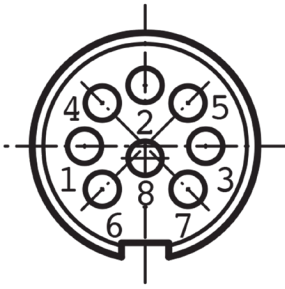
The Zebra OEM Base top plate provides (73) threaded M5x0.8x4mm mounting points, oriented in a 50mm x 50mm grid, for easily and securely mounting hardware and additional sensors. There are also 2 auxiliary power and communication panels provided on the top surface for flexible connectivity to your custom top module.



Power and Signal Specifications

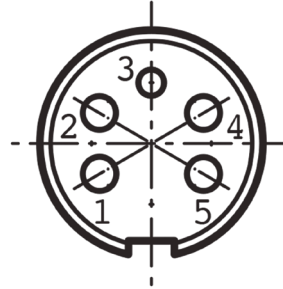
The top panel of the Zebra OEM Base robot has two accessory panels. AUX1 supports 360W, RS485, Runstop, and has 2 USB ports. AUX2 supports 180W (not connected to Runstop), RS485, as well as Ethernet.

AUX1 Receptacle (Mounted on top panel):



Pin #	Signal
1	GND
2	AUX1 PWR
3	RS-485-1A
4	AUX1 PWR
5	RUNSTOP-A
6	GND
7	RS-485-1B
8	RUNSTOP-B

AUX2 Receptacle (Mounted on top panel):



Pin #	Signal
1	GND
2	AUX2 PWR
3	NC
4	RS-485-2A
5	RS-485-2B

Corresponding Plug Connector:



Pin #	Signal
1	GND
2	AUX1 PWR
3	RS-485-1A
4	AUX1 PWR
5	RUNSTOP-A
6	GND
7	RS-485-1B
8	RUNSTOP-B

Recommended Connectors:
Amphenol T 3504 551
or T 3504 055

Corresponding Plug Connector:



Pin #	Signal
1	GND
2	AUX2 PWR
3	NC
4	RS-485-2A
5	RS-485-2B

Recommended Connectors:
Amphenol T 3356 551
or T 3360 055

AUX1 Output Power Specifications:

Output Power	Minimum	Typical	Maximum
Voltage	20V	25V	33V
Current	-	15A	18A

*15A is guaranteed by design. Absolute maximum varies based on internal circuitry tolerances, 16A to 19A.

AUX2 Output Power Specifications:

Output Power	Minimum	Typical	Maximum
Voltage	20V	25V	33V
Current	-	7.5A	10A

*7.5A is guaranteed by design. Absolute maximum varies based on internal circuitry tolerances, 9A to 11A.

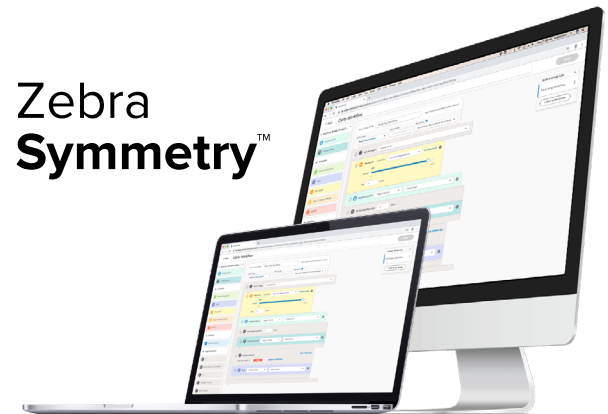
Zebra Symmetry Makes It Simple To Deploy and Manage

Get up and running in hours with the ability to modify workflows on-demand

- Create and change workflows from anywhere with just a few clicks
- Track, analyze, and optimize robot performance
- Annotate, update, and share maps
- Schedule robot operations
- Find WiFi™ cold spots

WorkFlow allows you to program complex robot tasks using a dragging and dropping graphical blocks

- Send robot to multiple locations
- Manage exceptions
- Program conditionals
- Add triggers and actions



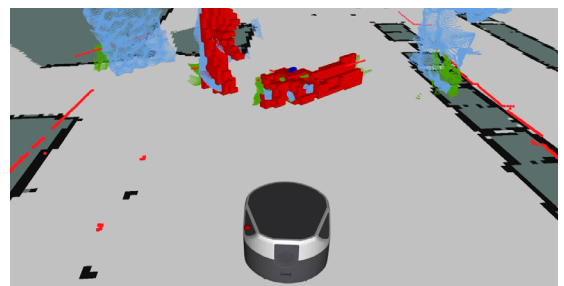
Uncompromising Safety

The Zebra OEM Base robot comes equipped with some of the most advanced safety features in the industry. A 2D laser scanner with 25m range enables mapping, localization, obstacle avoidance, as well as object detection. Two 3D depth cameras allow for superior robot vision to avoid both ground-based and overhanging dynamic obstacles.

Each Zebra OEM Base also has a runstop button for safe shutdown when needed. Zebra OEM Base carries the CE mark, FCC registration, and is an ISO 13849 PLb device.

Operating Environments

- Indoor use with WiFi availability
- Minimum 3.1 ft. aisle width for movement
- No significant temperature changes or wet floors



Zebra Robotics Automation Cart Connect carries a CE mark and meets regulatory requirements for product safety.



WARNING: This product uses components which emit invisible laser radiation. Incorrect use or observing the safety laser scanner through optical instruments (such as magnifying glasses, lenses, telescopes) may be hazardous for the eyes.

Note: Product appearance is subject to change

For more information about Zebra's autonomous mobile robot solutions, please visit zebra.com/automation-solutions



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