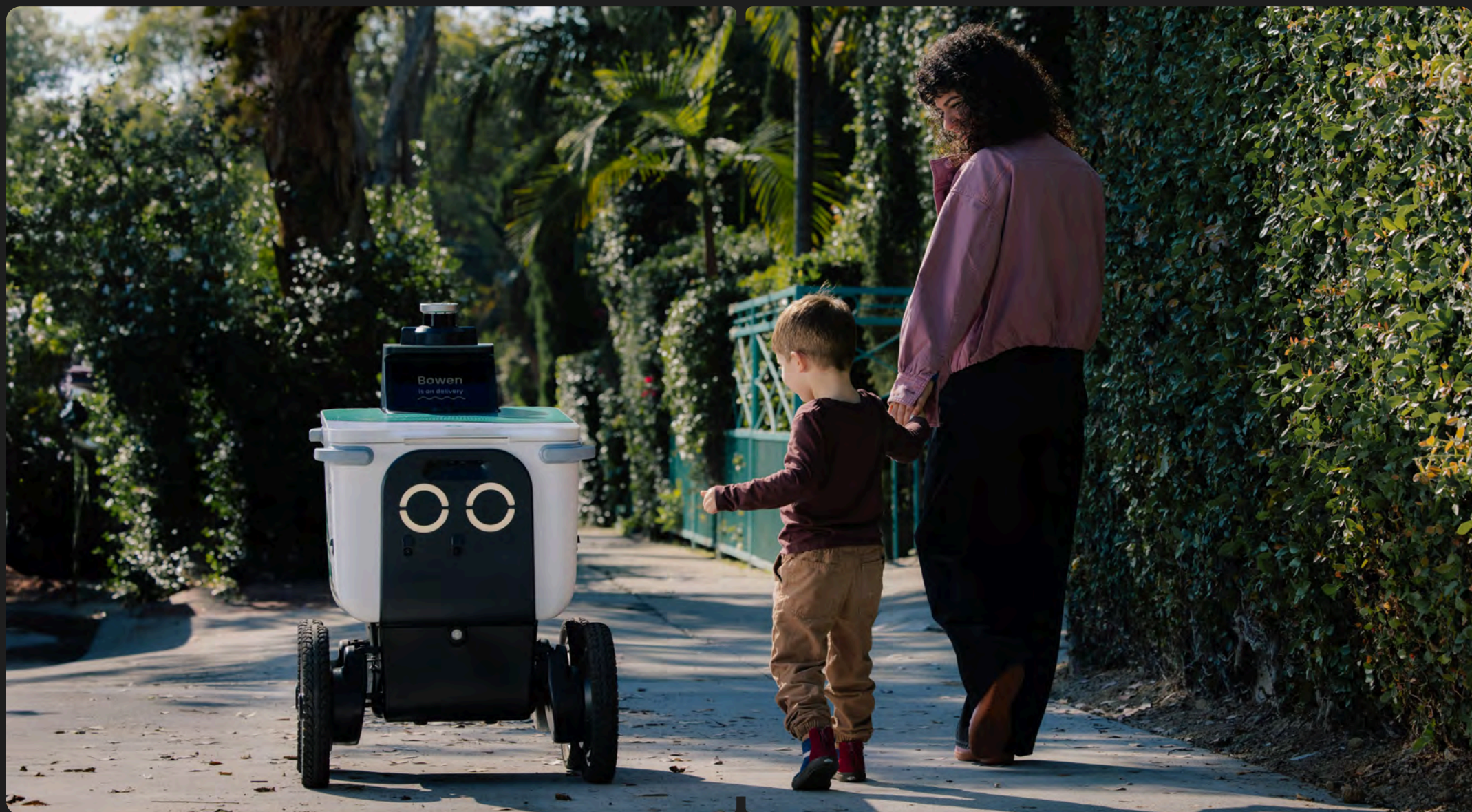


# First Responder Interaction Plan



2026

# To Our Partners in Public Safety

Serve Robotics is proud to present this First Responder Interaction Plan—a comprehensive guide designed to promote safe and informed encounters between our delivery robots and the dedicated public safety personnel who serve our communities.

We recognize the critical importance of working collaboratively with law enforcement, fire departments, emergency medical services, 911 centers, and other municipal agencies. Robots that operate in public spaces must coexist seamlessly with the public and first responders.

This plan reflects our deep commitment to transparency, public trust, and safety. It provides information about robot operations, protocols, procedures, incident response support, and training recommendations. Whether encountering a robot during routine patrol, emergency response, or a public safety event, this guide equips first responders with the information they need to understand, engage with, and, if necessary, safely intervene in robot activity.

We believe that the successful integration of robotics into everyday urban life requires strong relationships and clear communication. This plan is not just a resource—it is an invitation to you for feedback, questions, and collaboration. The Serve team is here to partner with your agency to provide training, demonstrations, public-facing information, or briefings tailored to your specific needs.

On behalf of the Serve Robotics team, thank you for your service and for your continued partnership as we deploy technology that works in harmony with public safety.

Sincerely,

A handwritten signature in black ink that reads "Ali Kashani". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Ali Kashani  
Co-founder & Chief Executive Officer  
Serve Robotics



# About this Plan

This plan equips law enforcement, fire departments, emergency medical services, 911 centers, and other municipal agencies with the guidance they need to recognize, interact with, and, if necessary, manage a Serve sidewalk-delivery robot during an emergency or incident.

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# What To Do in an Emergency

## A Quick Guide for First Responders

Call 1-888-711-1178 in an emergency to be immediately connected with Serve's Operations Center.

This phone number can be found on each robot along with a QR code for easy access as well as a unique five-character ID label. You can also email [firstresponder@serverobotics.com](mailto:firstresponder@serverobotics.com).

Serve's Operation Center

**1-888-711-1178**

[firstresponder@serverobotics.com](mailto:firstresponder@serverobotics.com)

### Our team can help:

- Move or disable the robot remotely
- Unlock the bin
- Transmit audio messages
- Dispatch a Serve Field Agent to the scene

### In Case of Obstruction

If a robot is stuck, we can either resolve the issue remotely, or dispatch a Field agent within 30 minutes.

### In Case of Vandalism, Collision, or Fire

- Secure the area
- Call Serve's Operations Center immediately at 1-888-711-1178
- Use water fog or specialized foam for lithium-ion battery fires and avoid opening the unit. Below 60V, HVIL is not required; our battery is not High Voltage. The battery power output will automatically disconnect when the internal temperature gets too high.

While robots and electric autonomous vehicles statistically catch fire less than combustion engine vehicles, please follow your standard operating procedures for electrical vehicle fires.

### To Impound a Robot

Call Serve's Operations Center to get on-site assistance.

### About our Batteries

Our battery packs are compliant to UL 2271, a nationally recognized safety standard for lithium-ion batteries used in light electric vehicles. The battery system has been independently tested for hazards such as overheating, short circuits, mechanical damage, and overcharging to ensure it can safely operate without causing fires

### For More Info or to Schedule a Training

Email [firstresponder@serverobotics.com](mailto:firstresponder@serverobotics.com)

# An Introduction to Serve Robotics

Serve Robotics is a Los Angeles-based company that designs and operates electric, autonomous sidewalk delivery robots. Serve reduces traffic congestion, over-reliance on cars, carbon emissions, and can reduce costs for businesses and consumers.

As of December 2025, Serve operates in select U.S. cities, including Los Angeles, Miami, Atlanta, Dallas, Chicago, Alexandria, Fort Lauderdale, and others. The company is expanding its service areas in partnership with national and local delivery partners.

## Design & Functionality at a Glance

Approximately the size of a shopping cart, Serve robots are four-wheeled, lithium ion battery-powered devices with a high-visibility exterior and digital display. They are typically used by restaurants, convenience stores, and delivery platforms such as Uber Eats to deliver small food and retail items. They're designed to share the sidewalk with pedestrians.

They weigh about 220 pounds unloaded and can carry up to 50 pounds in the cargo bin. The robots support sidewalk and level-delivery only; they cannot climb stairs. When the robot arrives at a delivery address, customers are notified so they can meet them at the curb to unlock the bin and retrieve their order. The bin can be opened with a unique code from a partner app, or remotely by Serve Operations.

The robots use onboard sensors, cameras, GPS, and artificial intelligence to safely navigate sidewalks, crosswalks, and curb cuts. They operate autonomously but are monitored by Remote Supervisors who can intervene if necessary.



### Key Specifications

- ✓ Shopping cart sized
- ✓ Autonomously operated but remotely monitored
- ✓ ~220 pounds
- ✓ 48v Lithium Ion battery (no HVIL required)
- ✓ Fail-safe brakes
- ✓ Curb-level delivery only (no stairs)
- ✓ Customer unlocks bin to retrieve order

For more in-depth specifications, [click here](#).

### Safety

Serve robots are programmed to travel at appropriate speeds for the environment, and stop for pedestrians, pets, and obstacles. They follow local pedestrian rules and are tested to support safe operation in urban environments. Their maximum speeds vary by jurisdiction, but they do not go faster than 10 miles per hour. All robots are equipped with fail-safe brakes to prevent runaways, even if there's a power failure or the robot runs out of battery.

### Our Commitment to the Community

Serve is committed to operating delivery robots safely within the communities we serve. Safety is not negotiable.

# Need to Knows for First Responders

## Maximum Speeds

The robot's software enforces the highest speed limit based on state statutes and/or local regulations:

|         |         |         |             |        |          |                |
|---------|---------|---------|-------------|--------|----------|----------------|
| Chicago | Florida | Georgia | Los Angeles | Texas  | Virginia | West Hollywood |
| 5 mph   | 10 mph  | 4 mph   | 5 mph       | 10 mph | 10 mph   | 6 mph          |

## Video Recording

Robots are equipped with multiple cameras, which record continuously while robots are on duty. Safety incidents are automatically detected by the robot or identified by Remote Supervisors. All video footage is stored in encrypted servers in accordance with our data preservation responsibilities.

To protect the privacy rights of pedestrians, we do not generally share video footage without a subpoena except in extraordinary circumstances. If you believe you have a legitimate need to access video footage, please email the Serve Legal team at [legal@serverobotics.com](mailto:legal@serverobotics.com).

## Visibility & Interactivity

The robots have LED lights and speakers that allow it to effectively engage with the public, signaling both its presence and intent.

## Finding Lost or Stolen Robots

The robot constantly streams its location, even when not fully powered. If a robot goes missing, we can provide coordinates to help recover the robot.

## Unlocking the Bin

The cargo bin of the robot is secured and can be accessed by a specific code, via a partner app, remotely by a Serve representative, or physically by an on-site Field Agent.

## Locating the Battery

The 48v Lithium Ion (no HVIL required) battery is located inside the robot, under the black cowling (not removable).

## Transporting a Disabled Robot

Use a flatbed with a dolly and tie-downs to transport a disabled robot.





# Technology Deep Dive

## The Serve Autonomous Delivery Robot

The third generation Serve delivery robot is an all-electric, sidewalk-operating unit weighing approximately 220 pounds unloaded. The robot operates within geofenced Operational Design Domains (ODDs). Robot travel speeds on sidewalks are governed by jurisdiction: Los Angeles (5 mph), West Hollywood (6 mph), Chicago (5 mph), Texas (10 mph), Georgia (4 mph), Virginia (10 mph), and Florida (10 mph). Our delivery robot's top speed is 11 mph as of March 6, 2026.

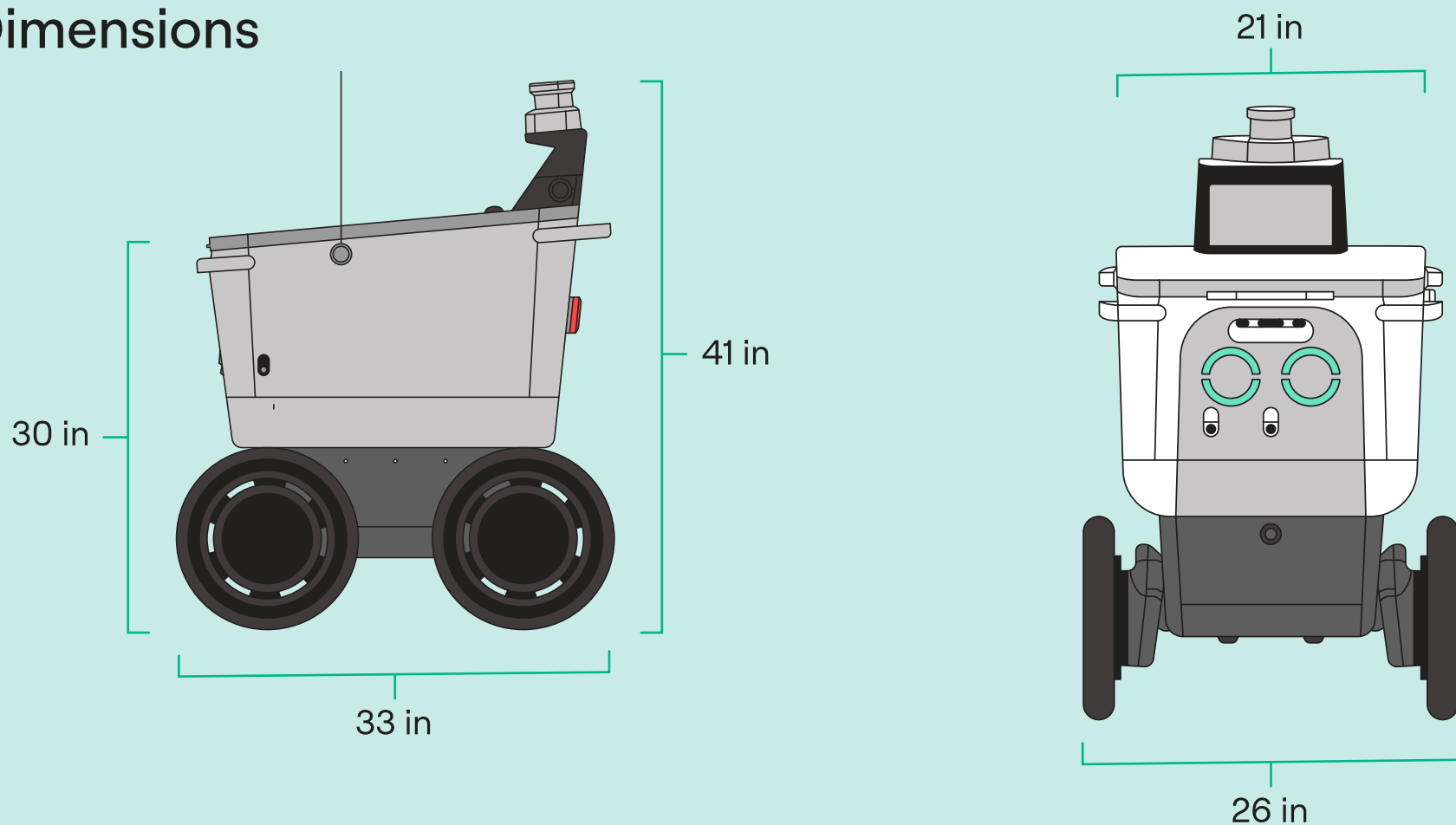
The sensor suite includes 360° LiDAR and stereo cameras, and 5 around-chassis cameras for autonomy and Remote Supervisors, including one facing the customer when getting their items out of the bin.

Each robot has Serve contact info and a unique five-character identification label visibly posted.

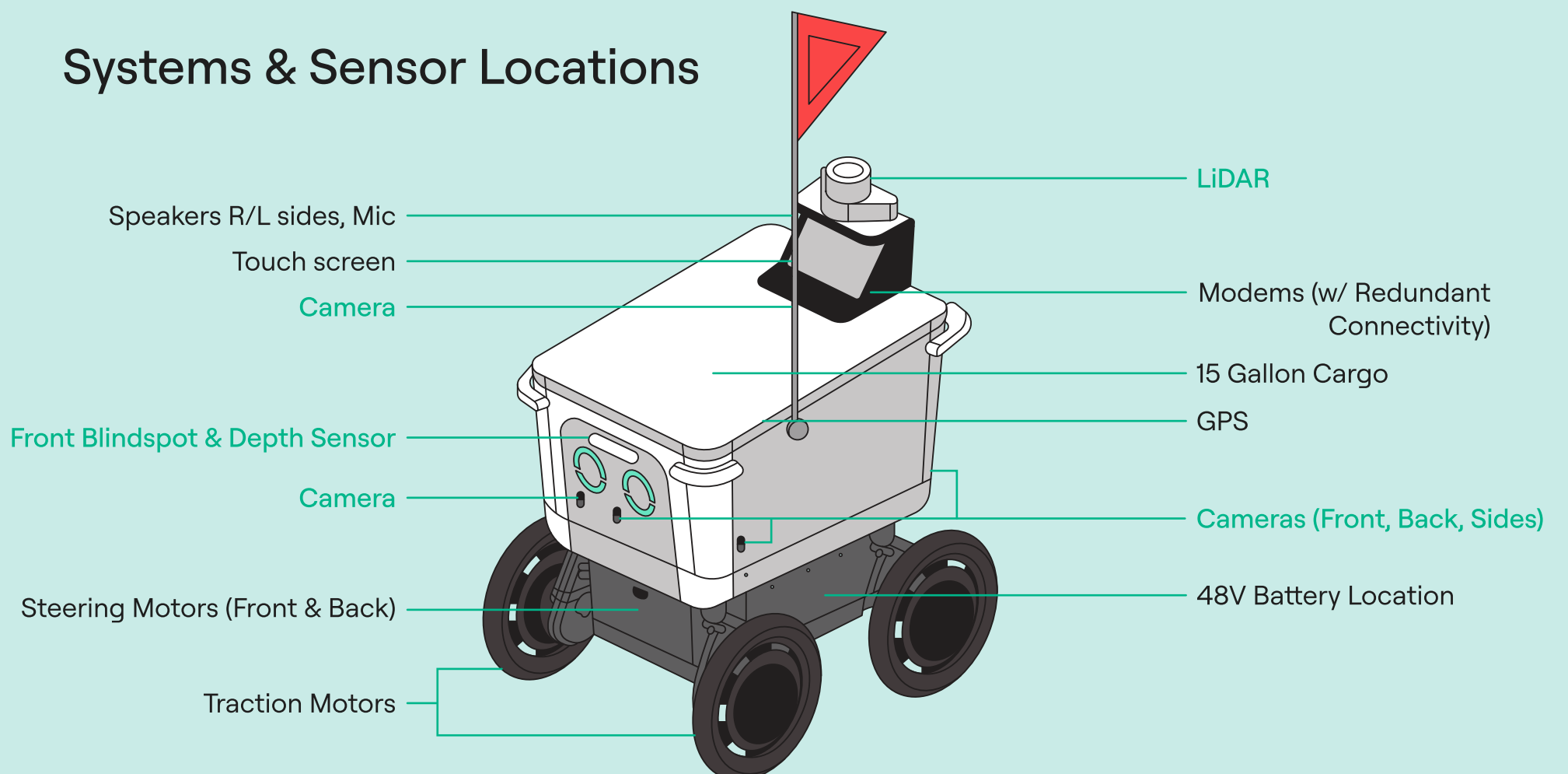
# Specifications & Features

The following diagrams provide an overview of robot specifications and features.

## Dimensions



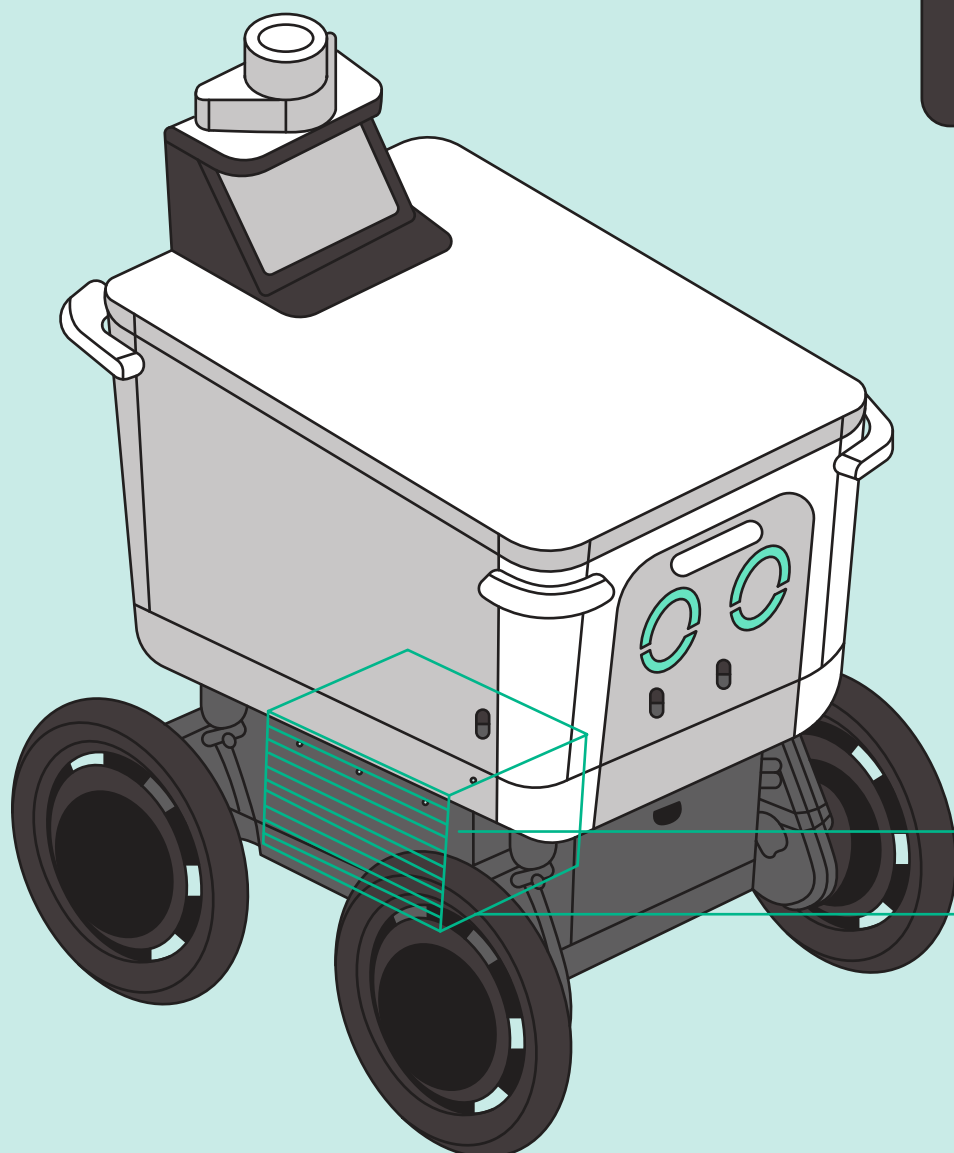
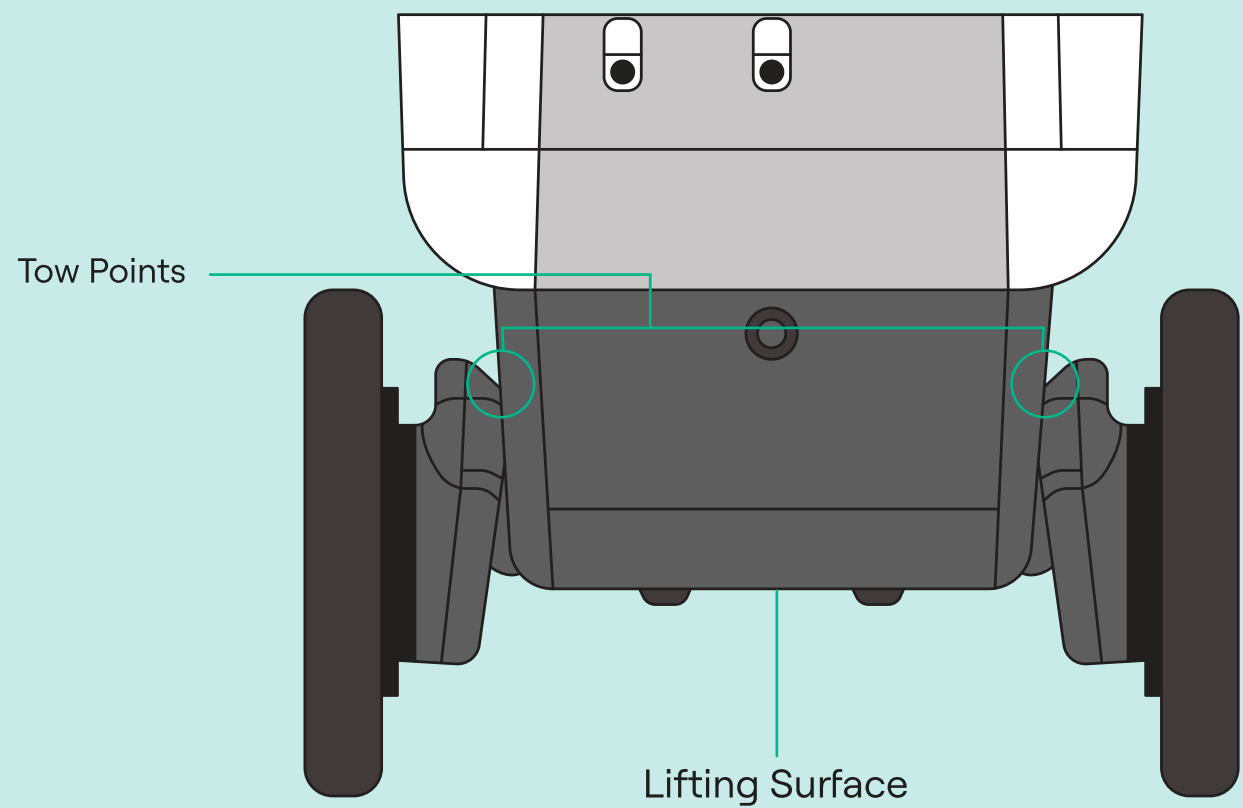
## Systems & Sensor Locations



# Specifications & Features

The following diagrams provide an overview of robot specifications and features.

## Lifting & Towing Locations



## Battery Location

Battery Location (Inside Chassis)

Battery Cable Port

# Details of Robot Safety Technology

While safety standards are in development for non-roadway, public-facing robots, they do not currently share the same guidance or regulations as autonomous vehicles. The robot has been designed and developed to ensure safe deliveries. Serve has leveraged standards and best practices where they exist, while also defining new frameworks to address gaps in existing standards for robot operations and storage.

The following are features and technologies that support safe and effective autonomous operations of our robots:

- **Nvidia Jetson**, an AI computer, helps the robot navigate.
- **Light Detection and Ranging (LiDAR)** provides range information to aid autonomous navigation.
- **Red, Green, Blue (RGB) Cameras** provide vision for the robots of their surroundings.
- **Stereoscopic Cameras** provide 3D depth to help the robot understand the shape and distance of objects.
- **Global Positioning System (GPS) Output** provides the approximate location of the robot.
- **4-Wheel Drive and 4-Wheel Steering Powertrain** driving systems support robot agility.
- **Fail-Safe Brakes** engage in the event of loss of power or other vehicle failure, ensuring the robot stops.
- **Dual-Modem** allows the robot to connect to two cellular providers.
- **Interactive Signaling Systems** feature a host of LEDs, speakers, an LCD display, and a safety flag to increase visibility.

## DETAILS OF ROBOT SAFETY TECHNOLOGY

### On-Vehicle Self-Driving Software

The Serve Robotics on-vehicle self-driving software features the following suite of systems and features to enable safe and effective autonomous operations:

- **Vehicle Health Monitor** keeps track of the robot's system to make sure it is safe for travel.
- **Unexpected Motion Detection** watches for unexpected or unintended motion of the robots.
- **Odometric Estimation** tracks how far, how fast, and where the robot has gone.
- **Emergency Collision Avoidance** acts quickly to avoid a crash.
- **Perception and Prediction** helps the robot understand its environment and predict what might happen next.
- **Mapping and Localization** help the robot understand its location using stored and current data.
- **Motion Planning and Control** helps the robot select a safe route.

### Cybersecurity Protocols

Serve Robotics relies on a comprehensive cybersecurity framework to ensure the protection of its autonomous systems, data, and operational infrastructure. Some of the specific protocols include:

- **End-to-End Encryption** for all data in transit, protecting command channels, telemetry, and video feeds against interception or tampering.
- **Access-Control Enforcement** for all stored data.
- **Real-Time Event Logging** and continuous monitoring, enabling rapid detection of anomalies, unauthorized activity, or operational deviations across fleet and backend systems.
- **Audit Logging and Session Replay**, to record operator interactions with fleet management systems, enabling reconstruction of actions taken during operational or safety events.
- **Secure Remote Intervention**, ensuring authorized operators can remotely intervene in robot operations, including issuing commands to stop or disable a robot when necessary.
- **A Cybersecurity Incident Response Plan** and documented procedures, which defines how cybersecurity incidents affecting robot fleet, integrated systems, infrastructure or data are identified, contained, investigated, and recovered.

## DETAILS OF ROBOT SAFETY TECHNOLOGY

### Batteries and Storage Protocols

The following safety protocols are in place to standardize the storage and charging of our robots:

- Battery health is monitored through our Battery Management System (BMS)
- Serve conforms with all local fire regulations and municipal codes.
- Batteries held in storage are charged at levels not exceeding 50% of their charge capacity, and when practical, 30%.
- Spare batteries are not stored stacked on multiple pallets, and never occupy more than a 10×10 area without distancing.
- Batteries that show evidence of damage are properly discarded per hazmat regulations.
- Charging stations allow for a minimum of 18 inches between robots.<sup>1</sup>

### Safety Collaboration

Serve is proud to be actively involved in the development of ISO4448, the emerging international standard for sidewalk and urban robotics, through our collaboration with the Urban Robotics Foundation (URF).

As a founding member, we contribute real-world insights from our fleet operations to help shape practical, forward-thinking guidelines that promote safety, interoperability, and public trust. By participating in the standard-setting process, we're helping to define how autonomous delivery robots coexist with pedestrians, infrastructure, and city ecosystems—ensuring that the future of urban robotics is both responsible and scalable.

### Safety Management

Serve is also maturing our Safety Management System (SMS) to support our organizational safety objectives and sustain our best-in-class safety program. SMS helps us manage safety risk, promote a safety culture, and enable a robust emergency response program. Through the work of the SMS, we are better able to continuously improve our safety program and relationships with our first responder stakeholders and the public.

<sup>1</sup> In accordance with the International Fire Code 322.4 #7



# Training and Partnership Programs for First Responders

Serve offers complimentary train-the-trainer programs for police, 911, and fire-rescue departments in every active or potential market. Each session includes an in-person briefing with case study discussions, review of frequently asked questions, and follow-up.

For more info or to schedule a training, please email [firstresponder@serverobotics.com](mailto:firstresponder@serverobotics.com)

# Regulatory References and Insurance

Serve certifies compliance with:

- California Vehicle Code § 38755 (Personal Delivery Devices)
- Texas Transportation Code § 552A
- Florida § 316.2071
- Georgia Code § 40-6-320 – 329.2
- Virginia § 46.2-908.1:1
- Chicago Ordinance O2022-2365 The Emerging Business Permit Program
- Washington, D.C. Law 22-137; D.C. Official Code § 50-110.01 et seq.

We are fully insured in accordance with legal requirements. Certificates of Insurance are stored digitally and in hard copy inside each robot's documentation pouch.



## Media and Contact

Visit [www.serverobotics.com](http://www.serverobotics.com) to request more information, schedule a demo, or contact our press or partnership teams.

To schedule a demo, please contact [press@serverobotics.com](mailto:press@serverobotics.com).

# Frequently Asked Questions



2026

## FREQUENTLY ASKED QUESTIONS

### What is Serve Robotics?

Serve Robotics is a company that designs and operates autonomous sidewalk delivery robots. Originally spun out of Postmates (which was later acquired by Uber), Serve focuses on sustainable delivery solutions using compact, safety-conscious robots that navigate sidewalks independently.

### Where does Serve operate?

As of March 2026, Serve operates in select U.S. cities, including Los Angeles, Miami, Atlanta, Dallas, Chicago, Alexandria, Fort Lauderdale, and others. The company is rapidly expanding its service areas in partnership with national and local delivery partners.

## Robot Design and Technology

### What do Serve robots look like?

Serve robots are shopping cart-sized, four-wheeled devices with a bright, colorful exterior and a digital face to display expressions. They are designed to share the sidewalk with pedestrians.

### How do Serve robots navigate?

Serve robots use a combination of onboard sensors, cameras, GPS, and machine learning to safely navigate sidewalks, crosswalks, and curb cuts. They operate autonomously but are monitored remotely by Remote Supervisors who can intervene if necessary.

### Are they safe around people and pets?

Yes. Serve robots are programmed to travel at appropriate speeds for the environment, and stop for pedestrians, pets, and obstacles. They adhere to local pedestrian rules and are rigorously tested to ensure safe operation in various environments.

## First Responder Safety

### How do I shut down or disable a robot in an emergency?

Call 1-888-711-1178 to immediately be connected with Serve's Operations Center. Each municipality can also be given direct contact, if needed.

### What happens if a robot needs to be impounded?

Call Serve's Operations Center to obtain on-site assistance. If possible, store the robot outside at least 10 feet from combustible material.

## FREQUENTLY ASKED QUESTIONS

**What are the chances that a robot will catch fire?**

Robots and electrically operated autonomous vehicles statistically catch fire less than traditionally powered apparatus.

Our battery packs are compliant to UL 2271, a nationally recognized safety standard for lithium-ion batteries used in light electric vehicles. This certification means the battery system has been independently tested for hazards such as overheating, short circuits, mechanical damage, and overcharging to ensure it can safely operate without causing fires

**What should I do on the rare chance that a robot catches fire?**

Follow your standard operating procedures for electrical vehicle fires.

### Deliveries and Customers

**What items can a Serve robot deliver?**

Serve robots typically deliver small food and retail items. They are often used by restaurants, convenience stores, and delivery platforms such as Uber Eats and DoorDash to deliver items ordered by a customer.

**How do I get a delivery from a Serve robot?**

If Serve operates in your area, you might receive a delivery via robot when ordering from participating platforms. You can monitor the robot delivery within the app where you placed your order, along with instructions to open the cargo bin on arrival.

**Can the robots go upstairs or enter buildings?**

No. Serve robots are designed for sidewalk and curb-level delivery only. They wait outside the delivery address, and customers meet them at the curb to retrieve their order.

### Accessibility and Community

**How accessible are robots for people with disabilities?**

Serve prioritizes sidewalk accessibility and works closely with municipalities and disability rights groups to ensure its robots do not block paths or create barriers. Their small footprint and slow speed make them easy to navigate around. The cargo bin is also designed to be accessible for those in wheelchairs.

## FREQUENTLY ASKED QUESTIONS

What if I see a robot stuck or in trouble?

Each robot has a visible contact number and QR code. You can report issues, and the Serve team will respond remotely or send assistance if needed.

Do the robots interact with emergency responders?

Yes. Serve is developing and piloting training guides for police, fire, and EMS personnel so they can safely interact with robots during emergencies or incidents. Robots can be stopped or rerouted by remote command.

### Privacy and Security

Do the robots record video or personal data?

Serve robots use cameras and sensors to navigate, which may capture video of public spaces.

Is user information safe during delivery?

Yes. Serve's systems are designed to protect user data.

Are delivery items safe?

The robot's cargo bin remains securely locked and can only be opened by the customer through instructions provided in the delivery app or by Serve.

