

## **STARSHIP TECHNOLOGIES**

## Frequently Asked Questions ("FAQ")

## 1. What are the benefits of Starship Technologies' Personal Delivery Devices ("PDDs")?

PDDs are revolutionizing the local delivery of goods for businesses and consumers. Rather than relying on car-based shopping trips or delivery trucks, PDDs offer consumers a low-cost *and* convenient alternative – all while using less energy and emitting zero CO<sub>2</sub>.

Moreover, for consumers who are transit dependent, non-ambulatory or live in neighborhoods with limited shopping choices, PDDs represent a new and cost-effective option.

## 2. How does a customer obtain delivery services from a PDD?

The process is very simple. Customers use Starship's mobile app to order their goods from participating businesses and select the time and destination for the delivery. The customer is then notified through the mobile app when their goods are ready for delivery, and can track the movement of the PDD through the mobile app. Once the PDD arrives at its destination, the customer is notified. The customer can then retrieve their goods by unlocking the lid of the PDD by pressing the unique 'unlock' button on the Starship mobile app.

### 3. What types of items will a PDD deliver?

Starship's PDDs are presently engaged in the following applications: (1) restaurant delivery, (2) grocery and retail delivery, (3) parcel delivery, and (4) industrial-campus delivery. The nature of our partner's business will dictate the usage of the PDDs.

### 4. Are the PDDs safe for pedestrians?

Absolutely! PDDs are low mass (approx. 50-60 lbs. without cargo), low speed (4 mph) devices that travel on sidewalks, using proprietary mapping, navigation and sophisticated obstacle avoidance technology. PDDs are equipped with twelve cameras, a sensor suite, radar, time-of-flight capabilities, and are constantly monitored by a remote operator. PDDs are capable of identifying objects in their vicinity and making the necessary course corrections to avoid them. When an object is adjacent to the PDD, but not in front of it, the PDD reduces its speed. When an object is in front of the PDD, the PDD will come to a complete stop.



Starship's PDDs have now travelled over 350,000 miles in 20 countries and over 100 cities, encountering more than 15 million people.

## 5. Do Starship's PDDs ever exceed 4 mph?

No.

# 6. How will Starship Technologies prevent PDDs from being used for unauthorized purposes and/or from being vandalized?

The cargo bay of each PDD is locked and secured during transport. Only individuals, who are known to the company, will be able to receive, open, and return PDDs with the use of their mobile technology. As mentioned above, PDDs are constantly monitored and equipped with twelve cameras and two-way audio communication systems. Any improper conduct will be detected immediately.

Moreover, because consumers will decide when to have their packages delivered, PDDs will substantially reduce incidents of stolen packages. According to a December 2015 study by insuranceQuotes.com, an astounding 23 million Americans have had packages stolen from their homes following a traditional delivery.

#### 7. Are PDD deliveries affordable?

Yes. Starship's PDD deliveries in the United States cost approximately \$2.00, which is much less expensive than alternative delivery options.

# 8. How does Starship protect customer information and the privacy of the general public?

Starship never shares customer information and does not store such information on its PDDs. Although the PDDs are equipped with 12 cameras, Starship minimizes the amount of information that it collects. First, when the PDD is operated by a human operator, the images are transmitted exclusively via a lower resolution feed, which is further obfuscated to conceal individual identities. Second, high resolution images, which are collected while the PDD is in autonomous mode, generally remain on the PDD for a very short duration and are then discarded. There are two exceptions: (i) safety and security, e.g. emergencies, vandalism, etc. and (ii) PDD system improvement, e.g. machine learning. In both instances, the information is transmitted in an encrypted form to Starship, where it resides on a segregated system with restricted employee access.



Starship maintains an audit trail of those employees who review these images and the reasons for this review. In all cases, the images stored are brief snapshots and human images are obfuscated. For more information, Starship's privacy policy can be found at <a href="https://www.starship.xyz/data-privacy/">https://www.starship.xyz/data-privacy/</a>.

# 9. What is the anticipated impact of PDDs on existing employment in the delivery business?

In 2018, online sales in the U.S. totaled \$513.6 billion, a 14.2 percent increase over 2017. At the same time, the demand for package delivery services is growing exponentially. The company anticipates that PDDs will supplement the growing logistics industry and offer additional employment opportunities associated with managing and maintaining the PDDs. In addition, the company expects that most PDD deliveries will simply supplant individual car-based shopping trips and, therefore, have only a positive impact on employment.

### 10. When can a community expect to receive services from PDDs?

Starship Technologies is currently operating in the United States, United Kingdom, Germany, and Estonia with partners like Sodexo, Daimler AG, Intuit, Tesco, Coop, Volkswagen, Novo Nordisk, Bayer, and others, offering PDD delivery in the food, grocery, and parcel industries.

The company is constantly exploring additional opportunities and expects to continue its rapid expansion in jurisdictions with accommodating legal and regulatory frameworks.

## 11. Are there other companies engaged in the development and use of personal delivery devices?

Yes. There are other technology companies developing and deploying ground-based personal delivery devices, including Dispatch Robotics, Marble, Robbie Technologies, TeleRetail, Kiwi, Amazon – Scout, Gita and FedEx.



## 12. How does Starship prevent the PDDs from being used for improper purposes?

Starship's PDDs are always under the control of a Starship PDD operator. Starship's PDDs cannot be used without the consent and knowledge of the company. In fact, <u>only</u> businesses, which have a contractual relationship with Starship, will be able to offer PDD services. Importantly, even these businesses have no operational control over the PDDs. Starship's software and PDD operators guide the devices – no one else!

Individuals will not "own" or "control" their own PDD.

## 13. Where is Starship Technologies currently operating in the US?

In addition to the UK, Germany, and Estonia, Starship Technologies is operating in several locations around the United States, including Washington, DC; Mountain View, California; Fairfax, Virginia; and Flagstaff, Arizona.

Currently, nine U.S. states and the District of Columbia have approved statutes permitting the use of PDDs: Virginia, Idaho, Florida, Wisconsin, Ohio, Utah, Arizona, Texas and Washington.