

# APTERA|FAQ

1.GENERAL

2.PRE-ORDERS

3.COMPANY

4.TECHNOLOGY

5.PERFORMANCE

6.EFFICIENCY



# APTERA|FAQ

## 1. GENERAL

### **What Is Aptera?**

The world's most technologically advanced solar vehicle made possible through breakthroughs in battery efficiency, aerodynamics, material science and manufacturing. Aptera is the first in a line of unique and breakthrough solar vehicles being produced by Aptera Motors that are powered by the sun and won't need charging for most daily use. We're an efficiency-obsessed brand offering an array of safe, comfortable, and fun to drive vehicles.

### **Will Aptera be available in Europe?**

Our goal is to sell Aptera worldwide everywhere possible. Our first three-wheel vehicle may not meet every global market's requirement, but we have an EU homologation and certification expert working with us and we may investigate minor model changes to meet earliest production deliveries. Please follow our social media handles @aptera\_motors for updates.

### **Is Aptera a car?**

No! Aptera is not a car, but the world's first Never Charge Vehicle. Technically speaking, Aptera can be classified as a motorcycle or auto-cycle.

### **Why three wheels?**

Our main goal is efficiency. Efficient transportation is crucial to managing our natural resources. Aptera makes better use of materials in construction, therefore saving precious resources and lessening our overall impact on the planet and each other.

### **What is Aptera made of?**

Carbon, kevlar, and hemp. Sandwich core composites provide great strength.



# APTERA|FAQ

## 1. GENERAL

### **How big is Aptera?**

Aptera is 172" long, 88" wide and 57" high. Aptera has 25 cubic feet of luggage capacity.

### **Is Aptera safe?**

We will not know Aptera's actual rating until we pass a production vehicle through the full safety test. But we are designing to exceed all passenger car standards and the previous version had the highest roof crush strength of all passenger cars on the road, and it performed exceedingly well in actual side and frontal crash tests. Aptera features a Formula One-inspired safety cell with advanced composites and metal structures for impact strength. Similar to aerospace and racing, these energy-absorbing methods are a core part of our safety strategy and have proven effective time and time again in high speed impacts.



# APTERA|FAQ

## 2. PRE-ORDERS

### **How can I make a preorder reservation for Aptera?**

Aptera will be available to pre-order at [www.aptera.us](http://www.aptera.us) beginning at 4 pm PST on Friday, December 4.

### **I made a reservation but my order is not showing up. Why?**

If your order is not showing up in your profile, you most likely made a reservation before signing up for an account. While the system is unable to link them together, we can verify your reservation on our end and your spot is confirmed as long as you received an email with an order number.

### **How much does an Aptera vehicle cost?**

Aptera pricing is between \$25,900 to \$46,900 depending on range and options.

### **Can you tell us more about financing options? How about delivery?**

We will contact customers who have preorder reservations in Aptera in early 2021 with more information about financing and shipping options.

### **I was on the list the first time around. Is my place on the list still valid?**

Thanks for your early support! We are more than happy to honor your place on the list. All we ask is that you leave us a reminder on your new reservation.

### **What type of vehicles will Aptera offer in the future?**

We will focus on aerodynamic, lightweight vehicles with efficient powertrains. And those will likely not look like standard passenger cars. We will expand to more seats and wheels over time, always ensuring our vehicles exceed the highest safety and performance standards.



# APTERA|FAQ

## 2. PRE-ORDERS

### **When will Aptera start delivering preordered vehicles?**

Aptera is working to deliver its first production vehicles before the end of 2021. We will then look to scale production to a rate of 10,000 vehicles a year by the end of 2022.



# APTERA|FAQ

## 3.COMPANY

### **Who is Aptera Motors?**

We're an efficiency-obsessed brand offering an array of safe, comfortable, and fun to drive vehicles. Learn more at [www.aptera.us](http://www.aptera.us).

### **Why are we different?**

Aptera has the longest range of any electric vehicle ever created – breaking the 1,000 mile per charge barrier. Integrated solar can be configured to provide up to 45 miles of range per day with over three square meters and 180 efficient solar cells designed into the body structure. This makes the Aptera the first vehicle capable of meeting most daily driving needs with solar power alone. We have solved key manufacturing challenges allowing for rapid, high-volume and cost-efficient vehicle production - Aptera has just four main pieces.

### **What is our mission?**

At Aptera, we believe efficient transportation is crucial to managing our natural resources. With a focus on efficiency, Aptera makes better use of materials in construction and in their use. This saves resources we cannot afford to waste and lessens our overall impact on the planet and each other.

### **How does Aptera help the environment?**

If Aptera produces one million vehicles, we'll reduce our CO2 footprint by seven million tons per year. Each Aptera owner can reduce their carbon footprint by over 14,000 pounds of CO2 per year, what 884 twenty five year old pine trees can absorb in a year. If one out of every 20 vehicles on the road were replaced with an Aptera, Americans would save 18 million gallons of gasoline every day or six BILLION gallons per year (assuming 20 mpg vehicle and \$3 per gallon gas).



# APTERA|FAQ

## 3.COMPANY

### **Where will Aptera be manufactured?**

We will manufacture these vehicles ourselves and intend to do the initial assembly here in San Diego. Though some sub assemblies may be made elsewhere and eventually we will have other assembly plants around the world

### **Where can I invest?**

Here: <https://wefunder.com/aptera/about>. Your support is truly appreciated!

### **How much funding has Aptera raised?**

Aptera has raised \$3.4 million privately, and another \$1 million from the crowd for a total of \$4.4 million.

### **Where is Aptera located?**

San Diego, CA

### **How big is the Aptera team?**

We have a loyal following of fans and many original team members and supporters who have been a part of the Aptera dream since the beginning. They are all very excited to see Aptera become a reality!

### **Are you hiring?**

We're always looking for talented people who want to join us on our mission to reinvent the future of transportation and create a healthier planet. Please send your resume and cover letter to us at [info@aptera.us](mailto:info@aptera.us).



# APTERA|FAQ

## 3.COMPANY

### **How can I get involved?**

Sign up for our newsletter below or find us on Facebook, Instagram, Twitter, LinkedIn, YouTube and Reddit. Above all, continue spreading the word to your community!

### **Can Aptera handle pre-order demand?**

Working with partners such as Munro & Associates, our first initiatives include the layout of the assembly line and overall manufacturing process, including productionization of metal parts, interior systems, and HVAC. Their expertise will be critical to help Aptera scale and reach its goal of vehicle delivery in 2021.

### **Do you compete with Tesla or other electric vehicles?**

We admire Elon Musk as a true visionary and his accomplishments with Tesla are fantastic. As Elon initially intended with Tesla – he has created the foundation for companies like Aptera to take auto-manufacturing into the future.



# APTERA|FAQ

## 4. TECHNOLOGY

### **What's a solar vehicle?**

Eco-friendly transportation that preserves our natural resources by reducing carbon and chemical emissions. Solar vehicles give people the ability to constantly recharge using the power from the sun without any requirement of a charging station, making the driver independent.

### **What are the benefits of solar?**

One of the key features that sets Aptera apart from other electric vehicles is our unique combination of solar and electric power that will fuel your ride. Watch our video and learn more.

### **What do you mean by Never Charge?**

The average American drives 29 miles per day. Even though the longest range Aptera can drive for about 1,000 miles between charge, the reality is that most of our driving is 30 miles or less. For Aptera, 30 miles consumes about 3 kWh of electricity. Now, let's say your commute is 15 miles each way, let's assume it's dark when you're driving to and from work. While parked at the office on a sunny day, your Aptera could put back in about 4.4 kWh which is far more than what you'll use that day. You'll arrive home with more charge than when you left with. That's how it works, it's as simple as that.

### **How do you charge Aptera when you need to?**

Aptera can be charged and travel up to 1,000 miles in range by plugging into a standard 100 V or 220 V outlet. Aptera will also be compatible with Level 2 and DC Fast Charge stations.

### **How quickly does it charge?**

From the sun, you get up to about 40 miles per day. From a 110v cord (like what you'd charge your cell phone on) you get 13 miles an hour or about 150 miles of charge overnight. At roadside charging stations you'd likely get about 100 miles in 10 minutes.



# APTERA|FAQ

## 4. TECHNOLOGY

### **How many times a year will I need to charge Aptera?**

There is a solar calculator on our website: <https://www.aptera.us/never-charge> This will show you if your daily driving and location are compatible with a "Never Charge" lifestyle or if you will have to charge a few times a year.

### **What solar does Aptera come with?**

Integrated solar can be configured to provide up to 45 miles of range per day with over three square meters and 180 efficient solar cells designed into the body structure. This makes Aptera the first vehicle capable of meeting most daily driving needs with solar power alone.

### **How is it constructed?**

Over 180 efficient solar cells were designed into the body structure with consideration to such things as thermal gradients, solar insolation, and efficient wiring pathways. With this we were able to build a system that is efficient, rugged and that will offer years of charge free driving.

### **How does it work?**

Simple. When the vehicle is in the sun, it's charging. And when it's sunny it is charging fast, over 5 miles per hour at its peak.

### **Why doesn't every electric car do this?**

They'd need a LOT more solar cells (like a 20' billboard size) to do the job. But, because Aptera is so efficient we don't need so many cells. It's a great example of the engineering karma of an efficiency focused design. We use a lot less power to drive, so it takes a lot less power to charge, so much so that an efficient solar panel covering just the top of our vehicle can provide for the driving needs of most Americans.



# APTERA|FAQ

## 4. TECHNOLOGY

### **40 miles of solar range a day isn't enough!**

That's in addition to the 1,000 mile range battery you have. The goal is to have the solar top off the charge in your battery, so you never have to plug in to charge.

### **Can I use any extra power for my home?**

Yes, we will offer home V2G compatibility with your home power system.



# APTERA|FAQ

## 5. PERFORMANCE

### **How fast is Aptera?**

All of our vehicles will be 100 mph+ capable. 0-60 mph in our All-Wheel Drive version clocks in as fast as 3.5 seconds and Front-Wheel Drive as fast as 5.5 seconds. Both versions will be RPM limited to just over 110 mph.

### **How does Aptera handle in the snow and cold weather?**

With all-wheel-drive and vectorized torque control, Aptera handles beautifully in the snow and ice. We are designing specifically for a lot of the cold countries that love electric vehicles. The Aptera will have a full climate control system capable down to -20 and up to 125 degrees Fahrenheit. With our sandwich core composites body offering great insulation and a nice heater, it's very comfortable to drive in the winter.

### **How will Aptera handle repairs?**

We are designing Aptera to be very modular and easy to service anywhere in the world. 24-hour parts, shipping, and mobile service will make most service tasks a breeze. We will open source all of our service and build documentation that allows people to buy outside our service network, do service themselves or with a local shop. We think the "right to repair" should be applied on every large purchase and we are very supportive of "do it yourself" rights!

### **Can a child ride in Aptera?**

There is not a child seat in our first model, which seats two adults and a pet. Our vision is to create efficient solar vehicles with more seats in the near future.



# APTERA|FAQ

## 5. PERFORMANCE

### **Will Aptera be self-driving?**

Yes, Aptera is working towards a self-driving model, although those capabilities will be released in stages.

### **What kind of wheels does Aptera have?**

Elaphe's exceptional in-wheel motor technologies give Aptera exceptional ride comfort, sporty performance, and tunable efficiency to assure the lowest energy usage possible. The standard motor package will be on typical 16" rims with a 195/45/r16 tire.

### **What about braking?**

Aptera will offer regenerative braking, which uses an electric vehicle's motor as a generator to convert much of the kinetic energy lost when decelerating back into stored energy in the vehicle's battery. Then, the next time the car accelerates, it uses much of the energy previously stored instead of tapping in further to its own energy reserves. Aptera will offer adjustable levels in 3 or 4 settings, from off to very heavy regen braking.

### **Is Aptera Front-Wheel or All-Wheel Drive?**

Aptera offers both front and all-wheel drive packages.

### **Does Aptera have air conditioning?**

It does, and it is very well insulated with its sandwich core composite construction. The solar also allows the interior to stay at ambient temps on hot days so you don't have to cool the car down before driving in the summer.



# APTERA|FAQ

## 5. PERFORMANCE

### **What kind of sound system does Aptera have?**

In addition to a seven-speaker audio system, you can upgrade to an extra three channels of audio for great sound depth. An added lightweight transmission-line subwoofer brings accurate and deeper bass response.

### **What is the wheel clearance?**

5" to the bottom of the wheel covers and 9" to the bottom of the belly of the Aptera.



# APTERA|FAQ

## 6. EFFICIENCY

### **How efficient is Aptera?**

Watch this video to see efficiency explained: [https://www.youtube.com/watch?v=qgXIKDVL8rs&feature=emb\\_logo](https://www.youtube.com/watch?v=qgXIKDVL8rs&feature=emb_logo)

### **What makes Aptera so efficient?**

Most vehicles today waste more than 65% of their energy at highway speeds due to aerodynamic drag. Aptera's unique body shape allows it to slip through the air using far less energy than any other vehicle on the road. We can burn 30% of the energy the average EV does to go the same distance. Aptera puts over 90% of its battery pack's energy into propelling itself with regenerative braking to add range.

### **What is Aptera's drag coefficient?**

The vehicle is made of lightweight composites that are many times stronger than steel, allowing its unique body shape to slip through the air with an unheard-of drag coefficient (Cd) of .13.

### **Why is efficiency important?**

Efficient transportation is crucial to managing our natural resources. With a focus on efficiency, Aptera makes better use of materials in construction and in their use. This saves resources we cannot afford to waste and lessens our overall impact on the planet and each other.

### **How is Aptera's manufacturing process more efficient?**

Aptera uses additive manufacturing processes to rapidly scale production and allow for design variants to be added frequently (printed parts can be produced in just a few days versus the long turn times it takes with traditional methods). One composite part can take the place of tens of steel parts needed to do the same job, and is many times stronger.



# APTERA|FAQ

## 6.EFFICIENCY

### **How does Aptera use AI for greater efficiency?**

Artificial Intelligence (AI) can optimize the design of parts for the most strength with the least amount of material and weight. In most parts, we can achieve a 30-50% weight saving over the same part cast as a solid piece.

