

What Is The Fastest Supercar

What Is The Fastest Supercar Downloaded from evoluir.abar.org.br by Finn & Phoebe

THE ULTIMATE QUESTION: WHAT IS THE FASTEST SUPERCAR IN THE WORLD?

For decades, the automotive world has been locked in a relentless pursuit of speed. Enthusiasts and engineers alike have debated, tested, and pushed the boundaries of physics to answer one simple yet exhilarating question: **What is the fastest supercar?** The answer, however, is far from straightforward. It depends on whether you measure top speed, acceleration from a standstill, or the time it takes to complete a quarter-mile. This article explores the current kings of speed, the records they hold, and the engineering marvels that make them the fastest machines on four wheels.

In the modern era, the title of "fastest supercar" is a moving target. Just a few years ago, the Bugatti Veyron shattered expectations with a 253 mph top speed. Today, that number seems almost pedestrian. Hypercars have emerged as a distinct category, pushing past the 300 mph barrier. But as we dive into this high-octane topic, we'll look at production vehicles, prototypes, and the subtle distinctions that define who truly wears the crown.

DEFINING "FASTEST": TOP SPEED VS. ACCELERATION VS. TRACK TIMES

Before naming a specific model, it is crucial to understand what "fastest" means. The phrase **What Is The Fastest Supercar** can be interpreted in several ways, and each interpretation might yield a different champion.

- **Top Speed (Maximum Velocity):** This is the highest speed a car can achieve on a straight road. Currently, the battle for the highest top speed is the most publicized, with claims exceeding 300 mph.
- **Acceleration (0-60 mph / 0-100 km/h):** Some cars are built to launch off the line like a rocket. Electric hypercars such as the Rimac Nevera and Pininfarina Battista can hit 60 mph in under 2 seconds, far quicker than most internal combustion engine (ICE) supercars.
- **Quarter-Mile Time:** A traditional drag racing metric, the quarter-mile time combines both acceleration and top-end speed over a fixed distance.
- **Lap Time (Track Performance):** A car that is fast in a straight line may not handle well on a circuit. The Nürburgring Nordschleife lap record often serves as a benchmark for overall performance, with cars like the Mercedes-AMG One and Porsche 911 GT2 RS dominating.

For the purpose of this article, we will primarily focus on **top speed records** for production cars, while acknowledging other forms of speed where relevant. The official world record for the fastest production car is currently held by the SSC Tuatara, but several other contenders have legitimate claims.

THE CURRENT REIGNING CHAMPION: SSC TUATARA

When you search for **What Is The Fastest Supercar**, the name SSC Tuatara immediately appears. In 2020, SSC North America announced that their Tuatara had achieved a verified two-way

average top speed of **316.11 mph** (508.73 km/h) on a closed highway in Nevada. Later, in 2022, the company confirmed a new record with a two-way average of **295 mph** (474.8 km/h) on a public road near the Space Coast of Florida, though challenges about the GPS verification have kept the debate alive.

The Tuatara is powered by a twin-turbocharged 5.9-liter V8 engine that produces 1,750 horsepower on E85 fuel (or 1,350 hp on 91 octane). Its incredibly low drag coefficient of 0.279 Cd is key to its high-speed performance. The car's name comes from a reptile native to New Zealand, symbolizing its ability to adapt and survive at extreme speeds.

THE 300+ MPH CLUB: CHALLENGERS AND CONTROVERSIES

Bugatti Chiron Super Sport 300+

Bugatti made history in 2020 when a pre-production Chiron Super Sport 300+ became the first production-based car to break the 300 mph barrier, reaching **304.773 mph** (490.484 km/h) on the Volkswagen Group's Ehra-Lessien test track. However, Bugatti's record was a one-way run and the car was not a standard production model, leading some purists to argue it does not officially count as a production car record. Nevertheless, the Chiron Super Sport 300+ is limited to 30 units and remains an icon of engineering.

Powered by an 8.0-liter quad-turbo W16 engine producing 1,578 hp, the Chiron uses a combination of a long-tail body and advanced aerodynamics to slice through the air. Its top speed is electronically limited to 273 mph for the regular version, but the 300+ variant uncorks the full potential.

Hennessey Venom F5

Tuning company Hennessey Performance Engineering built the Venom F5 with the explicit goal of surpassing 300 mph. The car is powered by a bespoke 6.6-liter twin-turbo V8 called "Fury," delivering 1,817 hp. Although Hennessey has not yet achieved a certified public record above 300 mph, they have claimed simulation results suggesting a top speed over 310 mph. In early 2024, a Venom F5 was clocked at 271.6 mph in a test run, but the company continues to attempt the ultimate record. The F5's lightweight carbon-fiber construction (just 2,998 lbs) gives it an incredible power-to-weight ratio.

Koenigsegg Jesko Absolut

The Swedish manufacturer Koenigsegg has built the Jesko Absolut specifically for top speed. It features a 5.0-liter twin-turbo V8 engine that runs on E85 fuel producing 1,600 hp (with standard fuel delivering 1,280 hp). The Absolut has a drag coefficient of just 0.278 Cd, even lower than the Tuatara. Koenigsegg claims a theoretical top speed of **330 mph** (531 km/h), but this has not yet been proven on a public road or track. The car is designed with no large rear wing, instead using active aerodynamics to maintain stability. Until an official run is conducted, the Jesko

Absolut remains a tantalizing "what if" in the hypercar world.

THE ELECTRIC REVOLUTION: RIMAC NEVERA AND PININFARINA BATTISTA

While internal combustion supercars battle for the ultimate top speed, electric hypercars have redefined acceleration. The **Rimac Nevera** holds the record for the fastest production car from 0 to 60 mph, achieving **1.74 seconds**. It also set a quarter-mile time of 8.25 seconds at 171.5 mph, the quickest ever for a production vehicle. The Nevera's four electric motors produce a combined 1,914 hp, and its top speed is electronically limited to 258 mph.

The **Pininfarina Battista**, sharing the same underlying powertrain as the Rimac, also delivers similar acceleration numbers (0-60 in 1.79 seconds). However, its top speed is slightly lower at 217 mph. While electric hypercars excel at low-end torque and instant power delivery, they face challenges with battery cooling and weight when attempting top speed records above 250 mph.

It is worth noting that as of 2025, no electric car has officially broken the 300 mph barrier. However, companies like **Lotus (with the Evija)** and **Dodge (with the upcoming electric Challenger)** are working on higher-speed electric platforms. The question **What Is The Fastest Supercar** may soon have an all-electric answer.

OTHER CONTENDERS AND HONORABLE MENTIONS

McLaren Speedtail

The McLaren Speedtail is a three-seat hybrid hypercar with a top speed of 250 mph. While not a record-holder, it represents the pinnacle of McLaren's "Hyper-GT" philosophy, combining speed with luxury. Its 1,035 hp twin-turbo V8 hybrid powertrain allows for a 0-186 mph time of just 12.8 seconds.

Lamborghini Aventador SVJ & Revuelto

Lamborghini's V12 flagship, the Aventador SVJ, held the Nürburgring production car lap record for a time and has a top speed of 217 mph. The new hybrid Revuelto pushes that toward 220 mph but is more focused on track agility than pure top speed.

Ferrari SF90 Stradale & 812 Superfast

Ferrari's 812 Superfast lives up to its name with a 6.5-liter V12 producing 789 hp and a top speed of 211 mph. The hybrid SF90 Stradale is quicker to 60 mph (2.5 seconds) due to its electric

motors, but its top speed is similar at 211 mph. While not in the 300 mph club, these cars are benchmarks of Italian performance.

WHAT MAKES A SUPERCAR "FASTEST"? ENGINEERING SECRETS

To truly understand **What Is The Fastest Supercar**, one must look at the engineering decisions that enable such incredible numbers. Achieving a top speed above 300 mph requires a near-perfect synergy of several factors:

- 1. **Power-to-Weight Ratio:** A lightweight body (carbon fiber, titanium) allows a smaller engine to produce better acceleration. The Hennessey Venom F5 weighs less than 3,000 lbs while producing over 1,800 hp.
- 2. **Aerodynamics:** A low drag coefficient is essential. Cars like the SSC Tuatara and Koenigsegg Jesko Absolut prioritize sleek shapes with minimal frontal area. Active aerodynamics (adjustable wings, flaps) help maintain stability without increasing drag.
- 3. **Tire Technology:** At 300+ mph, centrifugal forces can tear tires apart. Specialized tires from Michelin, Pirelli, or Bridgestone are designed to withstand extreme heat and pressure. Tire pressure is often adjusted to reduce rolling resistance at high speeds.
- 4. **Transmission and Gearing:** A seven-speed or nine-speed automated manual gearbox must be tuned to keep the engine at peak power across the speed range. The Tuatara uses a unique seven-speed gearbox with a helical gear design for lower friction.
- 5. **Cooling Systems:** Engines produce immense heat at high speeds. Brake cooling, engine oil coolers, and even intercooler systems must be oversized to prevent failure. The Bugatti Chiron has 10 radiators to manage heat.
- 6. **Stability Control:** At 300 mph, a crosswind can be catastrophic. Electronic stability control systems must be calibrated to allow driver input while preventing spins. Many hypercars also use four-wheel steering for added stability.

THE FUTURE: WHAT'S NEXT FOR THE FASTEST SUPERCAR?

The race for the title of world's fastest supercar is far from over. Several upcoming models threaten to rewrite the record books:

- **Bugatti Bolide:** A track-focused hypercar with a 1,578 hp W16 engine, but its top speed is limited due to downforce. It focuses on lap times rather than straight-line speed.
- **Hennessey Project Deep Space:** A planned hybrid hypercar with a target of over 300 mph, but details remain scarce.
- **Gordon Murray T.50s:** Not designed for top speed, but its Cosworth V12 and lightweight construction (under 1,800 lbs) make it one of the most engaging supercars ever built.
- **Electric Future:** OEMs like Tesla, Lucid, and even startups like