



PORSCHE

Cayenne Turbo GT

Press Kit

Highlights

Outstanding athlete.

With the Cayenne Turbo GT, Porsche is underlining its claim to best-in-class performance – and at the same time offering a high degree of everyday usability.

Pure emotion.

The 4.0-litre biturbo V8 has 471 kW (640 PS) and 850 Nm and offers exceptional driving dynamics. Thanks to its exclusive titanium sports exhaust system, it also produces an emotive soundtrack.

Dynamic in every way.

The Turbo GT is equipped as standard with all chassis and control systems currently available for the Cayenne. These are designed and adapted to ensure optimum performance and handling.

A strong character.

The exceptional sportiness of this model is underscored by a progressive design with specific features and a large number of carbon elements. It is available exclusively as a four-seater Coupé.

A sporty appearance.

The athletic character and exclusivity of the Cayenne Turbo GT are underlined by the standard equipment. Dark colours, specific accents, and items finished in Alcantara® dominate.

New infotainment system.

The Turbo GT marks the introduction of the new Porsche Communication Management (PCM 6.0) system for the Cayenne. This emphasises the sportiness of the vehicle and is intuitive, functional and driver-focused.

High-performance SUV with an output of 471 kW (640 PS) and racetrack-focused set-up

New sporting hero from Porsche: the Cayenne Turbo GT

Porsche rounds off the Cayenne model range with a sporting hero: consistently set up for maximum performance and handling, the new Cayenne Turbo GT combines outstanding driving dynamics with a high degree of everyday usability. Its 471 kW (640 PS) four-litre biturbo V8 provides the basis for superb driving characteristics. With 67 kW (90 PS) more than the Cayenne Turbo Coupé and maximum torque of 850 Nm (an increase of 80 Nm), the Cayenne Turbo GT reduces the 0-100 km/h sprint to 3.3 seconds (0.6 s less). Top speed is now 300 km/h (an increase of 14 km/h). With even sportier lines and available exclusively as a four-seater Coupé, the Cayenne Turbo GT comes with all available chassis systems fitted as standard and performance tyres developed specifically for this model. The powertrain and chassis also have a unique set-up specifically tuned for the Cayenne Turbo GT. The result is a harmonious overall concept with superb racetrack capability. This has been proven by Porsche test driver Lars Kern, who lapped the 20.832-km Nürburgring Nordschleife with the Cayenne Turbo GT in 7:38.9 minutes, setting a new official SUV record.

Compared to the Cayenne Turbo Coupé, the Turbo GT rides up to 17 millimetres lower. Based on this, both the passive chassis components and active control systems have been re-engineered and optimised for handling and performance. They also feature specific calibration to guarantee perfect interaction between them. As an example, the rigidity of the three-chamber air suspension has been increased by up to 15 per cent, and the damper characteristics of the Porsche Active Suspension Management (PASM) as well as the application of the Power Steering Plus and rear-axle steering have also been adapted. The Porsche Dynamic Chassis Control (PDCC) active roll stabilisation system now operates with performance-oriented control software. The result is even better roll stability and roadholding as well as more precise turn-in behaviour at higher cornering speeds. In line with this, the Porsche Torque Vectoring system allows higher torque bias ratios. The comprehensively optimised front axle also improves handling. Compared to the Turbo Coupé, its front wheels are an inch wider and negative camber has been increased by 0.45 degrees to give the new

22-inch Pirelli P Zero Corsa performance tyres, specially developed for the Turbo GT, a larger contact patch. Braking duties are performed by the standard-fit Porsche Ceramic Composite Brake (PCCB) system.

Quicker-shifting Tiptronic S and titanium sports exhaust system

The Cayenne Turbo GT's biturbo engine is currently Porsche's most powerful eight-cylinder unit. The most extensive upgrades were carried out in the areas of the crankshaft drive, turbocharger, direct fuel injection, intake system and intercooler system. The V8 of the Turbo GT differs from that of the Turbo Coupé in fundamental elements such as its crankshaft, connecting rods, pistons, timing chain drive and torsional vibration dampers. Given the increase in power to 471 kW (640 PS), these components have been designed for higher peak loads and improved driving dynamics. The Porsche Traction Management (PTM) system and eight-speed Tiptronic S, with shorter shifting times, have also been modified. In addition, there is extra water cooling for the transfer case. The standard sports exhaust system, with its central tailpipes, is unique to the Cayenne Turbo GT. From the middle of the vehicle, the exhaust system, including the rear silencer, is made from lightweight and particularly heat-resistant titanium. An additional weight saving is achieved through the omission of the centre silencer.

Sporty equipment: lots of carbon on the exterior, lots of Alcantara® in the interior

The Cayenne Turbo GT, for which the new Arctic Grey colour is an available option, accentuates its exceptionally sporty status thanks to its progressive design with a number of outstanding characteristics. The nose section is exclusive to the GT: a striking spoiler lip and larger side air intakes characterise the car's unique front-end design. Its side view is dominated by a contoured carbon roof and black wheel arch extensions, together with 22-inch GT-design wheels in Neodyme. The carbon side plates fitted lengthwise to the roof spoiler are GT-specific, as is the adaptively extendable rear spoiler's lip, which is 25 mm larger than that fitted to the Turbo. This increases downforce at the car's top speed by up to 40 kg. A striking carbon diffuser panel rounds off the design at the rear.

Debut in the Turbo GT: new infotainment system for the Cayenne

The sporty character of the Cayenne Turbo GT is highlighted by the high-quality standard equipment and extended Alcantara® features of its interior. Eight-way sport seats in the front and a sport rear-seat system with two seats are standard. They each come with GT-specific perforated seat centre panels in Alcantara, contrasting accents in Neodyme or Arctic Grey and 'turbo GT' lettering on the headrests. The multifunction sports steering wheel features a yellow 12 o'clock marking, which is typical of Porsche's sports cars. Depending on the specified trim, selected accent strips are finished in matt black.

With the Turbo GT, the next-generation Porsche Communication Management (PCM) system is launched onto the market in the Cayenne with improved performance, a new user interface and new operating logic. As before, PCM 6.0 is fully compatible with Apple CarPlay but now also allows for in-depth integration of Apple Music and Apple Podcasts. In addition, the infotainment system now also includes Android Auto. This means that the most common smartphones can be integrated.

Chassis and control systems

Fit for the racetrack

The driving dynamics of the Cayenne Turbo GT have been comprehensively set up to sports car standards and designed with the potential for track use in mind. This starts with the car's centre of gravity: compared with the panoramic glass roof usually installed on all Cayenne Coupé models, the carbon roof saves around 22 kg at the highest point on the car. The lighter roof not only reduces the overall weight of the vehicle, it also lowers its centre of gravity – so important for driving dynamics – and reduces body roll. This effect is reinforced by the car riding 17 mm lower than the Cayenne Turbo Coupé. This creates the prerequisites for outstanding driving dynamics. Both the passive chassis components and the active control systems have been modified to this end in order to achieve optimum performance and handling. The way that the components and systems interact has also been configured especially for the Turbo GT.

The new sporty Cayenne flagship has every active system for enhancing driving performance offered in the product line fitted as standard. In addition to the adaptive three-chamber air suspension with Porsche Active Stability Management (PASM), Power steering Plus, the Porsche Dynamic Chassis Control (PDCC) adaptive roll compensation system, rear axle steering and Porsche Torque Vectoring Plus (PTV Plus) are all fitted as standard.

Performance tyres specifically developed for lateral dynamics

The basis for the new set-up was provided by the 22-inch Pirelli P Zero Corsa tyres developed especially for the Cayenne Turbo GT. Compared with the 21-inch performance tyres that are already available as an option on all Cayenne models, these offer even more grip, are balanced for enhanced performance and reduce understeer. On the front axle, the flange-to-flange rim width is now 10.5 inches – one inch wider than the standard Cayenne Turbo wheels and 0.5 inches wider than the optional 22-inch GT Design wheels of the Cayenne Turbo Coupé. The front 285/35 ZR22 tyres can therefore transfer increased cornering forces, and the Turbo GT turns in more precisely and allows higher lateral

acceleration. This increased cornering grip is supported by 0.45 degrees more negative camber. The chassis specialists have extended the limit range along with the tyre size and camber setting: during extensive testing, they ensured that the wheels clear the arches during even the most dynamic driving manoeuvres. The actively steering rear axle delivers the lion's share of the power via 315/30 ZR22 tyres.

Systematic coordination with all active systems

In order to optimally handle the higher loads, the rigidity of the air suspension has been increased in all three stages. The system is approximately ten per cent firmer in Normal mode, and approximately 15 per cent more so in Sport Plus mode. This has made it necessary to also adapt the damper characteristics, which are now significantly firmer at the front. As a result, the higher roll stability, better roadholding and more precise turn-in behaviour permit higher cornering speeds. In addition, longer helper springs have been installed, which also reduce pitching and roll movements. On the rear axle, stiffer damper mounts ensure a more sensitive response.

When setting up the running gear, the goal was to fully exploit the dynamic potential of the Turbo GT in Sport Plus mode, while still generating the harmonious chassis characteristics typical for Porsche. The set-up guarantees that the driver has the feeling that the car offers a pleasant ride in Normal mode, despite the distinctly firm chassis settings.

The sporty chassis set-up is supplemented by the Porsche Dynamic Chassis Control (PDCC) electro-mechanical anti-roll stabilisation system, which features adapted control software. The system adapts the torsional rigidity of the anti-roll bars on the front and rear axles within a few milliseconds, thereby actively supporting the vehicle's body. At lateral acceleration of up to 0.8 g, any body lean in a Cayenne Turbo GT with two occupants is suppressed. This also controls the load on the tyres and prevents early slip on the inside wheels.

Handling like a compact sports car

The steering systems have also been updated, with increased feedback from the front-axle steering to ensure that the driver receives even more precise information about the driving

situation and road conditions. The changed set-up does not have any influence on the steering forces and steering comfort. Thanks to its standard rear-axle steering, the Cayenne Turbo GT turns in without delay and builds up lateral acceleration at the rear axle much sooner. Both axles steer in the same direction at higher speeds. This function has been modified on the Turbo GT in order to exploit the potential of the specially designed sport tyres. The effect is a further increase in driving stability, which is particularly evident on high-speed sections of race circuits. The adapted Porsche Torque Vectoring Plus (PTV Plus) supports turn-in behaviour with targeted brake interventions and ensures better traction when accelerating out of bends thanks to the fully variable differential lock. This completely new system set-up ensures that the Cayenne Turbo GT feels much smaller and lighter from the driving seat.

To match its distinctly dynamic performance, the Cayenne Turbo GT has the Porsche Ceramic Composite Brake (PCCB) system. The grip potential of the sporty tyres has made it possible to achieve even more exact ABS interventions. This precise control at the slip limit is especially advantageous when braking into corners on a racetrack. The Cayenne Turbo GT exploits the limit of the factory-fitted tyres so that the Coupé is not just very fast, but also very easy to drive.

Wide range of assistance systems

Porsche offers a comprehensive range of driver assistance systems for the new Cayenne Turbo GT, which were developed for the complete Cayenne range. Increased safety and greater comfort on journeys are ensured by the warning and braking assist system, Night Vision Assist, Lane Change Assist and Lane Keeping Assist with Traffic Sign Recognition as well as Porsche InnoDrive with Adaptive Cruise Control. Remote Park Assist, Park Assist with Surround View and front and rear Park Assist with rear-view camera make it easier to park in tight spaces, manoeuvre in multi-storey car parks and drive into garages.

Powertrain and performance

The most powerful biturbo V8 from Porsche

The V8 biturbo engine of the Cayenne Turbo GT is currently the most powerful eight-cylinder engine from Porsche. Its additional 67 kW (90 PS) corresponds to a power hike of approximately 16 per cent compared with the engine of the Cayenne Turbo, which serves as its basis. The most extensive engine modifications have been on the crankshaft drive, turbochargers, direct petrol injection system, and on the intake and intercooler systems.

The internals of the GT model's eight-cylinder engine differ with respect to fundamental components such as the crankshaft, connecting rods, pistons, timing chain drive and torsion vibration dampers. In view of the increased power, these components have been designed for higher load peaks and driving dynamics. In some cases, new materials have been used to further and significantly enhance the engine's robustness during track use. New fuel injectors supply a flow rate that is approximately ten per cent higher than before with an unchanged maximum injection pressure of 250 bar.

The engine's entire airflow system has been designed for increased throughput. Larger air/water intercoolers allow a higher volume to pass through, and the turbochargers have larger compressor wheels. Both efficiency and power have been increased in combination with a maximum boost pressure raised to 1.6 bar. In order to improve responsiveness and performance, turbocharger pre-loading has been increased at higher engine speeds. This means that a boost pressure reserve is built up between the turbocharger and throttle valve in partial load and overrun operation, which is then released when the driver presses the accelerator and transformed into instantaneous torque output. To prevent the knock limit from being exceeded, the engine's compression ratio has been reduced from 10.1:1 to 9.7:1. Three additional radiators ensure that the driver can call on the engine's power continuously and without restrictions under all conditions.

Custom design: titanium sports exhaust system

The standard sports exhaust system, with its centrally positioned tailpipes, is bespoke. From the middle of the vehicle, the exhaust gas tract including rear silencers is made of titanium. This material is significantly lighter than the stainless steel used directly in the tract from the engine and is also characterised by high corrosion and temperature resistance. The centre silencer is also omitted on the Cayenne Turbo GT. Overall, the sports exhaust system is around 18 kg lighter than the one on the Cayenne Turbo. The two exhaust branches are routed separately from each other. A continuously adjustable flap in each branch fully or partially opens a bypass around the main silencer, depending on load and engine speed. The effect is a particularly distinctive sound, which takes its inspiration from the motorsport arena and differentiates the Cayenne Turbo GT acoustically.

Modified eight-speed Tiptronic S changes gear faster and more emotively

The eight-speed Tiptronic S already behaves in a noticeably different way to the automatic transmission in the Cayenne Turbo, even in Normal mode: changing gear more quickly and accompanying downshifts with an emotive crackle on the overrun. In Sport mode, the reaction times for gearshifts are shorter, and there is distinct acoustic feedback. Sport Plus mode is designed for maximum performance. It offers the optimum set-up for the racetrack and was developed on the Nürburgring Nordschleife. Sport Plus mode also allows a lower gear to be manually preselected during braking, which is then automatically engaged as soon as the engine speed permits.

The significant increase in power and racetrack-capable driving dynamics also required a special set-up for the all-wheel-drive system. This is because the instant power delivery of the twin-turbocharged V8 can potentially lead to wheelspin sooner. The response of the Porsche Traction Management (PTM) control system has therefore been made even faster and the power distribution optimised for the demands of the racetrack. The PTM uses variable and adaptive strategies to control the power distribution between the rear and front axles. In addition, the system continuously monitors driving conditions and preloads the all-wheel-drive system as a preventive measure if necessary. As a result of the higher load

peaks, the thermal limit range of the hang-on system has been shifted upwards. A gearbox water cooling system installed exclusively for the Cayenne Turbo GT counteracts this effect.

Design and colours

Self-confident appearance

The Cayenne Turbo GT is available exclusively as a Coupé, with a roofline that falls steeply to the rear. It has the unmistakable features of a sports car with Porsche design DNA: an elongated silhouette, powerful air intakes, sophisticated aerodynamics, a wide track and a distinctive finish. A host of specific modifications distinguish the sporty flagship model from the other Cayenne derivatives.

The front end emphasises the performance aspirations of the Cayenne Turbo GT. The front apron is painted mainly in the exterior colour, while the air intake grilles and other details are in matt black. The larger side cooling air intakes guarantee the required supply of air to the biturbo engine. A pronounced spoiler lip ensures aerodynamic downforce on the front axle and rounds off the front apron towards the road. The Cayenne Turbo GT is equipped as standard with darkened LED headlights including Porsche Dynamic Light System (PDLS). LED matrix headlights including Porsche Dynamic Light System Plus (PDLS Plus) are available as an option.

The Cayenne Turbo GT is designed to hug the road: it has been lowered by 17 mm compared with the Cayenne Turbo Coupé and by 7 mm in comparison with the Cayenne GTS Coupé. In profile, the eye is immediately drawn to the 22-inch wheels painted in Neodyme and the matt-black side sills and wheel housing extensions. The contoured carbon roof is also standard, which lowers both the car's centre of gravity and its overall weight. The upper housing shells of the exterior mirrors are also made of carbon, while the lower mirror shells and base have a contrasting gloss black finish.

The rear design also reflects the performance set-up of the Cayenne Turbo GT. The adaptively extending rear spoiler features a spoiler lip that has been increased in size by 25 mm to 50 mm compared with the Turbo Coupé, generating up to 40 kg of downforce on the rear axle. The black roof spoiler is finished with sideplates made of carbon. The 'turbo GT' model designation on the rear lid is finished in matt black. The rear diffuser in carbon has

four pronounced ribs and frames the two central tailpipes of the titanium sports exhaust system. The titanium shimmers blue on the inner sides as soon as the exhaust system has been exposed to high temperatures for the first time.

Large choice of exterior colours

Porsche is introducing a new special colour, Arctic Grey, for the Cayenne Turbo GT. In addition, the Individual Colour option for the Turbo GT and the whole Cayenne product line means that there are many different possibilities for customising the exterior. Customers can choose a colour according to personal taste, thanks to a wide range of more than 50 shades offered by the Porsche Exclusive Manufaktur, which includes already approved colours, and historic Porsche hues.

Interior and equipment

Sporty surroundings

From behind the multifunction sports steering wheel, it becomes instantly obvious that the interior of the Cayenne Turbo GT has been designed for functionality and optimum ergonomics during dynamic cornering. The black Alcantara® steering wheel is not just a visual highlight but also offers perfect grip. The 12 o'clock marking in Racing Yellow offers a visual reference point for the current steering angle in every driving situation. When looking through the sports steering wheel at the instrument cluster, the analogue rev counter with silver-grey dial, Racing Yellow needle and 'turbo GT' lettering immediately catches the eye. To the right and left of the rev counter are two full HD displays, which are typical Cayenne features. These show configurable vehicle information depending on user settings. The 'turbo GT' lettering can also be found on the door entry sills. These are illuminated as standard and finished in carbon.

The Alcantara® and extended leather interior creates an exclusive and sporty atmosphere in the Cayenne Turbo GT. The grab handles, upper dashboard section supports, upper door trim panels including armrests, centre console cover, roofliner, A-, B- and C-pillar trim, centre console edging at the rear, and the perforated seat centre panels of the eight-way sports seats in the front and on the two rear seats are all finished in this high-quality material. The GT interior package, with contrasting stitching in Neodyme or optionally in Arctic Grey, creates colour highlights. The 'turbo GT' lettering on the front and rear headrests, decorative seams on the seats, centre console, dashboard and upper door trim panels, feature the corresponding colour, as do the seatbelts.

The sporty interior look is rounded off by the standard Carbon interior package as well as all-round matt black accent strips that are exclusive to the GT. The various trim frames and strips, such as on the air vents, are not finished in silver as they are in other Cayenne models, but instead are painted black.

In addition to the standard eight-way sports seats, adaptive sports seats with 18-way adjustment are optionally available. And alternatively to the Alcantara® interior items, it is also possible to order smooth-finish leather interiors in Black and Black/Bordeaux Red. The GT interior package with the coloured contrast stitching is then omitted.

Infotainment

New PCM: knows more, does more, listens better

The sixth generation of Porsche Communication Management (PCM) is being introduced in all Cayenne models. The most significant innovations include in-depth integration of Apple Music and Apple Podcasts streaming services into the PCM and the inclusion of Android Auto for the first time. In addition, the Voice Pilot voice assistant can now understand instructions in more natural language and is capable of learning. The navigation system calculates faster and displays its information more clearly. PCM 6.0 also ensures that software updates for the control units can be carried out in future using over-the-air technology – wirelessly and without the need to visit a workshop.

Additional flexibility with Android Auto

The new PCM 6.0 also features the integration of Android Auto. In addition to Apple's iPhones, smartphones with Google's Android operating system can now also be integrated into the infotainment system of Porsche models. This takes place automatically as soon as the mobile phone is connected to the vehicle via USB cable, at which point phone functions and smartphone apps that do not affect driving safety can be operated via PCM 6.0.

Porsche seamlessly integrates Apple Podcasts and Apple Music into the vehicle

Apple Music subscribers have ad-free access to more than 75 million songs thanks to a free three-year in-car internet connection. They can also stream thousands of playlists and choose every day from selections curated by the world's best current music experts. They also have access to all artists and radio hosts who broadcast on the global livestream stations Apple Music 1, Apple Music Hits and Apple Music Country. More than 1.5 million podcasts on the world-leading Apple Podcasts platform are also available to Porsche drivers, providing information, entertainment and inspiration on every journey. To access these, all they have to do is to connect to their vehicle using their Apple ID. The smartphone does not even have to be in the car in order to use Apple Podcasts or Apple Music.

“We have succeeded in combining the classic radio experience with the modern streaming experience,” says Martin Bayer, Team Leader Navigation and Infotainment at Porsche AG. “It is not just about listening to music, but rather the in-depth integration of Apple Music into the Porsche infotainment system. The driver can add a song that they hear on the radio to an Apple playlist so that they can listen to it again later. Or, if the driver likes a particular artist on the radio, they can switch to a specific Apple station that will play only their music.”

Porsche vehicles equipped with the new PCM 6.0 also feature wireless support for Apple CarPlay. This allows customers to easily establish a wireless connection between their iPhone and the vehicle. By simply tapping the touchscreen display or using Siri voice control, they can receive traffic-optimised navigation routes, make voice calls, send and receive messages and play music and podcasts. And they can keep their eyes on the traffic at all times while doing so.

Voice Pilot is now more human

It will now be possible to simply say “Hey Porsche”, as is already the case in the Taycan. The vehicle will then carry out commands without the driver having to take their hands off the steering wheel or their eyes off the road. For example, the phrase “I need petrol” results in the navigation system finding a route to the next filling station. Saying “I am cold” automatically increases the interior temperature, while massage seats or ambient lighting can also be voice-controlled as required. Voice Pilot is permanently online and continually learns new phrases: over time, the system will keep improving, providing more and more support to the driver.

The navigation system is now more powerful

The new hardware and software architecture of PCM 6.0 allows even faster calculations by the navigation system – always taking into account real-time traffic information. The significantly reduced and more clearly designed map view is also a factor that contributes to the speed at which information is provided. Using real-time traffic data, roads are shown in

different colours depending on the traffic situation. The route monitor permits fast access to all relevant information. Among other things, traffic jams and waypoints on the route are shown in a clear way. The Porsche navigation system now also shows traffic information for individual lanes.

More intensive communication between human and machine

With PCM 6.0, Porsche brings the digital functions of the Taycan electric sports car to combustion engine models for the first time. The interactive digital 'Good to know – Driver's Manual' is integrated into the system, smartphone calendar entries are displayed on the PCM 6.0 touchscreen via the Porsche Connect app and, if there is an active Bluetooth connection between car and smartphone, Porsche drivers can also dial into conference calls using the calendar service. Software updates for the infotainment system are also possible via over-the-air technology.