Revised V8 with 500 PS

24/07/2026 Central characteristics of the Cayenne GTS models

The charismatic eight-cylinder engine and the performance-focused overall design are central characteristics of the Cayenne GTS models. For the new Cayenne, the 4.0-litre twin-turbo V8 engine, developed by Porsche and manufactured in Zuffenhausen, has been extensively revised. This has resulted in a power increase of 30 kW (40 PS) to 368 kW (500 PS) (**Cayenne GTS (WLTP)*:** Fuel consumption combined: 12.7 – 12.1 l/100 km; CO_2 emissions combined: 289 – 277 g/km; CO_2 class: G, **Cayenne GTS Coupé (WLTP)*:** Fuel consumption combined: 12.7 – 12.1 l/100 km; CO_2 emissions combined: 290 – 277 g/km; CO_2 class: G). With a maximum torque of 660 Nm, when combined with the Sport Chrono package, the four-door sports car sprints to 100 km/h in 4.4 seconds – two tenths of a second faster than the previous model. The Cayenne GTS accelerates from 0 to 200 km/h in 16.7 seconds and has a top speed of 275 km/h.

The reworked eight-cylinder engine offers higher performance with reduced emissions and lower fuel consumption. For example, Porsche improved the engine's efficiency by switching from a twin-scroll to a single-scroll turbocharger. This results in higher exhaust gas temperatures under highly dynamic driving conditions and lowers fuel consumption. New electrically controlled wastegates regulate the

boost pressure of the turbocharger, thereby noticeably optimising the engine's responsiveness. Additionally, Porsche has increased the fuel injection pressure to 350 bar.

Another innovation in the high-performance engine is the two-stage valve lift changeover. Both intake camshafts have two cam profiles per valve. Actuators switch between these profiles at lightning speed. Thus, at low engine loads, the engine operates with short valve opening times and minimal valve lift. At high engine loads, a large lift and long valve opening times ensure a higher fill level in the cylinders and greater power output.

In combination with the fully variable camshaft control (Vario Cam Plus), these operating modes can be combined with short or long valve overlaps. Innovative magneto-resistive camshaft sensors tap the full potential of this technology by determining the high-resolution position of the camshafts in real time. On this basis, the engine controls select suitable regulating times for each engine load, which noticeably improves the performance while simultaneously optimising the CO_2 values.

Improvements to the Tiptronic S and the all-wheel drive system

Comprehensive gearbox optimisations also contribute to the improved driving performance of the Cayenne GTS models. The eight-speed Tiptronic S responds very differently depending on the selected driving mode. In Sport and Sport Plus modes, it noticeably shortens the shifting and response times. In Normal mode, on the other hand, it automatically shifts to higher gears quickly, thereby reducing fuel consumption.

The Porsche Traction Management (PTM) all-wheel drive, which has been reworked for the Cayenne GTS models, has a further new technical feature: its transfer box has its own water-cooling circuit. This technology originated in motorsport, and the Cayenne GTS adopted it from the Turbo GT and the Turbo E-Hybrid. In particular, the separate cooling circuit stabilises the continuous load capacity of the component on the track, on winding mountain routes and when driving at top speed.

In every Porsche sports car, the engine sound plays a key role. It shapes the emotive driving experience and helps the driver to intuitively judge the car's speed, especially at its upper limits. In the particularly high-performance GTS models, it is even more important. The sports exhaust system of the Cayenne GTS models therefore underlines their dynamic presence with a highly expressive sound.

MEDIA ENQUIRIES

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Consumption data

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Cayenne GTS Coupé (WLTP)*: Fuel consumption combined: 12.7 – 12.1 l/100 km; CO_2 emissions combined: 290 – 277 g/km; CO_2 class: G

*Further information on the official fuel consumption and the official specific CO_2 emissions of new passenger cars can be found in the "Leitfaden über den Kraftstoffverbrauch, die CO_2-Emissionen und den Stromverbrauch neuer Personenkraftwagen" (Fuel Consumption, CO_2Emissions and Electricity Consumption Guide for New Passenger Cars), which is available free of charge at all sales outlets and from DAT (Deutsche Automobil Treuhand GmbH, Helmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen, www.dat.de).

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