

Plug-in hybrid optimised in three ways

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In the new Cayenne, Porsche is expanding its electric drive portfolio to a total of three E-Hybrid models. The first is the new Cayenne E-Hybrid. It surpasses its predecessor in three respects: electric range, electric motor power and charging speed. Its sustainable hybrid strategy also optimises charging and discharge phases in different driving modes for the respective environment in which it finds itself. The result is a compelling driving experience with even greater efficiency.

The part of the conventional drive system in the new Cayenne E-Hybrid (**Cayenne E-Hybrid (WLTP)*:** Fuel consumption weighted combined: 4.4 – 3.9 l/100 km; Fuel consumption with depleted battery combined: 10,5 – 9,8 l/100 km; Electrical consumption weighted combined: 19.7 – 19.1 kWh/100 km; CO_2 emissions weighted combined: 101 – 90 g/km; CO_2 class weighted combined: C – B; CO_2 class with depleted battery: G) is handled by the 3.0-litre V6 turbo engine with 224 kW (304 PS). Porsche pairs it with a new electric motor, which is integrated into the eight-speed automatic transmission as before. A coil with an optimised number of turns as well as a new magnet and an

increased phase current of the pulse inverter boost the electric power by 30 kW to 130 kW (176 PS) and the torque by 60 Nm to 460 Nm. Together, the combustion engine and electric motor achieve a combined output of 346 kW (470 PS). The system torque is 650 Nm. With the new drive system, the sprint to 100 km/h takes a mere 4.9 seconds. The top speed is 254 km/h.

The new electric motor also improves the Cayenne E-Hybrid's recuperation performance by around 30 per cent. In generator mode, the Cayenne can convert a power of up to 88 kW into electrical energy and supply it to the traction battery. This is how the new Cayenne E-Hybrid uses a significantly larger share of braking energy to increase efficiency and performance. Moreover, recuperation now decelerates the vehicle down to a speed of 2 km/h. In the previous model, it only braked the vehicle down to a speed of 14 km/h.

Beyond its increased drive and recuperation performance, as well as the resulting improved performance and efficiency, the new Cayenne E-Hybrid offers a higher electric range. A new high-voltage battery with a gross capacity of 25.9 kWh is installed beneath the load compartment floor as before. The 8 kWh of extra capacity enables a purely electric range of up to 90 km (EAER City) with a single battery charge.

To avoid longer charging times due to the larger capacity, the Cayenne E-Hybrid also has a new on-board AC charger as standard. With a charging capacity of 11 kW (against 7.2 kW previously), the HV battery can be fully charged at an appropriate power source in about two hours and 40 minutes.

E-Hybrid driving modes for maximum efficiency

Porsche has optimised the configuration of the driving modes in the new Cayenne E-Hybrid. In the performance-oriented Sport driving programme, the vehicle now maintains a minimum battery charge level of 20 per cent. In the predecessor, it was 30 per cent. In Sport Plus driving mode, the minimum charge level drops from 80 to 30 per cent. The new strategy reduces the number of charging phases in which the motor feeds the battery. This improves the overall efficiency of the vehicle without affecting performance.

E-Charge mode for dynamic charging of the vehicle now also works more efficiently. When the new Cayenne is driving in built-up areas and at speeds of less than 55 km/h, the drive system operates in hybrid mode – the combustion engine and the electric motor share the workload. In this situation, the vehicle maintains a constant charge level. Out of town, the internal combustion engine takes over completely while simultaneously building up the electric range. It is able to charge the battery to a maximum charge level of 80 per cent. This enables the vehicle to generate electric range for later local emission-free trips with maximum efficiency. Hybrid-Auto mode benefits from the inclusion of environmental data in the drive system strategy by enabling a higher proportion of the route to be driven purely electrically in urban areas. This value gets even better with active route guidance.

MEDIA ENQUIRIES



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Consumption data

Cayenne E-Hybrid Coupé (WLTP)*: Fuel consumption weighted combined: 4.4 – 3.9 l/100 km; Fuel consumption with depleted battery combined: 10,5 – 9,8 l/100 km; Electrical consumption weighted combined: 19.7 – 19.0 kWh/100 km; CO_2 emissions weighted combined: 101 – 89 g/km; CO_2 class weighted combined: C – B; CO_2 class with depleted battery: G

Cayenne (WLTP)*: Fuel consumption combined: 11.7 – 10.6 l/100 km; CO_2 emissions combined: 266 – 242 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).

Video

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