



PORSCHE



# The new 911 Turbo and the new 911 Turbo Cabriolet

Press Kit

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## Fuel consumption and emissions

**911 Turbo:** Fuel consumption – urban 15.3 l/100 km, extra-urban 8.7 l/100 km, combined 11.1 l/100 km; CO<sub>2</sub> emissions combined 254 g/km

**911 Turbo Cabriolet:** Fuel consumption – urban 15.2 l/100 km, extra-urban 8.9 l/100 km, combined 11.3 l/100 km; CO<sub>2</sub> emissions combined 257 g/km

All information refers to the EU model.

The consumption and CO<sub>2</sub> emission values were calculated according to the new Worldwide Harmonised Light Vehicle Test Procedure (WLTP). The NEDC values derived from this must continue to be specified for the time being. These values cannot be compared with the values calculated on the basis of the previously used NEDC test. Further information on the official fuel consumption and official, specific CO<sub>2</sub> emissions of new passenger cars is available in the publication entitled "Guidelines on fuel consumption, CO<sub>2</sub> emissions and power consumption of new passenger cars", which is available free of charge from all sales outlets and from Deutsche Automobil Treuhand GmbH (DAT).

## Highlights

# **The new 911 Turbo and the new 911 Turbo Cabriolet**

## **Seventh generation of the 911 Turbo with 30 kW (40 PS) more power.**

The powerful engine with two turbochargers with variable turbine geometry has a displacement of 3,745 cm<sup>3</sup> and now develops 427 kW (580 PS).

## **Outstanding driving dynamics in every situation.**

The sprint from 0 to 100 km/h has been cut to just 2.8 seconds (0.2 seconds faster than before) with its eight-speed PDK dual-clutch transmission tailored specifically to the 911 Turbo. Its top speed remains 320 km/h.

## **Wide body.**

45-millimetre wider front wings and a 20-millimetre wider rear make the new 911 Turbo and 911 Turbo S the widest production 911 models to date.

## **Sporty characteristics with new options.**

For the first time, a firmer PASM sports chassis with lowering by ten millimetres can be ordered for the 911 Turbo models. The newly developed sports exhaust system, which boasts a distinctively rich sound, is also available on a 911 Turbo for the first time.

## **Enhanced aerodynamics.**

Adaptive Aerodynamics (PAA), now featuring controlled cooling air flaps at the front, an extended control strategy as well as a larger but lighter rear wing for even more downforce. The PAA also acts as an air brake in the event of emergency braking at high speeds.

## **New lightweight and noise-insulated glass.**

For the first time, newly developed lightweight and noise-insulated glass is available for the windows of the 911 Turbo Coupé, resulting in a weight reduction of more than 4 kg.

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Coupé and Cabriolet with new options and significantly increased power

## The new Porsche 911 Turbo

The Porsche 911 Turbo has been the quintessential high-performance sports car with everyday usability for the past 45 years. Following the market launch of the 911 Turbo S, the next generation of 911 Turbo Coupé and Cabriolet will now also be introduced – even more powerful, even faster and even more individual. Thanks to 427 kW (580 PS), which is 30 kW (40 PS) more than the predecessor, the Coupé and Cabriolet break the three-second barrier for 0-100 km/h with a time of 2.8 seconds (0.2 seconds faster). 750 Nm of torque (40 Nm more), now without overboost time limit, make quick sprints even more spontaneous and effortless. The acceleration, power output and torque of the new 911 Turbo therefore match those of the previous generation 911 Turbo S. Power transmission is performed by an eight-speed PDK gearbox with Turbo-specific set-up. Top speed remains unchanged at 320 km/h. Options such as a Sport or Lightweight Design package, sports chassis and sports exhaust system are available for the 911 Turbo for the first time. As a result, customers will be able to adapt the vehicle even more to their individual wishes.

The new sports cars are following in some rather prestigious footsteps: the 911 Turbo has been synonymous with luxury and performance since its market launch in 1975. Each generation has continued to live up to the claim of being a worldwide benchmark for high-performance sports cars. The 911 Turbo combines sportiness with everyday usability, emotionality with reliability and dynamic performance with efficiency. The latest generation of the 2+2 is more than twice as powerful as the original Turbo, which featured a 260 PS, three-litre, six-cylinder engine with a single turbocharger. Even though the 911 Turbo has become faster, larger and more comfortable over the years, it has always retained its fundamental characteristics.

The design of the new 911 Turbo has become even more muscular. The body has been widened by 45 mm to 1,840 mm over the front axle in order to accommodate the new chassis. The new bonnet, featuring a striking swage line, underlines its sporty character. As standard, LED headlights with PDLS Plus illuminate the road. At the rear axle, the body is now exactly 1.90 metres wide (plus 20 millimetres). Other distinguishing features of the new 911 Turbo are the enhanced adaptive aerodynamics

with controlled cooling air flaps at the front, a larger active front spoiler and the significantly increased size of the variable rear spoiler. The continuous light bar with LED tail lights as well as the new louvred rear lid grille with silver trim strips round off the design of the rear end.

The front axle now steers even more precisely thanks to an additional 42 millimetres of front track width and the new 20-inch 255/35 tyres. The active all-wheel control PTM is now able to transfer even more power to the front wheels. Traction at the actively steered rear axle is increased by ten millimetres of added track width as well as 315/30 tyres on 21-inch wheels – one inch more than on the front axle. The revamped brake system is even more powerful and can be recognised by the red fixed callipers fitted as standard. The front grey cast iron brake discs now measure 408 millimetres in diameter (plus 28 mm) and are 36 millimetres thick (plus 2 mm). The rear axle features 30-millimetre thick brake discs with a diameter of 380 millimetres.

A sports exhaust system with two oval tailpipes is optionally available for the 911 Turbo for the very first time. Two different chassis variants are also new: while the standard PASM chassis offers a greater spread between sportiness and comfort, the significantly firmer, ten millimetres lower, electronically controlled sports suspension benefits the agility of the new 911 Turbo. Its set-up is aimed at enhancing driving dynamics and provides even more stability in high-speed driving, such as when the vehicle is used on the race track. The optional hydraulic active anti-roll stabilisation (PDCC) and ceramic brake system (PCCB) with ten-piston fixed callipers at the front refine driving dynamics yet further.

The appearance and performance of the vehicle can be additionally sharpened by the new optional Lightweight Design package and Sport package. The Lightweight Design package for the Coupé reduces the vehicle's weight by 30 kg. Among other things, this is made possible by the use of lightweight full bucket seats, omission of the rear seats, lightweight glass and less insulation. This means that drivers can enjoy the engine sound even more directly. The Sport package features the 911 Turbo Sport Design package and additional applications in Black, Carbon elements and Exclusive Design tail lights.

The basic elements of the modern interior correspond to those of the 911 Carrera models with Porsche Advanced Cockpit and Direct Touch Control. The centre screen of the PCM is now 10.9 inches, and can be operated quickly and without distraction thanks to its new architecture. The particularly high-quality and extensive equipment includes fully electrically controlled 14-way sports seats, Sport Chrono package, a GT sports steering wheel with shift paddles, multifunction and mode switches as well as the BOSE® Surround Sound System with powerful sound. Numerous options are available for further personalisation, including Porsche InnoDrive with adaptive cruise control, Lane Keeping Assist with road sign recognition, Night Vision Assist, Surround View and the Burmester® High-End Surround Sound System.



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Engine and drivetrain

## **Leap in performance thanks to enhanced turbocharger technology**

The six-cylinder boxer engine in the 911 Turbo, with its increased output of 580 PS and displacement of 3,745 cm<sup>3</sup>, now features symmetrical turbochargers with variable turbine geometry and electrically controlled bypass valves. In conjunction with the redesigned charge air cooling system and the use of piezo injectors, this improves responsiveness, performance, torque characteristic and revving ability.

The new six-cylinder engine is aspirated by an almost completely new intake system. For this purpose, the previous routing of process air and charge air cooling has been swapped round: part of the process air now flows through the characteristic Turbo air intakes in the rear side sections. In front of the air filters now situated in the rear wings, two other airflows through the rear lid grille have now also been incorporated. The new 911 Turbo thus has four air intakes with a larger overall cross section and lower resistance, which improves the engine's efficiency.

Two symmetrical turbochargers with variable turbine geometry and larger dimensions replace the previous identical parts. The impellers (compressor and turbine wheels) now rotate in opposite directions on the right and left sides of the vehicle. The diameter of the turbine wheels has been increased by five millimetres to 55 millimetres, while the 59 millimetre compressor wheel is now three millimetres larger. This increases potential air throughput on both the exhaust and fresh air sides, which in turn influences torque and power output. The wastegate flaps are electrically controlled with stepper motors. The advantage: active and complete opening of the wastegates after a cold start means that the catalytic converters light off earlier. Boost pressure control is also faster and more precise. Further downstream in the intake system, compressed air flows through two newly positioned charge air coolers that are now 14 percent larger. They are now located directly over the engine in a central position under the rear lid grille.

## **New sports exhaust system available as an option**

For the first time, Porsche is offering an optional sports exhaust system for the 911 Turbo. Like the standard system, it features electric, continually adjustable exhaust flaps, solving the conflict between emotion, interior noise comfort and legal requirements. The specially developed interior flow routing of the sports exhaust system creates a particularly distinctive sporty sound typical of Turbo models. Two oval tailpipes are a distinguishing visual feature. The standard exhaust system has two rectangular chrome-plated twin tailpipes.

## **New eight-speed dual-clutch transmission in Turbo specification**

The torque of up to 750 Nm and power output of 427 kW (580 PS) place high demands on the drivetrain – particularly with an extremely dynamic driving style. The new 911 Turbo is ideally prepared for this. The PDK is based on the gearbox from the current 911 Carrera series and has been adapted for the power developed by the Turbo engine through the use of optimised steel plates and a reinforced gear set. Driving pleasure has also been increased: thanks to the new lightning gearshifts, the 911 Turbo reacts even faster and more spontaneously. These gearshifts are generally used at high engine speeds and loads, both in manual mode as well as when Sport Plus mode is activated. In addition, all gears have new ratios: the first gear is now shorter and eighth gear longer than the previous seventh gear. Compared with the seven-speed transmission in the previous models, the new eight-speed PDK offers a host of improvements. The driver can immediately feel the difference in terms of comfort, performance and efficiency.

## **Performance-enhanced all-wheel drive**

Like the PDK transmission, the Porsche Traction Management (PTM) all-wheel drive has also been adapted to the increased power. With the additional water cooling and reinforced steel plates, the front-axle transmission can transmit significantly more torque. The transfer case in the new 911 Turbo can now distribute up to 500 Nm to the front wheels. A new prop shaft that is both lighter and more stable, with just one universal joint, transmits power to the front axle.

## **Sport Chrono package with the newly integrated Porsche Track Precision app**

Driving pleasure can be enhanced even further with the Sport Chrono package. This package includes PSM Sport mode, dynamic engine mounts as well as a stop watch and the Porsche Track Precision app. Different driving profiles can be activated by means of a new mode switch with Sport Response button. The driver can also select the innovative Wet mode using the mode switch.

## **Innovative Wet mode provides assistance on wet road surfaces**

The Porsche 911 leads the way with an innovative system for detecting significantly wet road surfaces. Wet mode uses acoustic sensors in the front wheel housings to detect swirled-up splash water, and in this way can assess how wet the road is. This makes it fundamentally different from rain sensors for controlling windscreen wipers, which only react optically to water droplets on the windscreen, entirely independent of road conditions. The response behaviour of the PSM and PTM systems is preconditioned if wet road conditions are detected. At the same time, the system informs the driver as to how wet the road is and recommends manually switching to Wet mode. This function is integrated in the mode switch. If the driver activates Wet mode, the PSM, PTM, aerodynamics, PTV Plus and drive responsiveness are adapted for best possible driving stability. The PTM transfers more all-wheel torque to the front axle to increase traction and improve driving stability. The rear spoiler moves into the Wet mode position, the front spoiler is retracted, the accelerator pedal characteristics are flatter and PSM Off or Sport mode are deactivated.

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Design and aerodynamics

## **Top-class dynamic performance**

The Porsche 911 Turbo clearly signals its increased dynamic capabilities. The body now measures 1,900 millimetres (plus 20 millimetres ) above the rear axle. Thanks to unique front wings, width has grown at the front by 45 mm to 1,840 millimetres (previously 1,795 millimetres ). The track widths have also increased correspondingly: The distance is now 1,600 millimetres (plus 10 millimetres) at the rear and 1,583 millimetres (plus 42 millimetres) at the front.

The new front end, which features wider air intake openings, has a characteristic Turbo look with dual front light modules. The newly designed, pneumatically extendible front spoiler ensures aerodynamic performance. The 911 Turbo is equipped as standard with LED headlights with PDLs Plus. Its new rear end, featuring tailpipes in the rectangular design characteristic of Turbo models, harmoniously matches the rear light bar that is one of the defining features of the current 911 generation.

### **New and exclusive: optional lightweight glass**

Like for all 911 Coupés, innovative lightweight glass is optionally available for the windows of the closed 911 Turbo. This composite glass weighs around 4 kg less than the parts used normally in series production. The body weight in the area above the shoulder line that is important for driving dynamics is thus reduced, thereby lowering the centre of gravity. Compared to the series production glass, the lightweight glass is made from thinner outer panes and chemically prestressed inner panes. The special glass structure is not just lighter, but also offers improved heat and noise insulation.

### **Adaptive aerodynamics with more downforce, Wet mode and air brake**

The adaptive aerodynamics components contribute to the performance delivered by the 911 Turbo. The downforce is increased by 15 percent thanks to the newly designed active front spoiler and rear wing, thereby guaranteeing even greater driving stability and dynamics at higher speeds. The maximum downforce in the Performance position (Sport Plus mode activated) is now around 170 kg.

New functions include Wet mode and the air brake. If the sensor system equipped as standard detects a wet road surface, a corresponding warning is displayed to the driver in the instrument cluster. If the driver then activates Wet mode by means of the mode switch, the aerodynamic control systems adapt the balance in favour of greater downforce on the rear axle. This in turn increases the contact between the tyres and road.

The 911 Turbo also has an air brake function. In case of emergency braking at high speeds, the front spoiler and rear wing are moved to the Performance position. The higher drag force and increased downforce reduce the braking distance, depending on the initial speed and road conditions. Driving stability is also improved during braking.

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## Chassis and brakes

# **Driving dynamics with even greater sportiness and comfort**

The new 911 Turbo benefits from the completely new chassis set-up that was developed and adapted for the flagship model, the 911 Turbo S. As a result, Porsche has taken the concept of mixed tyres to a new level: the tyres on the front and rear axles differ not only in width but also in their wheel diameter. At the front, 255/35 20-inch tyres are now fitted on up to 9.5-inch wide wheels. On the rear axle, 21-inch tyres with size 315/30 fitted on up to 12-inch wide wheels transmit the main drive force to the road. The steering system with active rear axle steering has also been retuned. A six percent more direct steering ratio than on the predecessor model improves steering precision. This gives the sports car more agility, especially on twisty roads.

## **New active suspension system permits use of sports chassis for the first time**

The second significant development is the new-generation Porsche Active Suspension Management (PASM) with even faster and more precisely controlled dampers. When needed, the new PASM offers significantly softer damping in both the compression and rebound stages than the previous system, which translates into greater comfort. At the same time, the new PASM can make the dampers act more firmly, resulting in significant driving dynamics advantages with respect to roll stability, road holding, steering behaviour, and indeed potential cornering speeds.

The faster-reacting dampers mean that a 10 mm-lower sports chassis is available as an option on the 911 Turbo for the first time. To guarantee maximum grip at all times, helper springs are additionally mounted on the rear axle which ensure adequate spring pre-loading of the main springs for full rebound. The significantly firmer set-up is aimed at enhancing driving dynamics and provides even more stability in high-speed sections, such as when the vehicle is used on race circuits.

Another new feature is the tyre temperature display, which is combined with the tyre pressure display. At a low tyre temperature, the blue bars warn about reduced road grip. As the tyres warm up, the display colour changes to blue-white and then changes to white once the operating temperature has

been reached. This means that maximum possible grip is available, which allows drivers to precisely adapt their driving style to the grip level of the tyres. The system is deactivated and the bars are hidden when winter tyres are fitted.

### **More powerful brake system with ceramic option**

At Porsche, increased engine power traditionally goes hand-in-hand with increased braking power. The grey cast iron brake system features aluminium monobloc fixed callipers with six pistons each on the front axle. The corresponding brake discs have a diameter of 408 millimetres (plus 28 millimetres) and a thickness of 36 millimetres (plus two millimetres). The brake system on the rear axle is unchanged with four-piston fixed callipers and 380 mm x 30 mm brake discs. The brake callipers are painted red as standard with High-Gloss Black optionally available. The "PORSCHE" logo on the brake callipers is white for this design.

Additional options allow the chassis of the new 911 Turbo to be adapted according to individual demands: the ceramic brake system (PCCB) is still available as before. Here, braking on the front axle is performed by 10-piston brake callipers and 420-mm diameter brake discs. Four-piston brake callipers and 390-millimetre brake discs are installed on the rear axle.

Cornering stability can be further enhanced with the optional anti-roll stabilisation (PDCC) without having to compromise on driving comfort.

As before, a lift function is optionally available. This allows the ground clearance of the front apron to be increased by around 40 millimetres. Porsche is planning to extend this function to turn it into a smart lift system in the future. Here, the system saves the GPS coordinates of the current position at the push of a button. If the driver approaches this position from the same direction again, the front of the car will lift up automatically.

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## Interior and equipment

# **Sporty driving in an elegant atmosphere**

Sporty, clearly arranged, intuitive operation – the cockpit of a Porsche has always been designed with the driver in mind and not based on fashionable trends. The current 911 generation, and thus also the 911 Turbo, systematically continues this concept. The interior is characterised by the clear and straight lines of the dashboard with recessed instruments. Alongside the central rev counter – typical for Porsche – two thin, frameless freeform displays supply information to the driver. The 10.9-inch centre screen of the PCM can be operated quickly and without distraction. Located underneath this there is a compact switch unit with five pushbuttons for direct access to important vehicle functions. The functions of the five touch keys differ depending on the equipment. The centre air vent is the transition to the centre console. This has a touch-sensitive high-gloss surface that corresponds to the centre display. The standard equipment includes the full-leather interior and fully electric sports seats with 14-way adjustment. Paying homage to the first 911 Turbo (type 930), the door trim inlays have diagonal stitching. The centre seat panels feature transverse stitching. The standard GT sports steering wheel with shift paddles and Sport Chrono mode switch are available in different designs.

## **PCM with intuitive operation**

The Porsche Communication Management (PCM) with online navigation combines simple and intuitive operation with a multitude of infotainment functions. The system is intuitive to use and can be adapted to suit personal tastes. The PCM also allows you to swipe or to zoom in or out and rotate the display using two fingers. The display can also recognise handwriting, and many functions can be conveniently used via voice control.

The standard BOSE® Surround Sound system guarantees excellent acoustic entertainment. With 12 speakers and high-end amplifiers with a total output of 570 watts, a well-balanced and true sound experience is delivered. The top system remains the optional Burmester® High-End Surround Sound system with 13 speakers and a total output of 855 watts.



## **Porsche Track Precision app for race track training**

The new model adopts the enhanced Track Precision app from the 911 Turbo S: using Apple CarPlay®, the driver can now access the app functions directly on the PCM and use them conveniently. More than 300 international race tracks are already stored, and lap times are recorded automatically using a precise GPS signal from the PCM. The app permits detailed recording, display and analysis of driving data on a smartphone. Drivers can also film other perspectives by controlling GoPro cameras directly via Bluetooth. The videos can then be synchronised with the recordings and drivers can also export the data and videos and share them on their smartphones. Detailed analyses are also now possible with the adapted iPad app.

## **Optimised air conditioning with open convertible roof**

As with the current 911 Carrera models, the air-conditioning functionality when the hardtop is open has been significantly improved for the new 911 Turbo Cabriolet. The new feature is the automatic adjustment and regulation of the automatic climate control when the roof is opened. The blower control, temperature control and air distribution to the interior are adjusted to the particular situation depending on the outside temperature, strength of sunshine and many other parameters.

## **New options: lightweight design package and Sport package**

The new Sport package emphasises the dynamic attributes of the new flagship 911. It is based on the Sport Design package, combined among other things with exclusive design tail lights and numerous High-Gloss Black body details. The Coupé also comes with a lightweight carbon fibre roof.

The Lightweight Design package was developed exclusively for the Coupé with a weight saving of more than 30 kg. It includes the lightweight and noise-insulated glass as well as lightweight full bucket seats, reduced insulation and omission of the rear seat system. Other features include the new 10 mm-lower PASM sports suspension and a sports exhaust system with black tailpipes.