The new 911 GT3

Press Kit

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**Fuel consumption and emissions**

**Porsche 911 GT3:** Fuel consumption combined 13.3 – 12.4 l/100 km;
CO2 emissions combined 304 – 283 g/km

All information refers to the EU model.

The consumption and CO2 emission values were determined in accordance with the new Worldwide Harmonized Light Vehicle Test Procedure (WLTP). The NEDC values derived from this should continue to be specified for the time being. Further information on the official fuel consumption and official, specific CO2 emissions of new passenger cars is available in the publication entitled ‘Guidelines on fuel consumption, CO2 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 Porsche 911 GT3: closer to motorsport than ever

* Master of the Nürburgring Nordschleife

The new 911 GT3 reaches its full potential on closed racing circuits – like the 20.8 kilometre-long Nürburgring Nordschleife. It lapped the most difficult race track in the world in 6:59.927 minutes. Development driver Lars Kern set this time during the final fine-tuning work on the car. Porsche brand ambassador Jörg Bergmeister achieved similar lap times repeatedly in succession – a sign of the consistent performance of the new top-performance sports car.

* Emotive high-revving boxer engine

The 4.0-litre, 375 kW (510 PS), high-revving GT boxer engine lends the new 911 GT3 a thoroughbred temperament and accentuates this with an emotive sound. It delivers 10 PS more than the previous model and, like its predecessor, has a maximum engine speed of 9,000 rpm The maximum torque of the naturally aspirated six-cylinder boxer engine has increased from 460 to 470 Nm. As in motorsport versions, the intake system features six individual throttle valves. Despite having two gasoline particulate filters, the lightweight sports exhaust system weighs less than the one fitted to the previous 911 GT3.

* Manual or automatic gearshifts

In addition to a six-speed GT manual transmission with auto-blip function, a seven-speed Sport PDK transmission is also available. This allows gear changes within milliseconds without interrupting drive to the wheels. It therefore provides the basis for breathtaking acceleration: the new 911 GT3 catapults from 0 to 100 km/h in 3.4 seconds, reaching 200 km/h in 10.8 seconds. Porsche also offers the seventh edition of the 911 GT3 exclusively with rear-wheel drive.

* Front axle with motorsport DNA

It is the first time that the intensively redeveloped double-wishbone front axle, already known from the successful Le Mans-winning 911 RSR, has been used in a series-production Porsche model. Among other things, this offers higher camber stiffness and eliminates disturbing lateral forces acting on the shock absorbers. The result is extraordinarily agile turn-in behaviour and a high level of driveability at the limit of grip.

* Rear-axle steering with even more precise guidance

The tried-and-tested five-link rear axle based on the 'LSA' concept (lightweight, stable, agile) guides the wheels with even greater precision thanks to additional ball joints for the lower wishbones, which are subject to particularly high stress. Special shock absorbers combine greater driving comfort with improved race track performance. Rear-axle steering is also equipped as standard: it turns the rear wheels by up to two degrees in the direction of or contrary to the steering direction of the front axle, depending on the driving speed.

* Larger brakes with more bite

With a diameter of 408 millimetres instead of 380 mm, the lightweight brake discs on the front axle are considerably larger than on the previous 911 GT3. In addition to high-performance sports tyres, road-approved race track tyres are also now available as an option for the first time. The front-axle lift system features a Smart Lift memory function.

* Lightweight by design

In a high-performance sports car like the new 911 GT3, every excess kilo is one too many. That is why Porsche has comprehensively optimised the car’s weight – from the lightweight glass in all the windows and the lightweight sports exhaust system through to the LiFePO4 starter battery. The result: its weight-to-power ratio of 2.8 kilogram/PS for the manual-gearbox variant is now even closer to that of a thoroughbred racing car.

* Many components made of carbon fibre

The subject of weight reduction also affects the muscular aluminium and steel body of the new 911 GT3, which now contains an even higher proportion of carbon fibre reinforced plastic (CFRP). The lightweight composite material is used both for the bonnet and for the rear wing and spoiler. The roof is also available in CFRP on request.

* More downforce for faster lap times

The fully functional rear diffuser of the new 911 GT3 generates four times as much downforce as in the predecessor, as the interplay between the front diffusers and the wide spoiler lip ensures a more consistent airflow along the fully clad vehicle underbody. And thanks to the 'swan-neck' mounting, the air can flow more freely under the rear wing. The new 911 GT3 generates around 50 per cent more downforce overall than its predecessor, even in the factory aerodynamics set-up. In the Performance position for race-track driving, the downforce is even increased by 150 per cent at a speed of 200 km/h.

* Optional roll bar

The 911 GT3 feels particularly at home on the race track. This makes the Clubsport package, which is available at no extra cost, particularly popular. In addition to a roll bar mounted behind the front seats, it also includes a six-point harness on the driver’s side, a motorsport-specification hand-held fire extinguisher, and a battery disconnect switch.

Summary

Porsche 911 GT3 with motorsport expertise

Porsche unleashes the new 911 GT3. The seventh edition of this high-performance sports car was developed in close collaboration with Porsche Motorsport. It transfers pure racing technology into a production car more systematically than ever before: its double-wishbone front suspension and sophisticated aerodynamics with swan-neck rear wing mounting and striking diffuser originate in the successful 911 RSR GT racing car, and the 375 kW (510 PS) 4.0-litre six-cylinder boxer engine is based on that of the 911 GT3 R, tried and tested in endurance racing. The dramatic-sounding, high-revving engine is also used practically unchanged in the new 911 GT3 Cup. The result is a brilliant driving machine: efficient and exciting, precise and high-performance – perfect for the circuit and superb for everyday use.

The distinctive strength of the 911 GT3 lies in the sum of its characteristics. With a top speed of 320 km/h (318 km/h with PDK), it is even faster than the previous 911 GT3 RS. The new 911 GT3 accelerates from zero to 100 km/h in 3.4 seconds. Porsche also offers the new model with a six-speed manual transmission for those who want a particularly purist driving experience. The sophisticated aerodynamics benefit from the experience gained in motor racing and generate significantly more downforce without noticeably affecting the drag coefficient. In the performance position, the manually adjustable wing and diffuser elements significantly increase the aerodynamic downforce for high cornering speeds. This is, however, reserved for outings on the track.

It is there that the 911 GT3 can play all its trump cards. During final tuning work, it lapped the Nürburgring Nordschleife, traditionally the benchmark for all sports cars at Porsche, more than 17 seconds faster than its predecessor.

Development driver Lars Kern needed just 6:59.927 minutes for a full 20.8 km lap. The shorter 20.6 km circuit, which had previously served as a benchmark, was completed by the 911 GT3 in 6:55.2 minutes. Running on the optionally available Michelin Pilot Sport Cup 2 R tyres, the new model consistently delivered its performance over several laps in the expert hands of Porsche brand ambassador Jörg Bergmeister. For Bergmeister, it is “by far the best production car” that the experienced professional driver has ever driven at the 'Green Hell'.

Despite a wider body, larger wheels and additional technical features, the weight of the new GT3 is on a par with its predecessor. It weighs 1,418 kg with the manual transmission and 1,435 kg with the Porsche dual-clutch transmission (PDK). The front bonnet made of carbon fibre reinforced plastic (CFRP), lightweight glass windows, optimised brake discs and forged alloy wheels ensure a focus on weight-saving, as does the rear compartment cover. The lightweight sports exhaust system reduces weight by no less than 10 kg. With electrically operated continuously adjustable exhaust flaps, it combines a highly evocative sound experience with the Euro 6d ISC FCM (EU6 AP) emissions standard. The combined consumption of the 911 GT3 is 12.4 (with manual transmission: 13.3) l/100 km.

Its racing genes are expressed in practically all the details of the new 911 GT3. The cockpit is in line with the current model generation. But a new feature is the Track Screen. At the touch of a button, it reduces the digital displays to the left and right of the central 10,000 rpm rev counter to information such as tyre and oil pressures, oil and coolant temperatures, and fuel level, which are essential when driving on the track. It also includes a visual shift assistant with coloured bars to the left and right of the rev counter, as well as a motorsport-derived shift light.

Especially for the Porsche GT models, customers are increasingly requesting customised equipment. For this reason, the Porsche Exclusive Manufaktur range is also available for the new 911 GT3 and is supplemented by GT 3-specific options such as a lightweight roof made of exposed carbon fibre. Other highlights include exterior mirror tops made of carbon, darkened LED matrix main headlights and matching Exclusive Design rear lights with an arc of light with no red components. Indian Red or Shark Blue painted wheel rims enhance the black alloy wheels. In the interior, equipment details such as the dials for the rev counter and Sport Chrono stopwatch, seatbelts and trim strips set elegant accents in the car's body colour, or another colour of the buyer's choice.

As exclusive as the 911 GT3 itself is the individual chronograph that Porsche Design offers exclusively to customers of the high-performance sports car. Like its motorised role model, it boasts a dynamic design, consistent performance and high-quality workmanship. Its case reflects its proximity to motorsport. Just like the connecting rods of the GT3 engine, it is made of robust, lightweight titanium. The timepiece is powered by an individual winding rotor reminiscent of the wheels of the 911 GT3. The coloured ring of the dial can be customised in the paint colours of the 911 GT3.

Porsche is offering the new 911 GT3 at a starting price of 167,518 euros including VAT and country-specific equipment\*. Delivery is set for May 2021.

\*The equipment options and price may alter for the change in the model year.

The model

The Porsche 911 GT3 at a glance

Drive system:

Power output: 375 kW (510 PS); high-revving concept (max. 9,000 rpm), max. torque 470 Nm, Auto Start Stop function, lightweight stainless steel sports exhaust system with gasoline particulate filter (GPF) and two central tailpipes in black; individually configurable driving modes Normal, Sport and Track incl. shift assistant; rear-wheel drive; seven-speed dual-clutch transmission (PDK) with Porsche Torque Vectoring Plus (PTV+) incl. electronically controlled limited slip differential and fully variable torque distribution with Porsche Traction Management (PTM); optional six-speed GT manual sports transmission with Porsche Torque Vectoring (PTV) incl. mechanical limited slip differential with asymmetrical locking ratio (30 per cent in traction mode, 37 per cent in overrun mode); fuel consumption (NEDC, combined): 13.3 – 12.4 l/100 km; CO2 emissions combined 304 – 283 g/km

Performance (PDK / manual transmission):

Acceleration 0 – 100 km/h: 3.4 / 3.9 seconds, 0 – 200 km/h: 10.8 / 11.9 seconds; top speed: 318 – 320 km/h

Chassis:

Adjustable sports chassis; Porsche Active Suspension Management (PASM) variable damping control system with sports tuning and lowering by 20 mm; double-wishbone front suspension with anti-roll bar, all chassis mounts with ball joints; multi-link rear axle, anti-roll bar, chassis mounts partially with ball joints, integrated helper springs; electromechanical power steering; rear-axle steering with GT3 sports set-up; Porsche Stability Management (PSM) incl. ABS, with optional deactivation in two stages (ESC OFF and ESC+TC OFF); front wheels 9.5 J x 20 ET 46 with sports tyres 255/35 ZR 20; rear wheels 12 J x 21 ET 45 with sports tyres 315/30 ZR 21

Dual-circuit brake system with axle split, vacuum brake booster, brake assist system, electrically-operated duo-servo parking brake, auto hold function, multicollision brake, aluminium monobloc fixed-calliper brakes, dimpled and internally vented grey cast-iron composite brake discs with aluminium brake disc pots, disc diameter front/rear: 408/380 mm, number of pistons front/rear: 6/4

Exterior equipment:

Front apron in exterior colour with bottom part in black and with integrated cooling air openings including anthracite-coloured grille and black spoiler lip; lightweight front bonnet made of carbon fibre reinforced plastic (CFRP) in exterior colour with two air outlets; new fixed rear wing made of CFRP with swan-neck mounting and body-mounted wing supports made of aluminium, fixed rear spoiler made of CFRP, rear apron with additional air outlets; underbody panelling with rear diffuser incl. fins; LED headlights in black including Porsche Dynamic Light System Plus (PDLS); continuous tail light strip with integrated PORSCHE lettering in satin-gloss black; exterior mirror top and bottom covers in exterior colour, mirror base in satin-gloss painted black; lightweight and noise-insulating windows; partially recessed door handles; front axle lift system with GPS-based Smart Lift function; new 911 GT3 forged alloy wheels in satin-gloss black with silver-painted rim edges (optional: Shark Blue)

Interior equipment:

Sports Seats Plus (electric four-way adjustment) with raised side bolsters and black leather seat covers with seat centre panels in black Race-Tex, head restraints with embroidered GT3 logo in GT Silver; black interior design with elements in black Race-Tex; 360 mm GT3 multifunction sports steering wheel with mode switch and steering wheel rim in black Race-Tex; PDK shift paddles (not in combination with manual transmission); 911 GT3-specific instrument cluster with analogue rev counter and two high-resolution 7-inch displays with new track screen; Porsche Communication Management (PCM) including online navigation with 10.9-inch touch display; GT-specific PDK selector lever with manual shift gate (not in combination with manual transmission), grip area and gearshift gaiter in Race-Tex; trim strips in Black with inlays made of brushed aluminium in Anthracite; door sill guards made of brushed aluminium in Anthracite with GT3 lettering; Porsche Track Precision App; Chrono package (optional); lightweight rear compartment cover

Engine and transmission

High-revving naturally aspirated engine with evocative sound

The high-performance athlete’s heart of the Porsche 911 GT3 traditionally beats at the rear: the naturally aspirated 4.0 litre six-cylinder engine creates an emotive experience through the combination of exhilarating power delivery and a stirring soundtrack. The boxer engine is familiar from its use in the 911 Speedster and is based on the racing powerplant of the 911 GT3 R. With 375 kW (510 PS), its output is 10 PS higher than in the last 911 GT3. Thanks to its high-revving concept, it delivers its maximum power at 8,400 rpm and the rev limiter only cuts in on this outstanding revving ability at 9,000 rpm. Maximum torque has been increased from 460 to 470 Nm.

The new GT model's engine responds eagerly when the accelerator is pressed, and its qualities as a thoroughbred racing motor are also demonstrated by the fact that this direct-injection petrol unit will be used in practically unchanged form from the start of the 2021 season to power the new 911 GT3 Cup, the standard car for the Porsche Mobil 1 Supercup and selected Carrera Cup championships around the world. Both cars therefore also share the same racing technology. On the intake side, for example, each of the six cylinders is provided with its own individual throttle valve at the end of the variable resonance intake system. This is positioned particularly close to the intake valves, thereby improving air supply and control precision. The central throttle valve is preserved as a back-up solution. However, this is continuously open during normal operation.

Rigid valve train, high-performance oil supply system

Like in motorsport models, speed-resistant valve actuation takes place via rigid rocker arms, which do without hydraulic clearance compensation. Porsche adjusts the correct valve clearance at the factory by means of interchangeable shims – this means that there is no need for later adjustment. This reduces the maintenance work required both on the race track and in daily use. The proven VarioCam technology ensures camshaft control adapted precisely to engine speed and load condition. A crankshaft with large bearing diameters, wide connecting-rod bearings and plasma-coated cylinder liners ensure lower friction losses and reduce wear.

The high longitudinal and lateral acceleration forces produced by the new 911 GT3 on race tracks mean that the oil supply for the high-revving engine is of particular importance. Like in motorsport, this is performed by a dry-sump lubrication system with separate oil tank. With a total of seven suction stages, this routes the engine oil back into the external reservoir quickly and efficiently, while lubrication of the highly loaded connecting-rod bearings takes place directly via the oil pump through the crankshaft.

Lightweight exhaust system with two particulate filters

The stainless steel sports exhaust system ensures that the 911 GT3 responds powerfully and also has a unique sound. It provides the high-revving six-cylinder naturally aspirated boxer engine with a highly evocative auditory experience guaranteed to produce goosebumps. Thanks to the electrically controlled continuously adjustable exhaust flap, the impressive sound can also be given additional nuances. At the same time, the GT sports car complies with the strict emission standard Euro 6d ISC FCM (EU6 AP). Two separate gasoline particulate filters (GPF) and stereo lambda control for both catalytic converters are used for this purpose. Porsche was even able to compensate, and more, for the unavoidable additional weight with a sophisticated lightweight construction concept. In fact, the stainless steel sports exhaust system of the new 911 GT3 weighs around 10 kg less than the corresponding component in its predecessor.

PDK transmission with reduced weight and optimised performance

As with the previous GT3, customers for the new model can choose freely between a manual transmission and a PDK dual-clutch transmission. Unlike on the current 911 Carrera, the PDK developed in motorsport has seven, instead of eight, forward gears. Omission of the gear set for the engine speed-reducing overdrive gear also saves on weight and underlines the performance orientation of the new 911 GT3. The characteristic advantages of the PDK technology remain unchanged: like in motorsport, it permits gear changes in milliseconds without any interruption in drive to the rear wheels for optimum acceleration, while the intelligent automatic mode offers a high degree of operating convenience and reduces fuel consumption.

As for the manual transmission, the PDK selector lever has an ergonomic design. As an alternative to the practical shift paddles behind the sports steering wheel, it also again has a separate gate for manual gear changing. Like in motorsport, it is pulled to shift up and pushed to shift down.

Purist GT gear changing pleasure with throttle blip function

The six-speed GT manual sports transmission offers a purist, more emotive and more involved driving experience. It weighs 17 kg less compared with the seven-speed PDK. Matched perfectly to the engine characteristics, it increases the pleasure derived from manual gear changes with a short gear lever and short-travel shift action. When changing down, the auto-blip function can be optionally used to assist synchronisation of the gear wheels. This counteracts overbraking of the rear wheels, stabilises handling and reduces wear.

The new 911 GT3 with PDK has an electronically controlled rear differential lock. On the model with manual gearshift, a mechanical system compensates the drive torque between the two wheels with a locking ratio of 37 per cent in overrun mode. The ratio is 30 per cent in traction mode.

Nordschleife in under seven minutes

Comprehensively upgraded running gear, plenty of aerodynamic grip, moderately increased engine power and a lower weight-to-power ratio: overall, these ingredients provide the new 911 GT3 with impressive dynamic response, so that the newest GT model from Porsche Motorsport now sets the bar considerably higher. The acceleration figures already provide a clear indication of this: in combination with the PDK transmission, the new GT sports car achieves the sprint from 0 to 100 km/h in 3.4 seconds. The 200 km/h barrier is broken after 10.8 seconds. The comparable times for the new six-speed manual 911 GT3 are 3.9 and 11.9 seconds on its way to a top speed The top speed of the model with a manual gearbox is 320 km/h. The PDK version tops out at 318 km/h.

However, another statistic serves as a more fitting reflection of the true character of this motorsport-oriented driving machine: 6:59.927 minutes – the official lap time that the new 911 GT3 set on the complete Nürburgring Nordschleife almost as an aside as part of routine development work. The new 911 GT3 was a whole 17.5 seconds faster than its predecessor on this lap and was even able to narrowly beat the time of the 911 GT3 RS. Just like Porsche brand ambassador Jörg Bergmeister, development driver Lars Kern was remarkably able to remain under the seven-minute barrier on several consecutive laps. Alongside the sustained performance capability, this is also proof of the balanced handling of the new 911 GT3.

“In terms of balance, the new 911 GT3 is easily the best production car that I have ever driven,” confirms former professional racing driver Bergmeister. “In spite of the small increase in power compared with the previous model, it was very much faster. This is clearly due to the fact it is much better in terms of cornering. Its reactions are always predictable and permit very consistent performance: all my Nordschleife laps were within eight tenths of a second of each other.”

As a comparison: with the first edition of the 911 GT3 based on the 996 model generation, the two-time World Rally Champion and current Porsche brand ambassador Walter Röhrl first beat the eight-minute mark with a road-going sports car in 1999, completing a lap in a time of 7:56.3 minutes. However, a shortened lap timing variant was used as the basis for this at the time: this omitted the section in front of grandstand 13 and served as the benchmark for a long time. In the hands of test driver Lars Kern, the new 911 GT3 needed only 6:55.2 minutes for this shorter lap. This means that it is possible to accurately measure the progress that the 911 GT3 family has made in the past 21 years: it is reflected in the time of just over one minute gained on the most demanding race track in the world.

Chassis

Motorsport wheel suspensions set performance standards

The chassis of the new 911 GT3 makes comprehensive use of thoroughbred motorsport technology like no other production model from Porsche before. This applies in particular to the front wheel suspensions. Their completely newly developed double-wishbone design is taken from formula racing cars. It was used by Porsche in 2005 on the legendary RS Spyder LMP2 prototype and was then also adopted for the 911 RSR Le Mans class winner in 2017. It is now used on a Porsche road-going vehicle for the first time and lends the 911 GT3 exemplary turn-in agility in combination with higher cornering performance and greater braking stability. In short, it makes the GT sports car faster and more predictable, and at the same time improves its driveability.

The new double wishbone front axle offers numerous advantages compared with the conventional McPherson spring strut layout. It offers higher camber stiffness under high compression and provides more constant support specifically for the wheel on the outside of a bend. This makes it possible to call on higher cornering force potential over the entire spring travel. At the same time, the double wishbone design inherently counteracts brake diving due to the different angles of the longitudinal polar axes. The spring struts are installed angled towards the rear and serve the same purpose. The wheel can therefore also evade any acting forces towards the rear instead of only in an upward direction.

In addition, the double wishbone front axle eliminates the disturbance from lateral forces on the shock absorbers when cornering. These can lead to distortion in the form of bending loads and cause higher frictional losses. With a twinkle in his eye, Andreas Preuninger, overall project director for GT road cars, explains this as follows: “Let us assume you are doing knee bend exercises and someone pushes you from the side – with a McPherson suspension you would lose your balance. A double wishbone axle stabilises you in the shoulder area, and you can continue the exercise undisturbed …”

Multi-link rear axle with additional ball joints

To ensure that the chassis is well-balanced, the proven LSA (lightweight, stable, agile) five-link rear axle is equipped with additional ball joints for the lower wishbones, which are subject to particularly high stress. Used instead of elastokinematic rubber components, they now ensure practically play-free and therefore especially precise connection to the body on the inner and outer sides. As a result, they also create a particularly direct connection to the road. Like on the front axle, the camber and anti-roll bar stiffness can be adjusted individually in order to find the ideal set-up for every circuit. As on the front axle, the stiffer springs are supported by helper springs. Like on Porsche racing cars, these extend the spring travel and make sure that the vehicle does not lose contact with the ground on crests, for example, in spite of the high spring rates. Special shock absorbers round off the comprehensively upgraded running gear. These permit a larger bandwidth between the soft and hard characteristics as well as faster and more precise response of their valve system. They therefore successfully manage the balancing act between greater comfort in everyday driving on the one hand and better race track performance on the other.

Rear-axle steering increases agility and stability

The rear-axle steering also makes a significant contribution to the tremendous driving dynamics of the 911 GT3. Up to a speed of approximately 50 km/h, it turns the rear wheels by a maximum of 2.0 degrees in the opposite direction to that of the front wheels. This virtual shortening of the wheelbase by 6 mm reduces the turning circle and makes parking manoeuvres easier, for example. At the same time, it also ensures more direct turn-in behaviour when steering into bends. In contrast, at speeds above 80 km/h the rear wheels steer in the same direction as the fronts by up to 2.0 degrees. The result? The virtual lengthening of the wheelbase by 6 mm increases cornering stability. Between speeds of 50 and 80 km/h, the rear-axle steering responds depending on the situation.

Like on its predecessor, Porsche is offering an optional front axle lift system on the new 911 GT3. At speeds between 35 and 60 km/h (depending on country), it increases the ground clearance at the front spoiler lip by 46 mm, and therefore allows the car to drive over speed bumps without bottoming out, for example. The intelligent Smart Lift memory function is new: it stores the position of an obstacle and then automatically lifts the car at this location in the future.

Active chassis systems underline high-performance character

Porsche Stability Management (PSM) offers a protecting hand for the new 911 GT3. Its special, particularly sporty set-up matches the dynamic character of the high-performance sports car and allows greater freedoms before it intervenes to provide assistance. As a general rule, Porsche sets up the chassis on its models so that they already combine the best possible performance with safe handling without the use of electronic control systems. Like on all GT vehicles from Porsche, the PSM of the new 911 GT3 can be switched off either fully or with the exception of the traction control (TC) system. This allows its full potential to be exploited, for example when driving on the race track.

The variable damping control system Porsche Active Suspension Management (PASM) offers advantages both on closed circuits and in daily driving. Its special GT3 configuration is combined with a 20 mm-lower ride height compared with the 911 Carrera. Two control maps can be selected: Sport offers sufficient suspension comfort for long-distance driving, while Track reduces body movements to a sportily firm level.

Larger brakes for even better deceleration

The more powerful brake system of the new 911 GT3 is able to reliably cope with the improved performance. Internally vented grey cast-iron brake discs are used as standard, and these are now dimpled instead of cross-drilled. In other words, the holes, which primarily serve to remove brake dust, are provided with cone-shaped openings. The result is higher material strength and more powerful braking action. The front discs are also much larger than on the previous model and have a diameter of 408 mm instead of 380 mm.

Two special air paths optimise brake cooling on the front axle: the upper path is responsible for internal cooling of the brakes, while the lower path makes use of the underbody air flow and cools the friction ring. The latter is clamped by especially rigid aluminium monobloc fixed callipers with six pistons. These respond quickly and offer a precise pressure point even under high loads. The brake discs of the rear wheels have an unchanged diameter of 380 mm and monobloc brake callipers with four pistons. Like at the front, the callipers are painted red in each case, but are also available in high-gloss black. The brake pads of the new 911 GT3 do without the use of copper for the first time.

Optionally available: Porsche Ceramic Composite Brake (PCCB)

The Porsche Ceramic Composite Brake (PCCB) system is available as an option on the new 911 GT3. If not otherwise requested, this is characterised by yellow-painted brake callipers. The ceramic composite material used here impresses thanks to its high thermal load capability and significant weight advantages: the PCCB brake discs – with a diameter of 410 mm at the front and 390 mm on the rear axle – weigh a good 50 per cent less than comparable grey cast-iron components. As a result, they reduce the unsprung and rotating masses even further, which in turn greatly benefits driving dynamics.

Lightweight forged wheels with double mixed tyres

Porsche has also taken a new approach in terms of the wheels and tyres for the 911 GT3: the front and rear axles are equipped with different wheel sizes for the first time – this was previously a typical characteristic of RS models: 20-inch wheels are used at the front and 21-inch wheels at the rear. The rim width at the front has been increased from 9.0 to 9.5 inches. Nevertheless, the finely designed but extremely robust forged alloy wheels weigh 0.8 kg less in total than the wheels on the predecessor model. Among other things, this is achieved through the use of a centre-lock wheel nut, which has been adopted from motorsport. The 911 GT3 wheel has a silver painted finish as standard. Alternatively, it is also available in satin-gloss Dark Silver, Neodyme and Black. The latter option can also be upgraded with a painted rim edge in Shark Blue or Guards Red.

High-performance sports tyres – or race track tyres as an option for first time

The tyres naturally have a great influence on the performance of the new 911 GT3. As standard equipment, Porsche provides the powerful GT car with high-performance sports tyres. Ths measure 255/35 ZR 20 at the front, and 315/30 ZR 21 at the rear, ensuring superior grip. All four tyres are 10 mm wider than before. The larger contact area benefits cornering speeds, traction and braking. Race track tyres with approval for road use are a new option. Following on from the 911 GT3 RS, Porsche now offers these tyres for the 911 GT3 through its dealer network. Their performance focus is specifically on dry road conditions in terms of tread compound and tread design.

Body and aerodynamics

Muscular body, streamlined form

The new 911 GT3 already looks tremendously fast even when standing still. Its more aggressive look is based on striking body elements that positively influence performance while performing an aerodynamic function. This starts with the optimised front end with its generously dimensioned openings. These route air in a targeted way to the front wheel brakes and radiators. This air is then discharged again behind the centrally positioned radiator through the newly designed, now two-part air vent in the lightweight bonnet. The precise calculation of this air duct improves the air flow and thus also increases cooling efficiency, while at the same time increasing the aerodynamic downforce at the front axle.

The front diffusers also benefit from this: in combination with the wide spoiler lip, they ensure a more constant flow of air along the fully-clad vehicle underbody, particularly at higher speeds. The new 911 GT3 reaps the benefits of this aerodynamic design at the rear axle. Here, the fully functional rear diffuser supplemented by large fins accelerates the air directed at it in such a way that the vacuum generated sucks the high-performance sports car onto the road even more powerfully. This has the significant advantage that the downforce is produced in an especially efficient way because it hardly influences the car’s drag.

Performance setting for maximum race track downforce

The opulently designed and extremely effective rear wing underlines the focus on the downforce characteristics of the 911 GT3. Its swan-neck mounting is used in a similar form in the GT endurance racing car and Le Mans class-winning 911 RSR. Since two aluminium brackets hold the wing element from above, the airflow can pass undisturbed across the aerodynamically more important underside. This reduction in the flow losses increases the downforce and leads to well-balanced negative lift conditions, together with the many other detailed measures. In the factory setting, this downforce already exceeds the value for the previous model by 50 per cent.

In the Performance position of the aerodynamic components, the downforce is increased by 150 per cent at a speed of 200 km/h. This setting is reserved exclusively for the race track and offers extensive adjustment options: the attack angle of the rear wing can be modified manually in four stages, while sliding elements known as air curtains influence the air flow in the front diffuser. The effect: with increasing speed, the additional downforce improves grip through higher wheel loads – and this in turn benefits the cornering speeds. Just as in motor racing situations, the aerodynamic balance of the new 911 GT3 can be adapted individually to track conditions and driving style.

Intelligent lightweight construction, dynamic weight-to-power ratio

When developing the 911 GT3, Porsche paid particular attention to the weight-to-power ratio, this 'Body Mass Index' for vehicles being one of the most informative figures for defining the performance of both racing and road cars. In the new GT sports car with six-speed manual transmission, each of the 510 PS is responsible for accelerating 2.8 kg (3.8 kg/kW). This takes the new 911 GT3 even closer to the level of thoroughbred racing cars than before.

When looking for avoidable excess weight, the experts at Porsche Motorsport examined practically every component and detail of the new GT model. The improvements include the new lightweight bonnet made of carbon fibre reinforced plastic (CFRP), forged alloy wheels, lightweight glass for all windows, and the lightweight sports exhaust system made of stainless steel. The new rear compartment cover behind the front seats and the PDK dual-clutch transmission without an eighth gear also contribute important kilograms of weight savings. The now standard 60 Ah LiFePO4 starter battery alone saves more than 10 kg compared with the previous 911 GT3. A 40 Ah variant is also available, This is a further 3.5 kg lighter.

Interior and equipment

Cockpit for ambitious, sporty drivers

The two-seater interior of the new 911 GT3 is rightly referred to as the cockpit: the focus is clearly on the driver’s position and its direct surroundings. The standard Sports Seats Plus already show this with their high side bolsters. Comfort is ensured by electric four-way backrest and seat height adjustment, while the seats are upholstered in attractive black leather, with black Race-Tex used for the seat centre panels. The leather head restraints feature a silver 'GT3' logo, while the backrest shell is finished in contrasting Dark Silver. Porsche optionally offers the adaptive sports seats Plus with electric 18-way adjustment.

The optional full bucket seats with integrated thorax airbag are taken from the Porsche 918 Spyder. They are made of carbon fibre reinforced plastic (CFRP) in an attractive exposed carbon design. Their high side bolsters offer secure support in the pelvis and shoulder areas even for extremely dynamic driving styles. They are also weight-optimised with openings in the carbon fibre design for multi-point harnesses. As a pair they weigh 12 kg less than the standard Sports Seats Plus. Height adjustment is performed electrically on both the driver’s and front passenger sides, with manual fore-and-aft adjustment. The black centre section is made of partially perforated and colour-backed Race-Tex. As with the exterior paintwork, GT Silver, Guards Red and Shark Blue contrasting colours are available for this and the GT3 logo of the head restraints.

GT3 multifunction sports steering wheel with Mode switch

Thanks to the possibility of height and longitudinal adjustment, the three-spoke GT3 multifunction sports steering wheel makes a further important contribution to ensuring an optimum seating position. It has a black Race-Tex cover to provide good grip and PDK paddles in Dark Silver. The standard mode switch has also been integrated in the steering wheel for the first time on the 911 GT3. As a result, it can be reached particularly easily and permits fast switchover between the Normal setting and the customisable Sport and Track modes.

Dashboard with analogue rev counter and track screen

With its special functions, the instrument cluster behind the steering wheel is one of the highlights of the new 911 GT3: it combines the classic 911 design with five round dials with the advantages of two high-resolution TFT displays. The increments on the centrally positioned analogue rev counter run right up to the heady 10,000 rpm mark – a necessary measure as the four-litre flat-six engine of the 911 GT3 revs to 9,000 rpm. On either side of this, the seven-inch displays show different vehicle information depending on the chosen configuration. The left display is reserved for the Speed & Assist area and the right display for Car & Info. Its functions are controlled by the buttons on the multifunction steering wheel.

The new track screen will appeal especially to more dynamic drivers. This specific feature of the 911 GT3 reduces the display to the information that counts on the track: on the right, for example, fuel level, oil temperature and oil pressure; on the less configurable left side, the coolant temperature and the information from the tyre pressure monitoring system. The latter can distinguish between the tyre pressure of cold and warm tyres. The rev counter is also flanked by a shift assistant: Like in modern racing cars, it indicates the optimum moment for changing gear by means of lights in graded colours.

Digital tools for optimised race track performance

The Chrono package of the 911 GT3 combines the analogue stopwatch on the dashboard with a digital stopwatch function in the instrument cluster. There is also an additional performance overview in the 10.9-inch full HD touch display of the Porsche Communication Management (PCM). A lap trigger is also optionally available. This can be obtained through Porsche Tequipment and records lap times automatically and with particularly high precision. Like in motorsport, the collected data can then be analysed and compared in the standard Porsche Track Precision App on a smartphone or laptop. The wiring necessary for this comes with the new 911 GT3 from the factory.

The PCM display is among the central elements of the Porsche Advanced Cockpit, which the new 911 GT3 shares with all other models of the current 992 generation of the 911. It serves as the basis for operating numerous functions, ranging from the various sound systems, online navigation, general information on vehicle settings and status messages through to selected functions of integrated smartphones.

Optional Clubsport package with roll bar

A high proportion of GT models from Porsche are also driven on race tracks. For this reason, the sports car manufacturer is again offering an optional Clubsport package for the 911 GT3: this includes above all a bolted-on roll bar behind the front seats. The package also includes the preparation for a battery disconnect switch, a motorsport-specification hand-held fire extinguisher and a six-point harness on the driver’s side.

Porsche Exclusive Manufaktur offers additional personalisation options

An increasing number of customers, especially those of Porsche GT cars, choose to specify personalised equipment. More than half of all GT models are additionally enhanced with items from Porsche Exclusive Manufaktur. The highlights of the more than 70 personalisation options of the Exclusive Manufaktur for the 911 GT3 include exterior mirror top covers in carbon, darkened LED matrix headlights including Porsche Dynamic Light System Plus (PDLS Plus), and matching Exclusive Design tail light clusters. Rim edges painted in Guards Red or Shark Blue are an additionally available upgrade for the black alloy wheels. Inside the car, elegant accents are created by items such as the rev counter and Sport Chrono stopwatch, the seat belts being finished in selected colours, and trim strips that can be painted to match the car's exterior colour. The optional lightweight roof made of carbon fibre further lowers the vehicle’s centre of gravity.

As part of the personalisation programme, customers worldwide can also choose from an extended colour range with around 100 paint hues. Alongside many classic colours, the range includes shades from Porsche’s history, which can be chosen to give the vehicle's exterior an extra personal touch.

Reserved exclusively for 911 GT3 customers: The Chronograph 911 GT3

As exclusive as the 911 GT3 itself is the individual chronograph that Porsche Design offers solely to customers of the high-performance sports car. Like its motorised role model, it impresses with a dynamic design, consistent performance and high-quality workmanship. Its case reflects the influences that elite motorsport has had on it. Just like the connecting rods of the GT3 engine, it is made of extremely strong, lightweight and hypo-allergenic titanium. The Porsche Design WERK 01.200 movement with flyback function combines starting, stopping and resetting in a single process. It is powered by an individual winding rotor reminiscent of the wheels of the 911 GT3. Porsche Design offers the 911 GT3 chronograph in a sporty version with the colour dial ring in Shark Blue and as a purist version with a black-coloured ring. The colour of the GT3 wheel-rim rotor matches the customer’s vehicle configuration. Further personalisation options are available for the new chronograph in markets where the new Porsche Design custom-built timepieces are already available. The price of the Porsche Design Chronograph 911 GT3 starts from 7,750 euros.

History Seven models of the Porsche 911 GT3

An incredibly sporty family that came to stay

With the 911 GT3, Porsche laid the foundation for a living legend in the summer of 1999. The enthusiastically received road-going sports car followed in the footsteps of the iconic Carrera RS models and represented the intersection between production and racing cars. It was based directly on the 911 GT3 Cup, which had celebrated its debut the previous season as the new car for the Porsche Supercup as part of the support programme for Formula One. Its type designation GT3 went back to a new class introduced in motorsport in 1994, which is still considered to be a successful concept in the GT scene right up to the present day. The spartan 911 GT3 of the 996 generation and its successors contributed significantly to its international breakthrough.

Both the racing and road versions benefited from its unique genes and components that reflected Porsche’s immense motorsport experience. The engine is a good example: the six-cylinder naturally aspirated boxer engine, featuring a displacement of 3.6 litres, originated from the water-cooled turbo engine of the 911 GT1, which drove to a one-two victory at Le Mans in 1998. The GT1’s crankcase still incorporated the DNA of the Porsche 962 from the Group C era. In the production model, water-cooled cylinder liners and heads ensured rapid heat dissipation, while lightweight forged pistons and titanium connecting rods reduced the weight of the moving parts in the engine. The crankshaft was supplemented by a dual-mass flywheel and a racing clutch.

The result was extremely exhilarating and created as if specifically for passionate 911 drivers who enjoy letting their sports car off the leash on race tracks: The 265 kW (360 PS) four-valve engine impressed with a specific power output of 100 PS per litre and delighted with its rich sound and pronounced ability to rev. The top five gears of the precise six-speed manual transmission could be easily replaced in order to match the transmission ratio to different racing circuits. The anti-roll bars could also be adjusted. The reinforced chassis, lowered by 30 mm, had an extended adjustment range for the wheel camber so that the 911 GT3 could exploit the potential of race tyres. The rear wing also had six different positions to permit adjustment of the aerodynamic downforce on the rear axle.

The 302 km/h 911 GT3 received its ultimate accolade in the hands of Walter Röhrl on the Nürburgring Nordschleife: it became the first road-legal production car to lap the circuit in the Eifel region in less than eight minutes. To be precise, just seven minutes and 56.3 seconds elapsed for the then lap record on the shorter lap variant. As a comparison: the new, fourth generation of the 911 GT3 broke the seven-minute barrier with a time of 6:59.927 minutes during routine development work on this track. Timed in the same way as Walter Röhrl back then, test driver Lars Kern needed just 6:55.2 minutes to complete a lap. This means that it is possible to precisely measure 21 years of automotive progress in terms of the 911 GT3, shaving more than a minute off a lap of the most difficult race circuit in the world.

The new sports model repeated the success of the 911 Carrera RS 2.7 from 1973: the demand significantly exceeded expectations. Instead of the initially planned 1,350 units, a total of 1,868 cars were delivered to happy owners. The 911 GT3 reduced to the essentials was here to stay. Porsche presented a further enhanced version in 2003. This was characterised mainly by new headlights, a modified rear wing and an increase in power output to 280 kW (381 PS). This allowed the 911 GT3 to accelerate to 100 km/h in 4.5 instead of 4.8 seconds, and its top speed rose to 306 km/h. The Porsche Ceramic Composite Brake (PCCB) was also available as an option for the first time. This reduced the unsprung mass by 18 kg.

More displacement, more power, more performance

The next GT3 generation followed in 2006. This was based on the 911 with the internal designation 997 and made its debut with 305 kW (415 PS) at the Geneva International Motor Show. The largely unchanged six-cylinder engine initially retained a displacement of 3.6 litres. only 4.3 seconds were now needed for the 0-100 km/h sprint on the way to a top speed of 310 km/h. The 911 GT3 visually set itself apart by virtue of a black-painted radiator vent in front of the luggage compartment lid for the first time – a detail that became a characteristic feature of this model series from then on. The new sports car also took a significant step forwards in the area of aerodynamics: Thanks to the front spoiler lip and the enhanced rear wing supplemented by an additional spoiler with Gurney flap, aerodynamic lift was reduced to zero in a production model for the first time. The standard Porsche Active Suspension Management (PASM) also premiered in the 911 GT3.

One year after the facelift of the 997 generation of the 911, Porsche launched a new 911 GT3 in 2009. This was equipped with a larger engine: the displacement increased from 3.6 litres to 3,797 cc, and the power output increased to 320 kW (435 PS). As a result, the road-going sports car accelerated to 100 km/h in 4.1 seconds and reached a top speed of 312 km/h. The one-piece rear wing now again served as a particular distinguishing feature.

New engine and an understated alternative

The successor was launched in 2013: the 911 GT3 based on the 991 generation again came with a displacement of 3.8 litres. However, the boxer engine, now with an output of 350 kW (475 PS), was from a new engine family, used direct petrol injection and achieved a maximum engine speed of 9,000 rpm. The systematic use of lightweight materials had a direct impact on the even higher performance. It sprinted to 100 km/h in only 3.5 seconds in combination with the seven-speed dual-clutch transmission (PDK), and the top speed was 315 km/h. It also shone on the Nürburgring Nordschleife, which has always been the manufacturer’s ultimate benchmark for its vehicles: the lap time fell to below 7:30 minutes.

The next evolutionary stage was ready in 2017: in the 911 GT3 of the 991.2 generation, the six-cylinder engine now received a displacement of 4.0 litres and a maximum output of 368 kW (500 PS). Alongside the PDK transmission, a mechanical six-speed gearbox was again available for an even more purist driving experience. However, the 911 GT3 achieved its impressive performance figures – 3.4 seconds from zero to 100 km/h, top speed 318 km/h – in combination with PDK technology. Its top speed was even 320 km/h with a manual transmission. Also new: Porsche introduced the 911 GT3 Touring for customers who wanted the impressive temperament of the GT3 model in a more understated form. It picked up the tradition of the 911 R from 2016, and made do with the extending rear wing of the 911 Carrera GTS supplemented by an additional separation edge (Gurney flap), for example.

The latest chapter: progress is measured in minutes

With the new, seventh edition, the 911 GT3 is again setting new standards. Now with a power output of 375 kW (510 PS), it makes more systematic use of pure racing technology than ever before. For instance, as the result of complex development work, a double-wishbone front suspension is used for the first time in a production 911. Its principle was derived from the 911 RSR that was successful at Le Mans. The swan-neck rear wing with four adjustment positions, functional rear diffuser and wide spoiler lip with adjustable front diffuser are also based on the transfer of technology from the 911 RSR to the series production car. The interaction of these components significantly improves the aerodynamic downforce of the new 911 GT3 in comparison with its predecessor. The result is impressive: 6:59.927 minutes. In this short time, test driver Lars Kern was able to complete a lap of the Nürburgring Nordschleife at the wheel of the new 911 GT3 as part of its routine development process. It was therefore over one minute faster than the original 911 GT3 in 1999.