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Press Information

Porsche 911 GT3 RS

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Highlights**911 GT3 RS: the race car for the circuit racetrack and everyday driving**

The new Porsche 911 GT3 RS breaks down the barrier between street-legal sports cars and race cars more than ever. It contains the maximum amount of motorsport technology that is possible today in a street-legal 911. Extensive modifications to the drive system, aerodynamics and lightweight design boost performance even more significantly compared to the 911 GT3. And the 911 GT3 RS – now in its fifth generation – achieves these gains despite having already set standards in its class on the circuit racetrack ever since making its debut.

Performance

With a lap time of seven minutes and 20 seconds on the North Loop of the Nürburgring, the 911 GT3 RS even beats the historic record time of the Carrera GT super sports car of just around seven minutes and 29 seconds. Top performance by applying motorsport know-how.

Drive system

Four-litre six-cylinder engine with 500 hp (368 kW) and 460 Newton metres of torque combined with a specially developed PDK transmission. The engine, which has the largest displacement and most power of any naturally aspirated engine with direct fuel injection in the 911 series, accelerates the 911 GT3 RS from zero to 100 km/h in 3.3 seconds and to 200 km/h in 10.9 seconds.

Lightweight design

The innovative magnesium roof, engine and boot lids and wings made of carbon fibre, as well as other lightweight parts made of alternative materials, make the RS ten kilograms lighter than the 911 GT3 despite its Turbo body that is even wider at the rear. In addition, the lightweight roof lowers the sports car's centre of gravity, which improves its already excellent lateral dynamics.

Chassis

The larger track widths at the front and rear axles give the car even better roll stability than in the 911 GT3. In addition, the 911 GT3 RS comes with the widest tyres of any 911 model as standard. The results: even better mechanical grip which enables even higher speeds through bends.

Circuit racetrack

Functions such as “paddle neutral” declutching – which is comparable to pressing the clutch with a conventional manual gearbox – and speed limiting by pressing the Pit Speed button have been customised not only for more driving pleasure but also for motorsport use. They give the driver more ways to influence vehicle behaviour, and they assist the driver more when driving on a circuit racetrack.

The new Porsche 911 GT3 RS

Extreme 911 for the circuit racetrack

Continuation of a success story: Developed according to the basic formula of race car building, the 911 GT3 RS once again shifts the boundary between sports car and race car. With a lap time of under seven minutes and 20 seconds on the North Loop of the Nürburgring, it sets a new standard and even beats the Carrera GT super sports car's lap time of 2003. The 911 GT3 RS is traditionally the highest street-legal performance stage of the 911 with a naturally aspirated engine. Ever since 2003, and now in its fifth generation, this car has been offering racing drivers high-carat motorsport technology for circuit racetrack use in a sports car that is still practical for everyday use.

An overview of the drive system: A four-litre six-cylinder engine power-boosted to 500 hp (368 kW) and a specially tuned Porsche Doppelkupplung (PDK) for gear shifts without any interruption in tractive power. The effects: The two-seater catapults the driver from zero to 100 km/h in 3.3 seconds, and the speedometer needle passes the 200 km/h mark after another 7.6 seconds. Overtaking times are reduced to the time of two breaths: The intermediate sprint from 80 km/h to 120 km/h takes just two seconds. The car's top speed is 310 km/h, and its combined NEDC fuel consumption is 12.7 l/100 km.

Its impressive sprinting ability is the result of a combination of high power and low weight. Its weight-to-power ratio of 2.8 kg per hp positions the new 911 GT3 RS well under the magic barrier of 3.0 kg/hp. To achieve this, Porsche has consistently built up its intelligent light-weight design capability – which is a core theme of the current 911 generation.

For the first time, the roof of a 911 GT3 RS is made of magnesium. It weighs nearly one kilogram less than the aluminium roof of the current 911 GT3, and its construction makes it even a bit lighter than a carbon fibre (CFRP) design. The weight savings has a positive effect on lowering the centre of gravity, which improves the vehicle's lateral dynamics. The front lid and front wings, rear lid and rear wing are all made of CFRP. The polycarbonate rear and side windows replace the otherwise usual glass windows.

The form of the 911 GT3 RS consistently follows one primary function, namely: downforce. At a speed of 300 km/h, it is primarily the low front spoiler that generates downforce at the front axle, contributing 110 kg; the rear spoiler with its large surface area increases downforce at the rear axle by over 220 kg. The high-performance sports car got the body of the 911 Turbo to create adequate space for the wide chassis and the specially developed UHP (Ultra High Performance) tyres. This means: Above the front axle, the 911 GT3 RS is 50 mm wider than a 911 Carrera, and in the area of the drive axle a full 72 mm. The lateral air intakes, positioned directly in the air flow, are typical of the 911 Turbo and also make a contribution towards boosted performance by supplying the high-performance engine with process air and easing its induction work by a ram-air effect.

The interior and its equipment are tailored to the extraordinary driving dynamics of the 911 GT3 RS. The driver and passenger sit in full bucket seats made of visible carbon, which originate from the 918 Spyder. When the car is driven on a circuit racetrack, the new Pit Speed button on the centre console assures that the vehicle complies with the prescribed speed limit in the pit lanes at the press of a button. Standard equipment also includes the Club Sport Package with a rollover protection cage behind the front seats and a six-point safety harness for the driver.

Engine and transmission

Spontaneous high performance: 500-hp engine with a dual clutch transmission

For the first time in an RS sports car, Porsche is implementing a naturally-aspirated engine with direct fuel injection and the Porsche Doppelkupplung (PDK). The engine is derived from the 911 GT3 and was further developed into a purebred sport engine with reduced moving masses for very high revs. It provides for spontaneous engine response and a linear power curve up to the highest rev levels. In combination with the seven-speed PDK, which shifts extremely quickly without loss of tractive power, the powertrain produces optimal drive power for sporty use with extremely fast reaction times. The PDK is specially developed for this car with characteristics directly inspired by the sequential gearboxes used in car racing. This gives the driver further benefits in terms of performance, dynamics and driving pleasure.

The 911 GT3 RS has been prepared for circuit racetrack use down to the finest details, such as the new Pit Speed button. This is a function derived from professional car racing which implements quick and simple activation of automatic speed limiting. The driver uses the steering wheel stalk to set any desired speed limit, and the function can be used in a speed-limited pit lane, for instance, by pressing the Pit Speed button. This prevents exceeding the preset maximum speed while still controlling the car's speed via the accelerator pedal.

Largest and most powerful 911 naturally aspirated engine with direct injection

The engine of the 911 GT3 RS is the largest displacement and most powerful naturally aspirated engine with direct injection that Porsche has developed from the flat-six engine for street use. The 4 mm longer stroke increases the working volume from 3.8 to four litres, increases power by 25 hp (18 kW) to 500 hp (368 kW) at 8,250 rpm and increases torque by 20 Nm to 460 Newton metres at 6,250 rpm. Its power-to-displacement ratio is 125 hp/litre. The newly developed crankshaft enables a high maximum engine speed of 8,800 rpm, despite the increased loads. The shaft consists of a high-purity, multiple remelt, tempered steel, which is also used in the 919 Hybrid LMP1 race car and in Formula 1.

The 911 GT3 RS gets its combustion air from an independent air induction system that is completely new. The air does not enter through openings in the rear lid as in all other 911 models, but instead through the lateral intakes of the 911 Turbo body. In the 911 GT3 RS, these openings and air channels – which are used in the 911 Turbo models for charge-air cooling – guide the engine induction air into the redesigned air filter. The new filter element is a design derived from motorsport, and it offers low induction resistance. The advantages of this induction system lie in its significantly lower flow and induction resistances for high engine power combined with an additional ram pressure effect at high speeds. The driver can hear it: the lateral induction gives the 911 GT3 RS a very special sound in the interior.

With the base engine, the RS engine exhibits all of the traits of a typical high-performance engine for motorsport use. They include dry sump lubrication with separate oil reservoir, titanium connecting rods and weight-saving valve activators using cam followers, as well as a sport exhaust system with low back pressure. As in the previous model, the rear silencer is made of titanium to reduce weight. The new RS model adopts the dynamic engine mounts from the 911 GT3. They hold the engine tighter to the body during cornering, and this prevents undesirable effects of engine mass on car handling.

One option for additional weight savings is a starter battery in lithium-ion technology; Porsche was the first automaker to offer this feature in the previous model. The further developed battery, which can store 40 Ah of electrical energy, weighs over twelve kg less than the standard lead-acid battery with 70 Ah. The lithium-ion battery is supplied uninstalled, and it can be installed as an alternative battery. By delivering the vehicle with both batteries, it is ready for use in all seasons, because although the lightweight battery is fit for everyday use in most conditions, at outdoor temperature below minus ten degrees Celsius its starting ability is limited due to its intrinsic properties.

First 911 GT3 RS with PDK

The PDK dual clutch transmission, which was originally developed for car racing, is now also being used in the 911 GT3 RS. Optimised for very high shifting performance, it improves driving dynamics by its very short reaction and shift times as well as lightning quick gear changes. The gear ratios were taken from the 911 GT3, but they were modified to compensate for the larger circumference of the 21-inch rear wheels. This ensures greater sprinting ability over all speed ranges.

Two modes are available to the driver: manual shifting or the adaptive shift programme. Manual shifting is done using two paddles on the steering wheel, the right for upshifts and the left for downshifts. This lets the driver shift with short shifting travel and optimised actuating forces for even faster gear shifts with concise feedback; its operating characteristics are comparable to those of race cars. As an alternative, the driver can also shift using the selector lever, with a shift pattern based on that used in professional motorsport. Upshifting is performed by pulling the lever back, while pushing it forward downshifts.

Paddle-neutral: declutching function extends driving dynamics

The dynamics of a sports car driven to optimum lap times are also affected by the clutch. That is why the PDK comes with a “paddle-neutral” feature. If the driver pulls both shift paddles simultaneously, the clutches of the PDK are opened, and this cuts off the flow of power between the engine and drivetrain. As soon as the two shift paddles are released, the clutch engages at lightning speed, provided that the PSM is switched off. If PSM is activated, the clutch is engaged quickly, but in a less abrupt manner.

This function offers two principal advantages: the driver can, for example, pull the paddles to neutralise the driving behaviour of the vehicle in case of understeer on wet pavement in a bend. This redirects lateral cornering forces to the wheels of the front axle. The second aspect relates to specifically influencing driving dynamics by a rapid onset of propulsive power when engaging the clutch. Comparable to the use of a traditional clutch with a manual transmission, the rear of the vehicle can be intentionally destabilised for dynamic turn-in behaviour when cornering. In addition, the driver can use the paddle-neutral function when accelerating from a standstill. As in a vehicle with a manual transmission, the driver alone decides on how to accelerate using the clutch and accelerator foot, without any assistance from powertrain or driving dynamics related control systems.

Chassis and rear-axle steering

Wheels and tyres for exceptional circuit racetrack performance

This vehicle adopts the chassis technology of race cars, and its wheel dimensions are the same as those of the 918 Spyder super sports car. The chassis of the 911 GT3 RS has been tuned for maximum driving dynamics, precision and safety. In contrast to the previous model, the new 911 GT3 RS has rear axle steering, Porsche Torque Vectoring Plus with fully variable rear differential lock, extended wheelbase (+100 mm) and a larger sized brake system. Driving properties are also improved by new hub carriers at the front and rear axles as well as modified wheel bearings and wheel hubs.

The large, forged alloy wheels with central locks provide for excellent grip on the 911 GT3 RS. As in racing vehicles, different sized wheels are used to meet the requirements of the different axles. 20-inch wheels on the front axle assist in agility and steerability, while the 21-inch rear wheels provide for traction. Generously sized for these wheels are the Pilot Sport Cup 2 tyres specially designed by Michelin: they are 265/35 ZR 20 in front and 325/30 ZR 21 at the rear. Hence, the 911 GT3 RS comes with the widest standard tyres of any 911 model.

Very wide track for very high cornering speeds

To improve roll stability, the track widths of both the front and rear axles were widened compared to the 911 GT3. Advantages: even more agile turn-in characteristics and even higher cornering speeds. The front strut mounts and rear damper bearings on the body side are fitted with ball joints. These offer even greater precision than the usual elasto-kinematic mounts. As in all 911 GT models, in the new 911 GT3 RS it is possible to individually adapt the toe and the anti-roll bars as well as the spring strut system, including vehicle ride height, for the desired handling characteristics on circuit racetracks.

As in the previous model, the chassis of the new 911 GT3 RS is supplemented by weight-saving helper springs on the rear suspension, a specially tuned Porsche Stability Management (PSM) system that can be deactivated over two stages, and Porsche Active Suspension Management (PASM).

Rear-axle steering: more agile in bends, more stable in lane changes

Agility and stability, driving safety and, above all, the racing car like handling of the 911 GT3 RS are in a large part based on the rear-axle steering. Electromechanical actuators are used to vary the steering angle of the rear axle by up to 1.5 degrees in either direction based on the vehicle's speed. At speeds below 50 km/h, the front and rear wheels turn in opposite directions, and this enhances dynamic turn-in behaviour so that the car is even more agile in cornering. From 80 km/h, the wheels of the two axles steer in the same direction. This heightens stability during lane changes and driving manoeuvres at high speeds. To further improve driving properties, the 911 GT3 RS has Porsche Torque Vectoring Plus with an electronically controlled, fully-variable rear differential lock; the system also utilises specific brake interventions at the rear wheels.

The very powerful standard brake system was, for the most part, adopted from the 911 GT3. Aluminium monobloc fixed callipers are used, with six pistons in front and four pistons on the rear axle. The system utilises composite brake discs, 380 mm in diameter, whose brake chambers are made of aluminium. The Porsche Ceramic Composite Brake (PCCB) system is offered as an option. It features large brake discs (front/rear diameters: 410/390 mm) and a further developed material composition, especially on the outer friction layer. The new PCCB brakes attain even better braking performance and wear resistance.

Body and aerodynamics

Intelligent lightweight design: less weight, more downforce

The new 911 GT3 RS is unmistakably an exceptional sports car. The body alone, with its RS-specific aerodynamic add-on parts illustrates, with its width, the car's status as a driving machine at near race car level. The front spoiler lip, which extends nearly to the road, and the large rear wing reinforce its dominant look. Also striking is a 30 centimetre wide recess that is five to ten millimetres deep; it extends centrally over the CFRP bonnet and the magnesium roof. This recess is a stylistic reference to the recess on the luggage compartment lid of the classic 911 models with air-cooled engines, and today it identifies the two largest lightweight components in the 911 GT3 RS.

The body properties of the 911 GT3 RS that are typical of race cars are clearly outlined here – first, less weight, and second, more downforce. The carbon fibre bonnet weighs around one-fourth less than the usual aluminium lid on a 911, while the magnesium roof is around 30 per cent lighter than the aluminium structure on the 911 GT3. The lightweight roof, in particular, lowers the sports car's centre of gravity and thereby contributes to its exceptional lateral dynamics. In addition, there are other lightweight components made of alternative materials. Despite the wide 911 Turbo body and large wheel and tyre combinations, at 1,420 kg the 911 GT3 RS weighs around ten kilograms less than the 911 GT3.

New generation: total downforce more than doubled

The ingenious aerodynamic concept of the sports car produces over twice the total downforce of the previous model, the 997 GT3 RS. The lower air pressure between the car body and the road at the front axle is primarily created by the interplay of the front spoiler and the unique air exhaust vents on the wheel arches. As on purebred race cars, the vents with their large cross sections extend well into the upper regions of the front wings that are made of CFRP. The vents are provided with louvres that function as covers and govern the air flow. This solution increases downforce at the front axle by around 30 per cent.

The high position of the rear wing – and its size, shape and angle of attack – generate significantly more aerodynamic pressure on the rear axle than in the 911 GT3. The wing is bolted-on, and for use on the circuit racetrack it can be individually adjusted to one of three positions. The RS-specific rear lid also makes a contribution towards improved aerodynamics with an integrated trailing edge and central air vent opening. Integrated into the rear lid is a large, black rear lid panel made of glass fibre reinforced polymer (GFRP), which contains lateral openings for cooling the engine compartment, the third brake light and an embossed PORSCHE badge. Additional openings in the lower part of the rear lid and in the lower part of the rear apron also serve to cool the engine compartment. The construction of this rear apron is based on a new material concept that combines polyurethane, hollow glass beads and carbon fibres as reinforcing filler materials. This reduces its weight by around 30 per cent. In addition, the new 911 GT3 RS has independent side sill trims in black which are 20 mm wider on each side than those on the 911 Turbo.

Interior and equipment

Cockpit experience

The interior design of the 911 GT3 RS with Alcantara elements is based on the current 911 GT3. The full bucket seats were newly developed as were the sport steering wheel and RS door panels with elements in silver or lava orange with visual carbon accents. In addition, various “GT3 RS” badges can be found in the interior. Other standard features are the Club Sport Package with a bolted-on roll cage behind the front seats, preparation for a battery master switch, and separately provided six-point safety harness for the driver and fire extinguisher with mounting bracket.

The very sporty and lightweight full bucket seats are based on those in the 918 Spyder. The load-bearing structure consists of carbon-fibre material, and the upholstery is black leather with a middle strip of Alcantara or microfibre. The seats have mechanical longitudinal adjustment and electric height adjustment, and they contain the latest generation of side airbags. As an alternative option offered at no extra cost, Porsche offers sport bucket seats without height adjustment, but with backrests that can be folded forward.

The GT3 RS sport steering wheel, which is 360 mm in diameter, also comes from the 918 Spyder and features manual longitudinal and height adjustment. The shift paddles for manual gear shifting of the PDK exhibit very short travel and extremely precise shifting behaviour. The interior is rounded out by model-specific RS door panels with door pulls made of seat-belt material.

As standard, Porsche delivers the 911 GT3 RS with the CDR audio system, which is controlled from a seven-inch touchscreen, has 2x25 watts of output power and four loudspeakers. To save weight, the system can be omitted, in which case it is replaced by a two-section storage compartment. Various audio options are offered as alternatives, which range up to the Porsche Communication Management (PCM) system.

Sport Chrono Package with Porsche Track Precision app

In its Sport Chrono Package, which is available as an option, Porsche offers drivers of the 911 GT3 RS even more ways to measure and optimise their personal lap times. As in the previous package, the base version of the new package offers an analogue timer on the dashboard and a digital timer in the instrument cluster. In conjunction with the optional PCM, a performance indicator is added. Completely new is the Porsche Track Precision app for a smartphone and a lap trigger preparation that is available from Porsche Tequipment. Drivers can use the Track Precision app for such tasks as having lap times automatically measured via GPS, managing the wide range of data acquired while driving on a smartphone and sharing and comparing it with other drivers. For example: Vehicle speed and engine rpm, steering angle and lateral acceleration, as well as acceleration and deceleration in the driving direction. This app utilises highly precise vehicle data from an auxiliary control unit in the vehicle. Graphic analyses of driving data and video analysis assist drivers in assessing and further improving their driving performance.

Lap times can be measured even more precisely with a lap trigger which can be procured from Porsche Tequipment. A fixed transmitter along the edge of the track is used, which triggers a pulse for time capture when the receiver in the vehicle passes by.

The previous models

RS: the history of racing sports cars

The first RS is a legend. In 1973, Porsche put a car in the hands of its customers who were motorsport enthusiasts, which was very difficult to beat on the circuit racetrack. It was the 911 Carrera RS 2.7 which was also known for its characteristic rear spoiler that was nicknamed the “duck tail”. At Porsche, the initials RS stand for Racing Sport, which means that the driver can drive the car to the racetrack over public roads, win a race there, then drive back home.

In 2003, Porsche revisited this idea of a street-legal sports car that could compete on the racetrack, and it developed the first RS version based on the 911 GT3 of that time. Its 3.6-litre engine came, for the most part, from the 911 GT1 that won at Le Mans and which had a power output of 381 hp (280 kW). Lightweight design and omission of comfort features reduced its weight to 1,360 kg, which is 20 kg less than the 911 GT3. This shortened its zero to 100 km/h sprint time by one-tenth of a second to 4.4 seconds. There were many ways to individually modify the 911 GT3 RS for the characteristic of a specific circuit course.

Together with the 911 GT3, the RS – as it is known in the motorsport scene – gained the reputation of being the most successful touring sports car. With the transition to the new generation 911 in 2006, Porsche introduced the second 911 GT3 RS. Its flat-six engine now produced 415 hp (305 kW) from an unchanged 3.6 litres of displacement. Its specific power positioned it at the top of all previously built naturally aspirated engines that were intended for street-legal vehicles. The 911 GT3 RS now completed the sprint from a standstill to 100 km/h in 4.3 seconds and rounded the North Loop in seven minutes and 45 seconds. New electronic control systems made their way into the vehicle in the form of the PASM active damper system and Traction Control (TC) which could be deactivated.

After three years, Porsche made fundamental revisions to the 911 GT3 RS. The displacement of the six-cylinder engine grew to 3.8 litres, and its power to 450 hp (331 kW). By pressing the Sport button on the centre console, the driver could briefly increase torque by up to 35 Newton metres in the mid-rev range. Short transmission ratios and standard

dynamic engine mounts made another contribution towards enhanced power and performance. As a result, it was now possible to accelerate the 911 GT3 RS from zero to 100 km/h in 4.0 seconds, and it could turn a lap of the North Loop in seven minutes and 35 seconds. New was the Porsche Stability Management (PSM) system in a special version with very sporty tuning.

In 2011, the Porsche engineers increased the displacement and power of what was once the 911 GT1 engine one final time. The 911 GT3 RS 4.0 could produce 500 hp (368 kW) of power and its production was limited to 600 units. The sport engine, which was then the largest ever used in a production 911, had the highest specific power of any naturally aspirated engine by Porsche at 125 hp/litre. The 911 GT3 RS 4.0, which came exclusively with a six-speed sport transmission, attained a zero to 100 km/h sprint time of 3.9 seconds with its gear ratios that were designed for circuit racetrack use, and reached the 200 km/h mark in under twelve seconds. On the North Loop of the Nürburgring, it set a new best lap time for its class at seven minutes and 27 seconds.

Overview of the Porsche 911 GT3 RS

Brief profile

The 911 GT3 RS assumes the top position in the 911 line-up among motorsport-oriented high-performance sports cars. With a lap time of seven minutes and 20 seconds for the North Loop of the Nürburgring, it outpaces the Carrera GT, yet it still offers the typical everyday utility of all Porsche sports cars. Its drive consists of a six-cylinder naturally-aspirated engine with direct fuel injection and a power output of 500 hp (368 kW). The chassis and aerodynamics are optimally tuned for circuit racetrack performance. Its intelligent lightweight design peaks with a magnesium roof, and carbon fibre reinforced polymer (CFRP) was used to produce its front lid, front wings, rear lid and rear wing.

RS

RS stands for Race Sport at Porsche. Ever since 2003, Porsche has been developing an RS version – based on the then current 911 GT3. The RS represents the highest performance stage of 911 sports cars with a naturally aspirated engine – positioned just below purebred race cars. The new 911 GT3 RS will be the fifth generation of this high-performance sports car model to be launched.

Technology highlights

- Four-litre six-cylinder engine with 500 hp (368 kW) of power at 8,250 rpm and 460 Newton metres of torque at 6,250 rpm. Its power-to-displacement ratio is 125 hp/litre. The newly developed crankshaft consists of a highly pure super steel alloy, which originates from the aerospace industry and has also been used in the 919 Hybrid LMP1 race car and in Formula 1.
- PDK delivers very high shifting performance and improves driving dynamics with very short reaction and shift times, permitting lightning-quick shifts. “Paddle neutral” declutching function extends capabilities in driving dynamic manoeuvres.
- PASM chassis with rear-axle steering, wide track, Porsche Torque Vectoring Plus and fully variable rear differential lock for optimal lateral dynamics. Specially tuned Porsche Stability Management (PSM) that can be deactivated over two stages.

- Forged alloy wheels with central locks. 20-inch diameter front wheels for agility and steerability; 21-inch rear wheels for traction. Widest tyres of any of the 911 production models as standard: tyre sizes 265/35 ZR 20 and 325/30 ZR 21.
- Aerodynamic concept attains twice the downforce of the previous model by such design features as the unique air exhaust vents of the wheel arches that extend into the front wings.
- Chassis and rear wing have multiple adjustment features for individual adaptation to specific circuit racetracks.
- Starter battery in lithium-ion technology is option for additional weight savings. Further developed battery with energy capacity of 40 Ah weighs over twelve kilograms less than the standard lead-acid battery with 70 Ah.

Design highlights

- Wide body of the 911 Turbo with advanced lightweight design: magnesium roof, CFRP lids and front wings. This makes it ten kilograms lighter than the 911 GT3.
- Lateral air intakes for combustion air with power-enhancing ram pressure effect.
- Independent design with characteristic 30 cm wide recess in the centre of the front lid and roof, as well as a low front spoiler lip and a large rear wing.

Equipment

- Black interior with Alcantara elements, door panels with door pulls and new sport steering wheel (360 mm diameter).
- Full bucket seats like in the 918 Spyder with carbon-fibre structure, black leather upholstery with middle strip of Alcantara.
- Club Sport Package with a bolted-on roll cage behind the front seats, preparation for a battery master switch, separately provided six-point safety harness for the driver and fire extinguisher with mounting bracket as standard.
- Sport Chrono Package with Porsche Track Precision app for exact lap timing on the circuit racetrack and detailed analysis of data relating to driving dynamics (optional feature).

Specifications Porsche 911 GT3 RS*

Body: Two seat coupé; lightweight body in intelligent aluminium-steel construction with wings, boot and bonnet lids made of carbon fibre reinforced plastic (CFRP); two-stage driver and front passenger airbags; side and head airbags for driver and front passenger.

Aerodynamics:

Drag coefficient c_d	0.33
Frontal area A	2.03 m ²
$c_d \times A$	0.672

Engine: Water-cooled flat-six engine; aluminium engine block and cylinder heads; four overhead camshafts, four valves per cylinder, variable valve timing (VarioCam); hydraulic valve clearance adjustment; direct petrol injection; one three-way catalytic converter per cylinder bank, each with two oxygen sensors; electronic ignition with solid-state ignition distribution (six active ignition modules).

Bore	102.0 mm
Stroke	81.5 mm
Displacement	3,996 cc
Compression ratio	12.9:1
Engine power	500 hp (368 kW) at 8,250 rpm
Max. torque	460 Nm at 6,250 rpm
Power output per litre	125 hp/l (92.1 kW/l)
Max. engine speed	8,800 rpm
Fuel type	Super plus

Electrical: 12 Volt; alternator 2,100 W; battery 95 Ah/520 A.

* Specifications may vary according to markets

Power transmission: Engine and transmission bolted to form one drive unit; seven-speed dual clutch transmission (PDK) with controlled rear locking differential and PTV Plus.

Gear ratios

1 st gear	3.75
2 nd gear	2.38
3 rd gear	1.72
4 th gear	1.34
5 th gear	1.11
6 th gear	0.96
7 th gear	0.84
Reverse gear	3.42
Final drive ratio	4.19
Clutch diameter	202 mm/153 mm

Suspension:

Front axle: strut suspension (MacPherson type, Porsche optimised) with wheels independently suspended by transverse links, longitudinal links and struts; cylindrical coil springs with internal dampers; electromechanical power steering.

Rear axle: multi-link suspension with wheels independently suspended on five links; cylindrical coil springs with coaxial internal dampers; active rear-wheel steering.

Porsche Active Suspension Management (PASM) with electronically controlled dampers; two manually selectable maps.

Brakes:	Dual-circuit brake system with separate circuits for front and rear axles.			
	Front: six-piston aluminium monobloc brake callipers, perforated and internally ventilated brake discs with 380 mm diameter and 34 mm thickness.			
	Rear: four-piston aluminium monobloc brake callipers, perforated and internally ventilated brake discs with 380 mm diameter and 30 mm thickness.			
	Porsche Stability Management (PSM); vacuum brake booster; electric dual servo parking brake; automatic hold function.			
Wheels and tyres:	Front	9.5 J x 20	with	265/35 ZR 20
	Rear	12.5 J x 21	with	325/30 ZR 21
Weights:	Unladen weight DIN			1,420 kg
	Permissible gross weight			1,720 kg
Dimensions:	Length			4,545 mm
	Width			1,880 mm
	Width with door mirrors			1,978 mm
	Height			1,291 mm
	Wheelbase			2,457 mm
	Track widths		front	1,587 mm
			rear	1,557 mm
	Luggage comp. capacity		front	125 l
			rear	260 l
	Fuel tank capacity			64 l (optional: 90 l)

Performance:	Top speed	310 km/h 193 mph
	Acceleration	
	0 – 100 km/h	3.3 s
	0 – 60 mph	3.1 s
	0 – 160 km/h	7.1 s
	0 – 200 km/h	10.9 s
	0 – 400 m (1/4 mile)	11.2 s
Fuel consumption: (NEDC)	Combined	12.7 l/100 km
	Urban	19.2 l/100 km
	Extra-urban	8.9 l/100 km
CO₂ emissions:	Combined	296 g/km
Emissions class:		Euro 6

Status: March 2015