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Press Information

Porsche Cayman GT4

Contents

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Highlights

Cayman GT4: the fastest entry into the GT family by Porsche

The first GT sports car of the Porsche Cayman model series has immediately become the new sporty benchmark in its segment. The radical two-door sports car handles the circuit racetrack as masterfully as it does everyday streets. In launching this car, Porsche is renewing its commitment to extraordinary high-performance sports cars in every market segment.

Performance A lap time of 7 minutes and 40 seconds on the North Loop of the Nürburgring makes the Cayman GT4 the new fastest performer in its class. This car embodies the Porsche motorsport experience.

Drive system 3.8-litre six cylinder engine from the 911 Carrera S with 385 hp (283 kW) and a stronger six-speed manual transmission: zero to 100 km/h in 4.4 seconds, top speed of 295 km/h. Dynamic power reserves for all of the challenges along the way.

Aerodynamics The first Cayman with downforce: the front spoiler and rear wing generate contact pressure with the road at the front and rear axles. This gives the Cayman GT4 even better driving stability and extraordinary performance in bends.

Chassis Top-class technology: the chassis and brake system largely originate from the 911 GT3. PASM active damping system and dynamic transmission mounts are configured for motorsport driving dynamics.

Option Time training with a smartphone: The Porsche Track Precision app is part of the optional Sport Chrono Package. It can perform timing functions and visualise driving dynamics on a mobile phone.

New addition to the GT family at Porsche

A purist that is fast and passionate – the new Porsche Cayman GT4

Its destination: the circuit racetrack. Its mission: pure Porsche driving pleasure. In introducing the Cayman GT4, Porsche is once again demonstrating its competence in building exceptional sports cars in every vehicle class. It is making its debut with a drum roll: the Cayman GT4 is the top performer in its segment, turning in a lap time of 7 minutes and 40 seconds on the North Loop of the Nürburgring. GT sports cars from Porsche embody the most passionate connection between everyday driving and the circuit racetrack, and so they embody the sporty core of the brand. Four out of five drivers of Porsche sports cars with the GT classification also use them on the race track. The Cayman GT4 also makes a clear statement that Porsche will continue to promote radical two-door sports cars in the future – sports cars that are developed at the motorsport department in Weissach.

Although the engine, chassis, brakes and aerodynamic design of the Cayman GT4 are configured for maximum driving dynamics, the Cayman GT4 still retains the versatility that is typical of the two-seat Porsche coupes. It is powered by a 3.8-litre flat-six engine with 385 hp (283 kW), which was derived from the 911 Carrera S engine. Its power is transferred by a manual transmission with six gears. This combination lets the Cayman GT4 accelerate from zero to 100 km/h in 4.4 seconds and attain a top speed of 295 km/h. The car‘s NEDC fuel consumption is 10.3 l/100 km.

The front suspension, the PASM (Porsche Active Suspension Management) active damper system with a 30 mm lower ride height, and the brake system all come nearly entirely with components from the 911 GT3. The car‘s tuning for high sporty performance incorporates all control systems relevant to driving dynamics such as Porsche Stability Management (PSM), Porsche Torque Vectoring (PTV) with a mechanical rear differential lock and dynamic transmission mounts.

The exterior of the Cayman GT4 is clearly differentiated from related mid-engine coupes. Three distinctive air intakes at the front and a large fixed rear wing signify an aerodynamic design that is designed for optimal performance. If desired, the Cayman GT4 can be equipped even more comprehensively for sporty performance. Options include the PCCB ceramic

brake system with brake discs up to 410 mm in diameter, full bucket seats made of carbon fibre reinforced plastic (CFRP), a custom Sport Chrono Package and a Club Sport Package with a rollover protection cage at the rear, a fire extinguisher and a six-point safety harness for the driver.

The interior of the Cayman GT4 is equipped so that the driver and front passenger can experience unfiltered driving pleasure. They sit on sport seats that are upholstered in a combination of leather and Alcantara and offer very good lateral support. The new GT4 sport steering wheel, with its compact dimensions, guarantees precise control and direct steering feedback.

As a mid-engine sports car and a prime example of driving dynamics in its class, this car follows the conceptual tradition of the 911 GT1, the Carrera GT and the 918 Spyder.

Engine and transmission

Powerhouse from the 911 Carrera S

385 hp (283 kW) of power with 1,340 kg of unladen weight yields a weight-to-power ratio of 3.48 kg/hp, which forms the foundation for the impressive sprinting ability of the Cayman GT4. At maximum acceleration, the car reaches a speed of 100 km/h in 4.4 seconds. 420 Newton-metres of maximum torque over a range from 4,750 to 6,000 rpm, on the other hand, guarantee high flexibility, ensuring that the Cayman GT4 can also move at an exceptional swift pace with very little shifting work. The 3.8-litre flat-six engine always makes light work of driving in the latest Cayman.

The induction system of the Cayman supplies air to the naturally aspirated direct-injection engine in this model with its optimised air intakes. Sideblades guide a portion of the lateral air flow into the induction openings in front of the rear axle, creating a power-enhancing air charging effect.

Active gear shifting assist: automatic throttle-blips at push of a button

The driver can use two buttons on the centre console to adjust engine-relevant functions for even sportier dynamics. One of them activates automatic throttle-blips in downshifts. This enables better matching of engine speed during quick downshifts and optimal gear shifting. The other button controls the flaps of the sport exhaust system between cultivated damping and reduced back pressure with passionate sound.

Higher-strength six-speed transmission and dynamic transmission mounts

As a purist driving machine, the Cayman GT4 comes exclusively with a six-speed manual transmission. The Cayman GT4 is equipped with two dynamic transmission mounts for precise and stable handling in fast passages through bends. When driving in a dynamic style, the mounts are adjusted to a hard setting to prevent movement of the drive unit and its effects on driving behaviour.

Engine power is distributed to the two rear wheels via a classic mechanical differential lock which is a component of Porsche Torque Vectoring (PTV). The locking effect is 22 per cent in traction and 27 per cent in thrust. In PTV, the system improves steering response and precision by making specific brake interventions at the rear wheel on the inside of the bend.

Chassis and brakes

Higher education in driving dynamics

The impressive lap time of the Cayman GT4 on the North Loop of the Nürburgring is also due to the sports car‘s new chassis. It is based on components from the 911 GT3 and was fully retuned. The car also has a 13 mm larger front track width and 30 mm lower ride height than a standard Cayman. By comparison, the optional sport chassis for the other mid-engine sports cars offers a 20 mm lower ride height, and the usual PASM chassis is 10 mm lower.

In the Cayman GT4, PASM and PSM stability control operate based on algorithms that are tailored for circuit track driving. This results in very high speeds in bends, enhanced agility and even better track stability at higher speeds. And yet they also offer the entirely satisfactory driving comfort for long journeys and everyday driving that is typical of Porsche.

Many of the front suspension components come from the 911 GT3, including the larger wheel bearings and split wishbones. They create the right conditions for individual adjustment of wheel camber for circuit courses by means of adjustment plates – also known as shims. At the rear suspension, the wishbones and the mounting bridge of the anti-roll bar have been reinforced, and a special suspension knuckle is used that is tuned to the kinematics of the Cayman GT4. What are referred to as helper springs enable the use of a short and light main spring. At the same time, they assure that the main spring is pretensioned in the fully extended state. This design is widely used in motorsport, and it is used in all 911 GT race vehicles. To further improve wheel location, the Cayman GT4 gets individual chassis mounts at the front and rear suspensions similar to those of the 911 GT3 in a ball joint design.

Active dampers with Nürburgring tuning

As in all GT sports cars from Porsche, the PASM is tuned with special upside-down dampers based on those used in motorsport. The “Normal” setting is adapted to the course profile of the North Loop of the Nürburgring, while the “Sport” setting is for modern circuit race courses. This reduces movements of the superstructure to a minimum, which results in very precise and accurate driving behaviour.

One visual characteristic of the highly developed chassis that stands out immediately: the wheels. They fill nearly the entire space of the wheel arches. The design of the GT4 wheels is based on the wheels of the 911 GT3, but unlike those wheels they are mounted with five lug bolts. The wheel dimensions are significantly larger than on the other Cayman models. The 20-inch diameter wheels have a width of 8.5 inches in front and 11 inches at the rear. They are fitted with UHP (Ultra High Performance) tyres: 245/35 tyres in front and 295/30 at the rear. As in the 911 GT3, the Cayman GT4 also has a tyre pressure monitoring system as standard along with auxiliary circuit racetrack mode functionality. When driving on a circuit racetrack, this system enables precise monitoring of individually adjusted air pressure under consideration of ambient air pressure and temperature conditions.

Generously sized brake system with ample reserves

At Porsche, superior driving performance also includes providing the right brakes. They too come from the 911 GT3, and they offer ample reserves due to their large size. The brakes feature fixed aluminium monoblock callipers with six pistons each at the front and four pistons each at the rear. The front and rear brake discs all measure 380 mm in diameter, so compared to the Cayman GTS, for example, they are 50 mm larger (front) and over 80 mm larger (rear). Not only that: to reduce unsprung masses, the brake discs are made of a composite material, and their design is derived from motorsport. Overall, they are around two kilograms lighter than comparable conventional brake discs. The friction rings are made of grey cast iron; stainless steel pins are used to join them to the aluminium brake chambers. The Cayman GT4 also has a specially developed cooling system for the brakes. In front, cooling air is routed to the brakes by guide vanes and spoilers at the wishbones. Special brake cooling air channels were developed for the rear wheels which ensure effective flow of cooling air.

The PCCB ceramic brakes, which can be ordered as an option, are also larger than those in other Cayman sports cars. The perforated and internally ventilated ceramic composite brake discs are 410 mm in diameter at the front wheels and 390 mm at the rear. They match those of the 911 GT3. Along with the benefit of extremely low weight, the ceramic brake discs immediately develop very high and, most importantly, constant friction values during braking.

PSM can be deactivated over two stages for the circuit racetrack

In all GT sports cars, Porsche lets drivers decide whether they want to test their abilities without the assistance of control systems. That is why Porsche Stability Management (PSM) not only has emphatically sporty tuning; it is also why the system can be deactivated over two stages. In the first deactivation stage, “ESC OFF”, the driving dynamics potential on circuit racetracks is increased by deactivating the ESC lateral dynamic control functionality. This lets the driver intentionally destabilise the rear end of the Cayman GT4 by steering and accelerator pedal control in bends. However, the functions for longitudinal dynamic control, which have a sporty tuning, are preserved in this driving mode. In the second deactivation stage, “ESC+TC OFF”, all driving dynamic control systems are deactivated except for the antilock brake system.

Design and aerodynamics

Lower to the ground, longer and optimised for downforce

The design of the Cayman GT4 sends a clear message: performance. The car's silhouette already differentiates it from other Cayman models. The unique front section features a longer overhang. Together with its longer wheelbase, the sum of geometric modifications results in 34 mm of additional overall length compared to the Cayman GTS. The Cayman GT4 is not only longer, but is also 18 mm lower to the ground at a height of 1,266 mm.

The unique exterior primarily serves two purposes: downforce and cooling. Three large air intakes at the front with black screens supply cooling air to the three radiators behind them as well as to the front brakes. To vent the air, the Cayman GT4 has an auxiliary air outlet in front of the bonnet in the front end – a solution typical of motorsport designs which contributes to downforce. The large front spoiler lip that extends down low accelerates the air flow between the underbody and the road surface, generating downforce at the front axle.

The most prominent feature of the Cayman GT4 is its large fixed rear wing, which is supported on the rear lid by two aluminium framework brackets. The wing is made of lightweight carbon fibre reinforced polymer (CFRP). It generates downforce at the rear axle in combination with the rear spoiler beneath it. This results in a high level of driving stability and exceptional performance in bends. In addition, the driver can adjust the aerodynamics for even greater emphasis of downforce for the circuit racetrack. The wing angle is adjusted for this purpose, and special inserts that cover the front axle diffuser channels can be removed. For legal reasons, however, this is only permitted off of public roads.

When viewed from the rear, the Cayman GT4 is further differentiated by its unique rear trim, sport exhaust system with two central tailpipes, smoked rear lights and model-specific underbody components in diffuser look.

Equipment and options

Two-seater with race car ambiance

Characteristic of the Cayman GT4 is its black interior with platinum-coloured decorative stitching, Alcantara elements and door panels with door pulls. It is also trimmed with brushed aluminium trim strips, custom “GT4” model badges and the new sport steering wheel in 918 Spyder design that is 360 mm in diameter (Cayman GTS: 370 mm).

In the Cayman GT4, Porsche is installing two-way Sport seat Plus as standard; they feature Alcantara middle seat panels and taller lateral support panels covered with leather. The “GT4” logo is embroidered on the head restraints. As an alternative, there is the optional Adaptive Sport seat Plus with 18-way adjustment. For very dedicated race drivers, Porsche offers the full bucket seat of the 918 Spyder, which is made of very lightweight carbon fibre reinforced polymer (CFRP).

Standard features of the Cayman GT4 also include the CDR audio system with seven-inch colour display and touchscreen. It can be customised by various multimedia options, including additional sound systems, Porsche Communication Management (PCM) with navigation module, digital radio, online services, mobile phone prep and speech control.

For sporty driving on the circuit racetrack, the Cayman GT4 can be equipped with the Club Sport Package, which includes a rollover protection bar at the rear, fire extinguisher and six-point safety harness. A separate front roll cage is offered as a car racing part from Porsche Motorsport. In conjunction with the rear rollover bar, it meets the requirements of the German Motorsport Association (DMSB) for motorsport events.

Option: Sport Chrono Package with Porsche Track Precision app

Porsche has designed a distinctive Sport Chrono Package for use in GT sports cars. The base option includes an analogue timer – mounted in the middle of the dashboard – and a digital timer in the instrument cluster. In conjunction with the optional PCM, a performance indicator is also shown on the touchscreen. The package also offers the special Porsche Track Precision app for smartphones and preparation for a lap trigger.

The app can be used to automatically stop the timer via GPS for lap times, and to record and manage detailed driving data with video footage on a smartphone. In circuit racetrack use, the programme visualises the car's driving dynamics on the smartphone and along with sector and lap times, it also shows deviations compared to a reference lap. This app utilises highly precise vehicle data from an auxiliary control unit in the vehicle. Graphic analyses of driving data and video analysis assist the driver in further improving driving performance.

Even more precise measurements of lap times are possible with the lap trigger that is available from Porsche Tequipment. This option includes a transmitter, which might be placed at the start/finish line of a circuit course, and a receiver in the vehicle. As in car racing, this makes it possible to automatically record lap times and transmit them to the system. Incidentally, the same lap trigger is also used in the LMP1 race car, the 919 Hybrid.

Overview of the Porsche Cayman GT4

Brief profile

The Cayman GT4 is the latest model in the GT class from Porsche. Its lap time of 7 minutes and 40 seconds on the North Loop of the Nürburgring sets the new performance benchmark in its segment. The radical two-door sports car is the first GT in the family of mid-engine two-seaters. The 3.8-litre engine, which comes from the 911 Carrera S, produces 385 hp (283 kW). Its power is transferred by a manual transmission with six gears. Components from the 911 GT3 provide for a motorsport tuning of the chassis, brakes and aerodynamics.

GT

GT sports cars from Porsche embody the most passionate connection between everyday driving and the circuit racetrack, and so they directly represent the sporty core of the brand. The technology of the Cayman GT4 is based on that of the 911 GT3. As a mid-engine sports car and a prime example of driving dynamics in its class, it follows the conceptual tradition of the 911 GT1, the Carrera GT and the 918 Spyder.

Technical highlights

- 3.8-litre six-cylinder engine from the 911 Carrera S with 385 hp (283 kW) and 420 Newton metres of torque. 45 hp more power and 40 Newton metres more torque than in the Cayman GTS. Its weight-to-power ratio of 3.48 kg/hp enables impressive sprinting abilities (4.4 seconds for 0 to 100 km/h).
- Automatic throttle-blips during downshifts can be activated for optimal gear changes during quick shifting.
- PASM active damping system, dynamic transmission mounts, PSM stability control and Porsche Torque Vectoring (PTV) tuned for maximum lateral dynamics based on motorsport algorithms. PSM can be fully deactivated over two stages.
- Adapted from the 911 GT3: adjustable chassis and large composite brake discs (380 mm); optional PCCB ceramic brakes (disc diameters: 410 mm front and 390 mm rear).
- 30 mm lower ride height and 20-inch wheels (8.5 inches wide in front, 11 inches at rear) for further enhanced lateral dynamics.

Design highlights

- Form follows function: downforce is produced by a front spoiler with an additional air exhaust vent in front of the bonnet as well as by a rear wing.
- Sideblades force air into the air intakes and generate a power enhancing charging effect.
- Longer and lower: distinctive front end lengthens the Cayman GT4 by 34 mm to an overall length of 4,438 mm. In conjunction with the lowered ride height the GT4 is 18 mm lower than a Cayman S.

Equipment

- Black interior with Alcantara elements, door panels with door pulls, brushed aluminium trim strips and new sport steering wheel (360 mm diameter).
- Two-way Sport seat Plus with taller lateral supports. Optional Adaptive Sport seat Plus with 18-way adjustment or full bucket seat of the 918 Spyder made of carbon fibre reinforced polymer (CFRP).
- Fit for the circuit racetrack: optional Club Sport Package with rollover protection bar at rear, fire extinguisher and six-point safety harness. Front rollover cage can be procured as a car racing part from Porsche Motorsport
- Professional time training option: special Sport Chrono Package with such features as the Porsche Track Precision app for smartphones and prep for a lap trigger.

Specifications Porsche Cayman GT4*

Body:

Two seat coupe; lightweight body in aluminium-steel construction with doors, front and rear lids made of aluminium; two-stage driver and front passenger airbags; side and head airbags for driver and front passenger.

Aerodynamics:

Drag coefficient c_d	0.32
Frontal area A	2.0 m^2
c_d x A	0.64

Engine:

Water-cooled flat-six engine; aluminium engine block and cylinder heads; four overhead camshafts, four overhead camshafts, four valves per cylinder, variable intake valve timing and lift (VarioCam Plus); hydraulic valve clearance adjustment; direct petrol injection; one three-way catalytic converter per cylinder bank, each with two oxygen sensors; engine oil 10.1 litres; electronic ignition with solid-state ignition distribution (six active ignition modules); thermal management for coolant circulation.

Bore:	102.0 mm
Stroke:	77.5 mm
Displacement:	3,800 cc
Compression ratio:	12.5:1
Engine power:	385 hp (283 kW) at 7,400 rpm
Max. torque:	420 Nm at 4,750 – 6,000 rpm
Power output per litre:	101.3 hp/l (74.5 kW/l)
Max. engine speed:	7,800/min
Fuel type:	Super Plus

Electrical system:

12 Volt; alternator 2,100 W; battery 95 Ah/520 A; electrical system recuperation.

* Specifications may vary in different markets.

Transmission:

Engine and transmission bolted into a single drive unit; rear-wheel drive; six-speed manual transmission with mechanical rear differential lock and Porsche Torque Vectoring (PTV).

Gear ratios	
1st gear	3.31
2nd gear	1.95
3rd gear	1.41
4th gear	1.13
5th gear	0.95
6th gear	0.81
Reverse gear	3.00
Final drive ratio	3.89
Clutch diameter	240 mm

Chassis:

Front axle: strut suspension (MacPherson type, Porsche optimised); independent wheel suspension with lateral and longitudinal links and struts; cylindrical coil springs with internal dampers.

Rear axle: independent wheel suspension with lateral and longitudinal control arms (MacPherson type, optimised to Porsche requirements); cylindrical coil springs with coaxial internal dampers; anti-roll bar.

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

Electromechanical power steering

Brakes:

Dual-circuit brake system with separate circuits for front and rear axles; Porsche Stability Management (PSM) with two-stage deactivation switch; vacuum brake booster; brake assistant; electric duo-servo parking brake; auto-hold function.

Front: six-piston aluminium monobloc brake callipers, perforated and internally ventilated brake discs 380 mm in diameter and 34 mm thick.

Rear: four-piston aluminium monobloc brake callipers, perforated and internally ventilated brake discs 380 mm in diameter and 30 mm thick.

Wheels and tyres:

front	8.5 J x 20	with	245/35 ZR 20
rear	11 J x 20	with	295/30 ZR 20

Weights:

Unladen weight (DIN)	1,340 kg
Permissible gross vehicle weight	1,640 kg

Dimensions:

Length		4,438 mm
Width		1,817 mm
Width with door mirrors		1,978 mm
Height		1,266 mm
Wheelbase		2,484 mm
Track widths	front	1,539 mm
	rear	1,533 mm
Luggage comp. capacity	front	150 l
	rear	184 l
Fuel tank capacity		54 l

Performance:	Top speed	295 km/h 183 mph
	Acceleration	
	0 – 100 km/h	4.4 s
	0 – 60 mph	4.2 s
	0 – 200 km/h	14.5 s
	0 – 400 m (1/4 mile)	12.5 s
Fuel consumption:	Combined	10.3 l/100 km
(NEDC)	Urban	14.8 l/100 km
	Extra-urban	7.8 l/100 km
CO_2 emissions:	Combined	238 g/km
Emissions class:		Euro 6

Status: February 2015