Porsche 911 GT3 Cup

13/06/2019 All information about the race car can be found here.

Boasting a completely redeveloped drive, the Porsche 911 GT3 Cup tackled the 2017 season – initially exclusively in the Porsche Mobil 1 Supercup, in the Porsche Carrera Cup Deutschland as well as the Porsche GT3 Cup Challenge USA and the Porsche GT3 Cup Challenge Canada. From 2018, the latest version of the world's most-produced GT race car will be campaigned in all of Porsche's 24 one-make cup series around the world.

The rear of the new 911 GT3 Cup houses a four-litre, six-cylinder flat engine for powerful propulsion. Thanks to thoroughbred motorsport technology, the compact engine with direct fuel injection delivers a peak performance of 357 kW (485 hp). A range of innovative details also improves efficiency in addition to engine performance, ensuring even better durability of the naturally aspirated engine under racing conditions, as well as reducing maintenance costs. A valve drive with rigidly mounted rocker arms and a central oil feed is used for the very first time. An integrated oil centrifuge is used to optimise oil defoaming in the engine. A crankshaft with significantly increased rigidity has also been installed.

Better performance

A new front apron and a new rear end improve the downforce of the new 911 GT3 Cup compared to the predecessor model, thus enhancing traction and performance. The prominent 184-centimetre-wide rear wing has been retained from the predecessor model. One-piece 18-inch racing rims with a central locking mechanism are used – with 270-millimetre Michelin racing slicks on the front axle and a massive 310-millimetre tread on the rear axle. The intelligent aluminium-steel composite construction ensures maximum rigidity and a lightweight body. Ready to race, the 911 GT3 Cup weighs in at just 1,200 kilograms.

During the car's development, the engineers put special emphasis on driver safety. The driver is protected by a solid safety cage and an innovative, bucket-style racing seat that is moulded around the head and shoulder area in particular. The rescue hatch in the roof, in line with the latest FIA standard, makes it easier to provide initial treatment and recovery following an accident.

911 GT3 Cup still the best-selling GT racing car

Porsche manufactures the 911 GT3 Cup on the same production line as the 911 road car in its main facility in Stuttgart-Zuffenhausen. The baseline race tuning is performed at the Weissach Motorsport Centre, where vehicles are also thoroughly tested by a professional race driver prior to delivery to the customer. From 1990 to the end of 2019, Porsche produced and prepared a total of 4,251 units of the 911 GT3 Cup in race trim. This makes the one-make cup contender still the best-selling GT racing car

in the world. The 911 GT3 Cup can be ordered from Porsche Motorsport in Weissach for a price of 196,880 Euro plus country-specific taxes.

Technical description Porsche 911 GT3 Cup

Body

Intelligent lightweight body of aluminium-steel composite; welded-in roll cage; front lid with two air intakes for cockpit ventilation, quick-release catches; removable roof hatch in compliance with the latest FIA safety regulations; modified and widened 911 GT3 wings; enlarged rear wheel arches; modified and widened 911 GT3 front apron with spoiler lip; modified 911 GT3 rear apron with integral rain light; doors, rear lid and adjustable rear wing of carbon-fibre reinforced plastic; polycarbonate rear side windows and rear screen; rear underbody panelling with NACA ducts for brake and driveshaft cooling; modified 911 cockpit; quick-release steering wheel with control panel and shift paddles; six-point seat belt, race bucket seat with padding system; 100-litre FT3-safety fuel cell; air jack system, fire extinguisher.

Engine

Aluminium six-cylinder horizontally opposed engine, rear-mounted; capacity: 3,996 cm3; stroke 81.5 mm; bore 102 mm; max. power: 357 kW (485 hp) at 7,500 rpm; max. rpm: 8,500; maximum torque: 480 Nm at 6,250 rpm; single-mass flywheel; water-cooled with thermal management for engine and transmission; four valves per cylinder; direct fuel injection; fuel grade: Super unleaded, minimum 98 RON; dry-sump lubrication; electronic engine management (Bosch MS 4.6 NG); race exhaust system with regulated race catalytic converter; rear silencer with central twin tailpipe; electronic throttle.

Transmission

Porsche six-speed sequential dog-type transmission; internal pressure-oil lubrication with active oil cooling by oil-water heat exchanger; mechanical differential lock; triple-disc sintered metal racing clutch; pneumatic gearshift activation (paddle shift).

Suspension

Front axle

McPherson suspension strut, adjustable for height, camber and toe; wheel hubs with central locking device; racing shock absorbers; forged and adjustable top mounts; double-blade-type adjustable anti-roll bars; electro-hydraulic power steering with external control function for easy car manoeuvring.

Rear axle

Multi-link rear suspension, adjustable for height, camber and toe; forged control arms with optimised stiffness, double-shear track rod connection and heavy-duty spherical bearings; wheel hubs with central locking device; racing shock absorbers; forged and adjustable top mounts; double-blade-type adjustable anti-roll bars.

Brakes system
Two independent brake circuits for front and rear axle, adjustable via brake balance system;

Front axle

Six-piston aluminium monobloc racing brake callipers with 'anti-knock back' piston springs; multi-piece steel brake discs, internally vented and slotted; diameter: 380 mm; racing brake pads; optimised ventilation routing.

Rear axle

Four-piston aluminium monobloc racing brake callipers with 'anti-knock back' piston springs; multi-piece steel brake discs, internally vented and slotted; diameter: 380 mm; racing brake pads; optimised ventilation routing.

Wheels and tyres

Front axle

One piece light alloy APP-Tech wheels conforming to Porsche spec, 10.5 J x 18 offset 28 with centre lock nut; Michelin race tyres 27/65-18.

Rear axle

One piece light alloy APP-Tech wheels conforming to Porsche spec, 12 J x 18 offset 53 with centre lock nut; Michelin race tyres 31/71-18.

Electrical system

COSWORTH colour display ICD and electrical system control unit IPS32; electronic throttle; fire extinguishing system (extinguishing agent: gas); battery 12 V, 70 Ah 175-A alternator. Lighting system: Bi-Xenon main headlights, LED daytime running lights, LED taillights and rain lights in compliance with FIA homologation regulations.

Dimensions

Length 4,564 mm; Width 1,980 mm; Height 1,246 mm, Wheelbase: 2,456 mm

Weight

ca 1,200 kg

Link Collection

Link to this article
https://newsroom.porsche.com/en_AU/motorsports/media-guide/race-cars/porsche-911-gt3-cup.html

Media Package
https://pmdb.porsche.de/newsroomzips/e9da9f1c-e3e2-4c49-92d3-47f1bc8117e9.zip

Dr. Ing. h.c. F. Porsche Aktiengesellschaft
Porscheplatz 1
70435 Stuttgart