



PORSCHE



**The new 911 GT3 Cup**  
Born in Flacht





## **Contents**

<b>The origins</b>	<b>4</b>
<b>The car</b>	<b>6</b>
<b>The production</b>	<b>10</b>
<b>The races</b>	<b>12</b>
<b>The data</b>	<b>20</b>



## The origins.

### Three digits. Countless victories. The 911 concept.

The Porsche 911 is a sports car icon. A synonym for uncompromising sportiness. A quality epitomised by every Porsche 911 going back more than 50 years. Each one was developed for superlative performance. Just like the youngest member of the family: the new Porsche 911 GT3 Cup. A pure-bred race car. Developed in the untouched countryside of the Stuttgart region. In a district of Weissach. In Flacht, to

be precise: the home of our very own Motorsport Manufaktur. A birthplace of legends. A melting pot of tradition and technology. A place where the art of engineering and heart and soul are one and the same thing. It is here that the new Porsche 911 GT3 Cup receives its finishing touches. For use on the most demanding race tracks in the world. Infused with the combined expertise accumulated from over 30,000 racing

victories and more than 60 years of experience in motorsports. For ever greater heights of performance. The same is true of its latest incarnation: based on the seventh generation Porsche 911. We've made it even faster, even more durable, even more efficient and even safer. In short: a precision instrument for the race track.

Born in Flacht.







## The car.

Highly specialised. In low lap times.

Our racing history confers obligation. Not only to strive for the next victory, but also to keep on improving. Like we've done with the 911 GT3 Cup. Thanks to its ongoing development, it has become one of the most competitive race cars in customer racing today. And it has proven to be one of the most successful for some time: with more than 3,500 examples made, it has been the car of choice for the Porsche One-Make-Series since 1990 and is the most produced and most sold racing car in the world – not least because of its outstanding versatility.

The new 911 GT3 Cup is due to make its first outings in the Porsche Carrera Cup Germany, in the Porsche Mobil 1 Supercup and in North America. Over the course of next season, it will participate in further One-Make-Series around the globe as well as in various GT and endurance races.

Why? Because the 911 GT3 Cup has what it takes. Especially the newest generation. Thanks to an updated appearance with new front and rear aprons, four-point LED headlights and taillights in contemporary design, it unites certain qualities more

than ever before: the character of the Porsche 911 sports car icon and new technologies from motorsports.

## Noticeably more space: for the cylinders.

911 – three digits that have been writing sports car and motorsports history for over 50 years. This experience formed the basis for the ongoing development that led to the emergence of the Porsche 911 GT3 Cup in its latest generation. Power, aerodynamics, longevity, safety, cost efficiency – we've improved every aspect. As a matter of principle. But, above all, for our customers.

The new front and rear aprons optimise the airflow and see FIA rain lights integrated into the design for the first time. Even the control concept is new: the revised software enables vehicle

diagnostics to be performed on the steering wheel display. Extra sensors on the car augment the information content of acquired vehicle data. This, in turn, increases the data evaluation potential. We've also further increased safety: the enlarged roof hatch provides easier access to the driver. In addition, the proven bodyshell of aluminium and steel hybrid construction satisfies all safety requirements.

Developed from scratch, the new engine offers even greater power output than before. This four-litre six-cylinder boxer unit delivers up to 357 kW (485 hp) at 7,500 rpm. Drive force is transmitted

to the rear axle by a racing clutch and a Porsche six-speed sequential dog-type transmission. Gears are changed manually by means of paddle shifters with electropneumatic assistance.

A key advantage of the new drive system: we've managed to double the engine and transmission run times before the first rebuild is due (engine: from 50 to 100 hours; transmission: from 30 to 60 hours). For reduced operating costs.

The new Porsche 911 GT3 Cup represents more than just a ticket to the One-Make-Series. It is a pure-bred race car, optimised for customer racing.





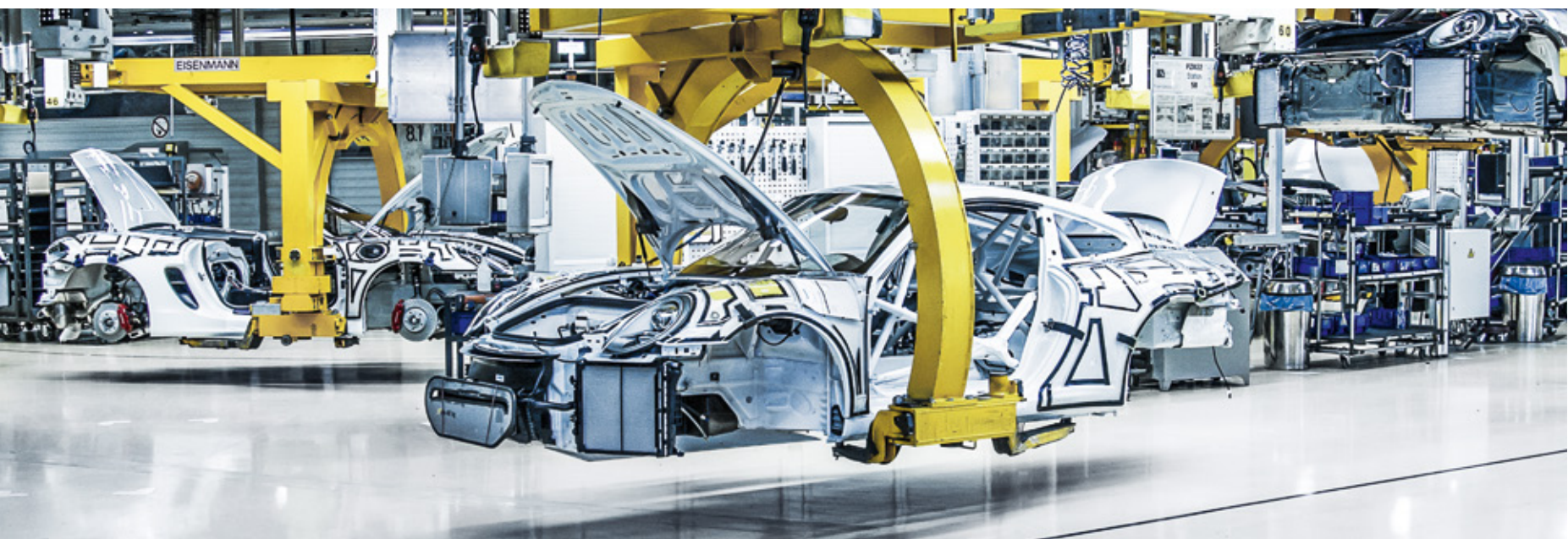


## The production.

### Resolutely one line.

One drives on the road. The other tears around the race track. What sets them apart exactly? Not much. That's because there's more to the 911 principle than the unwavering continued development of a sports car icon. It represents over 50 years of motorsports history. And a major contributor to over 30,000 racing victories. Every Porsche 911 is also the platform for a pure-bred race car. Entirely in keeping with Ferry Porsche's dream: to create a sports car capable of winning on the race track. As such, the Porsche

911 GT3 Cup and the Porsche 911 have more in common than the three legendary digits in their name. They originate from the same production line. In the main factory in Zuffenhausen. It is only once they are fully assembled that their paths diverge. The Porsche 911 GT3 Cup receives its finishing touch in Flacht. Our Motorsport Manufaktur in Weissach. So that, ultimately, it lives up to its calling: uncompromising performance on the race track.





## The races.

**Superlative sporty performance. Profoundly engaging duels.**

Motorsports is a hard-fought contest for every fraction of a second and every millimetre. For opportunities, victory and glory. It's a contest in which we participate all around the world. With heart and soul. With our engineers and with countless teams and drivers. What is it that drives us? Winning recognition of our feats of engineering for one thing. And also our One-Make-Series with more than 2,000 races run in the course of over 25 years.

Entry to the One-Make-Series is by way of the GT3 Cup Challenges. Stepping up a grade, drivers participate in the Porsche Carrera Cups and the Porsche

Mobil 1 Supercup, one of the fastest international One-Make-Series in the world. All follow the same philosophy: to promote customer racing events. All follow the same principle: equal opportunities by means of technically identical cars. All teams compete with the 911 GT3 Cup. This makes the races even more exciting. What counts is the performance of the individual, from the driver to every member of the team. Porsche Motorsport handles the event organisation, provides trackside support and, for all One-Make-Series, supplies the teams with race cars that are ready for action.

Fierce challenges on the track are not the only things that await our customers. The races attract a bumper audience. That's because Porsche One-Make-Series are almost always staged as part of the world's most important race series. This exposure pays dividends: huge numbers of motorsports fans turn up to watch the races live or follow them from afar, thanks to global coverage on the television, in the press and online. The One-Make-Series have long since become a win-win for all.







### Porsche Carrera Cup Germany.

The ability to call on superlative sports performance in the exact tenth of a second it's required. Whether it's in the corner, on the straights or in the chicane. That's precisely what makes the Porsche Carrera Cup such a spectacular racing event, and the excitement is intensified by its field of drivers. Talented newcomers meet seasoned racers. Appetite for success meets experience. Fire and passion meet sporting and technical fair play. Thanks to the overriding principle of technical equality for all.

The Porsche Carrera Cup Germany is steeped in tradition as one of the longest-standing One-Make-Series in the world. It is staged as part of the German Touring Car Masters (DTM). Not only does this guarantee maximum attendance, it also means that the competition is one of the most effective marketing platforms for aspiring teams and drivers.

Two races per event – one over approximately 60 km, the other over around 80 km. This gives the drivers and teams plenty of tracktime. And fans ample

opportunity to cheer on their favourites while crossing their fingers.

In the 2017 season, drivers will compete in the new Porsche 911 GT3 Cup, a car based on the second-generation 991. Just as the race cars are identical for all teams, so are the Michelin tyres. No more than two sets of slicks per weekend and car are permitted. So only one thing makes the difference between victory and defeat: the human factor.



## Porsche Mobil 1 Supercup.

Drama – with drivers pushing themselves to the limit. Passion – among the teams, partners and sponsors. As the most exacting series of the 20 Porsche One-Make-Series staged around the world, the Porsche Mobil 1 Supercup not only offers utterly electrifying excitement, it has also established itself as an excellent business and marketing platform in international motorsports. Since 1993, the Porsche Mobil 1 Supercup has been held as part of the FIA Formula 1 World Championship – and as the only Gran Turismo race series. All cars are looked after by professional

racing teams, which use two to three race cars in the championship. Each race covers a distance of approximately 70 kilometres. The drivers, which include established personalities alongside promising new talent, give everything they have from start to finish. After all, another prize might just be up for grabs: a career in top level GT racing, for example.

The level playing field is provided by the car: the new Porsche 911 GT3 Cup. Porsche AG takes care of the

organisation, while the specialists of Porsche Motorsport offer professional assistance in all aspects – from technical support and replacement parts sourcing to press coverage and hospitality experiences. Centralised organisation and a rulebook enforcing technical equality ensure the greatest possible transparency and calculability. The fundamental ethos behind the Porsche Mobil 1 Supercup means that fair competition is guaranteed: ideal prerequisites for motorsports at the top level.







## International One-Make-Series.

From the fastest One-Make-Series in Germany to the top international event. Since the Porsche Carrera Cup Germany was held for the first time back in 1990, a number of international spin-offs would soon establish themselves. Today, the drivers and teams compete against each other with their Porsche 911 GT3 Cup in 29 countries across five continents: from Brazil to China, from Australia to Finland, and from the Middle East to North America.

Like their German equivalent, these series in many countries provide support races for prestigious highlights of the motorsports calendar, including the BTCC and the FIA WEC. Races are held on almost every weekend of the motorsports season. The passion to win fuels the fight for every hundredth of a second: young upstarts challenge old hands, while amateurs compete with professionals. Encounters that promise sheer racing excitement.

Those who make it here can fight their way to the very top. The same philosophy applies: equal opportunities for every competitor. This is guaranteed by uniform rules and technically identical Porsche 911 GT3 Cup cars. Only the vehicle setup is allowed to be determined by the teams themselves. In true keeping with the motto 'May the best man win'. As a result, the power to tip the balance rests solely in the hands of the drivers and teams.



# The data.

## Concept

---

Single-seater production-based race car

Base model: 911 GT3

## Engine

---

Aluminium six-cylinder horizontally opposed engine, rear-mounted

Sealed

3,996 cm<sup>3</sup>; 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

Variable cam phasing (intake and exhaust)

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

Sealed

Gear ratios:

– Ring and pinion gear 14/22 i = 1.571

– Final drive 17/41 i = 2.412

– 1st gear 13/41 i = 3.154

– 2nd gear 17/40 i = 2.353

– 3rd gear 19/36 i = 1.895

– 4th gear 19/29 i = 1.526

– 5th gear 24/30 i = 1.250

– 6th gear 34/35 i = 1.029

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)

## Bodyshell

---

Intelligent lightweight construction in aluminium and steel composite

Weld-in roll cage, certified compliance with FIA homologation regulations

for safety cages

Front lid with two air intakes for cockpit ventilation, quick-release catches

Removable roof section in compliance with the latest FIA safety regulations

Fastening point preparation for central safety net attachment

Pickup point for lifting device

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 in compliance with

FIA homologation regulations

Lightweight exterior:

- carbon-fibre reinforced plastic doors with SportDesign mirrors
- carbon-fibre reinforced plastic rear lid with quick-release catches
- carbon-fibre reinforced plastic adjustable rear wing (nine positions)
- polycarbonate rear side windows with air outlets
- polycarbonate rear screen

Rear underbody panelling with NACA ducts for brake and driveshaft cooling

Modified 911 cockpit:

- weight-optimised magnesium subframe
- ergonomic driver-oriented centre console
- control switch trim with fluorescent lettering
- steering wheel with quick-release coupling, control panel and shift paddles
- adjustable steering column with steering angle sensor

Racing bucket seat with fore/aft adjustment:

- homologated to latest FIA requirements
- padding system for adapting to individual driver (delivered with size M)

Shock-absorbing roll cage safety cover for leg protection in driver's footwell

Six-point racing safety harness

100-litre fuel cell (FT3 safety fuel cell) and 'fuel cut-off' safety valve in accordance with FIA regulations

Built-in air jack system (three jacks) with valve mountable on either side of the car



## Chassis

---

Forged control arms:

- optimised stiffness
- double-shear track rod connection
- heavy-duty spherical bearings

Wheel hubs with central locking device

Racing shock absorbers, non-adjustable

Double-blade-type adjustable anti-roll bars

Tyre pressure monitoring system

Front axle:

- McPherson suspension strut, adjustable for height, camber and toe
- forged and adjustable top mounts
- electrohydraulic power steering with external control function for easy car manoeuvring

Rear axle:

- multi-link rear suspension, adjustable for height, camber and toe
- forged top mounts

## Brake system

---

Two independent brake circuits with brake pressure sensors for front and rear axle, adjustable by the driver via brake balance system

Derivative sensors and harness for retrofitting an ABS system

Multi-piece steel brake discs, internally vented and slotted, diameter: 380 mm

Racing brake pads

Optimised ventilation routing

Front axle:

- six-piston aluminium monobloc racing brake calipers with 'anti-knock back' piston springs

Rear axle:

- four-piston aluminium monobloc racing brake calipers with 'anti-knock back' piston springs





## Wheels/tyres

---

### Front axle:

- single-piece centre-lock alloy wheels conforming to Porsche specification and design, 10.5 J x 18 ET 28
- treaded Michelin transportation tyres; tyre size: 27/65-18

### Rear axle:

- single-piece centre-lock alloy wheels conforming to Porsche specification and design, 12 J x 18 ET 53
- treaded Michelin transportation tyres; tyre size: 31/71-18

## Electrical system

---

COSWORTH colour display ICD with integrated fault diagnostics  
COSWORTH electrical system control unit IPS32  
Electronic throttle  
Fire extinguishing system (extinguishing agent: gas)  
Battery 12 V, 70 Ah (AGM), leakproof, in co-driver's footwell  
175-A alternator  
Weight-optimised fan  
Windscreen wiper with direct drive (intermittent and continuous operation)  
Lighting system:

- Bi-Xenon main headlights
- LED daytime running lights
- LED taillights and rain lights in compliance with FIA homologation regulations

Two additional switches in the centre console for additional power consumers  
CAN connection (data logger, video system)

## Weight/dimensions

---

Total weight: ca. 1,200 kg (2,645.55 lbs)  
Total length: 4,564 mm (179.01 inch)  
Total width: 1,980 mm (77.95 inch)  
Total height: 1,246 mm (49.06 inch)  
Wheelbase: 2,456 mm (96.69 inch)

## Colours

---

Water-based paint  
Exterior: white C9A  
Interior: filler coat in white, no clear-coat finish

## Delivery

---

December 2016 – March 2017

## Conformity with regulations

---

Customers bear sole responsibility for complying with regulations applicable to themselves and their vehicle.

This document replaces all previously published versions.

Vehicle cannot be registered for public road use.

Subject to change without notice.





## Aftersales packages from Porsche Motorsport

Exhaust system:

- pre-silencer
- open tailpipes

Endurance fuel tank upgrade

Fuel tank top plate with adapters for closed circuit fuel handling

External digital engine oil level display

Engine oil quick refill

Passenger seat for taxi rides

Auxiliary weight plates for car weight balancing

Window safety net in compliance with the latest FIA safety regulations

Centre safety net in compliance with the latest FIA safety regulations

Cockpit illumination

Start number illumination

Heated windscreen

Suspension travel sensor package

External charging cable

Power supply extension (connecting additional consumers)

Available at COSWORTH Electronics:

COSWORTH ICD display upgrade for endurance races





Errors and omissions excepted.  
Subject to change without  
notice.

Porsche, the Porsche Crest, 911,  
Carrera and other marks are registered  
trademarks of Dr. Ing. h.c. F. Porsche AG.

Dr. Ing. h.c. F. Porsche AG  
Porscheplatz 1  
70435 Stuttgart  
Germany  
[www.porsche.com/motorsport](http://www.porsche.com/motorsport)

© Dr. Ing. h.c. F. Porsche AG, 2016  
Edition: 09/16  
WSRZ160111S220