

Product Highlights: Porsche Taycan Turbo GT – The most powerful series production Porsche

02/12/2024 The all-electric Porsche Taycan sports sedan model series is now headlined by two exhilarating versions: the Taycan Turbo GT and the Taycan Turbo GT with Weissach Package.

Australian model series

The Taycan Turbo GT and Taycan Turbo GT with Weissach Package are the new sporting flagship models of this all-electric model range. They take driving performance to extraordinary new levels.

The arrival of these two new GT sports cars brings the Australian Taycan sports sedan model range to eight different variants:

- Taycan (model range entry grade)

- Taycan 4
- Taycan 4S
- Taycan GTS
- Taycan Turbo
- Taycan Turbo S
- Taycan Turbo GT - **new**
- Taycan Turbo GT with Weissach Package - **new** (model range leader)

Powertrain: Porsche E-Performance

Twin electric motors

Both Taycan Turbo GT models are fitted with electric Permanent Synchronous Motors (PSM), one each on the front and rear axles.

This means both use an all-wheel drive layout.

Porsche recently upgraded all model variants in the Taycan model range, which included increased power outputs. Among these upgrades was an enhanced powertrain with a lighter (-10 kg) new rear-axle motor which delivers even more dynamic performance.

Performance Battery Plus

Both Taycan Turbo GT models are fitted with the high-voltage (HV) lithium-ion Performance Battery Plus. Like all other Taycan model variants, it now benefits from advanced cell chemistry to achieve higher energy content, lower internal resistance, and higher charge and discharge currents.

The battery's 33 modules consist of 396 pouch cells. The ratio of nickel, cobalt and manganese in the mix is 8:1:1. The result is a 105 kWh gross capacity / 97 kWh net capacity.

Gearbox

All twin-motor Taycan models are equipped with two gearboxes:

- A single-speed transmission is fitted to the front axle
- A two-speed transmission on the rear axle, contributing to stunning acceleration performance

In the two Taycan Turbo GT models, the transmission ratio and the robustness of the rear gearbox have also been improved, allowing for higher torque figures.

More powerful pulse inverters

In the Taycan, a pulse inverter is fitted with each electric motor. The pulse inverter is the main component that controls the electric motor. It converts the direct current (DC) supplied by the battery into the alternating current (AC) required to drive the electric motors.

In both Taycan Turbo GT models, silicon carbide is used as the semiconductor material in the two pulse inverters. This achieves better efficiency.

Compared to the Taycan Turbo S, both Taycan Turbo GT models are fitted with more powerful 900-amp pulse inverters (Taycan Turbo S: 600 amperes). The result is more power and torque.

- **Taycan Turbo S:**
  Overboost power with Launch Control: 700 kW / 952 PS*
  Maximum torque: 1,110 Nm

- **Taycan Turbo GT and Taycan Turbo GT with Weissach Package:**
  Overboost power with Launch Control: 760 kW / 1,034 PS*
  Maximum torque: 1,240 Nm

Recuperation: Up to 400 kW

The Porsche Recuperation Management (PRM) system has been improved in the new Taycan model series, and energy is now recovered more frequently with higher capacity.

Maximum recuperation capacity during deceleration from high speeds has increased by more than 30 per cent, from 290 kW to up to 400 kW.

In the two new Taycan Turbo GT models, the recuperation level can be set and adapted to the driving situation using the left steering wheel paddle.

Charging: Up to 320 kW

The Taycan's 800-volt architecture allows DC charging power up to 320 kW. This means reduced recharging times at fast-recharging stations.

Enhanced charging stability means charging capacities above 300 kW can be sustained for up to five minutes, which helps reduce the recharging time.

Charging at up to 150 kW is possible at 400-volt charging points. Charging time here is 33 minutes.

The new Taycan Turbo GT has two recharging ports just forward of the front door (both left and right).

The Taycan Turbo GT with Weissach Package has only one recharging port (driver's side) and the recharging port door is manually (not electrically) operated.

Recharging times^: summary

- Charging time for direct current (DC) with maximum charging power (10% to 80%): 18 min
- Charging time for direct current (DC) with 150kW (10% to 80%): 33 min
- Charging time for direct current (DC) with 120kW (10% to 80%): 46 min
- Charging time for alternating current (AC) with 22kW (0 to 100%): 6.0 h
- Charging time for alternating current (AC) with 11kW (0 to 100%): 11.0 h
- Charging time for alternating current (AC) with 9.6kW (0 to 100%): 13.00 h

Electric driving range (ECE)#: summary

- **Taycan Turbo GT (and with Weissach package):** Up to 605 kilometres

Porsche Destination Charging

Information about Porsche Destination Charging can be found at this link.

Further information about charging Porsche EVs can be found at this link.

Attack Mode

Attack Mode is part of the Sport Chrono package on the two Taycan Turbo GT models.

When deployed, this mode delivers up to 120 kW of additional power for 10 seconds – all at the press of a button.

Attack Mode is a push-to-pass-style function optimised for driving on the track. It functions in a similar way to the 99X racing cars that Porsche uses in the Electric ABB FIA Formula E World Championship.

The boost is indicated by a countdown timer in the instrument cluster and dynamically staged with animated rings on the speedometer.

Attack Mode can also be activated and deactivated via the right-hand paddle. This makes it easier to use on the track.

Porsche Electric Sport Sound

Porsche has developed an intelligent control algorithm that provides an emotive sound for different driving situations.

Porsche Electric Sport Sound is fitted as standard to the new Taycan Turbo GT. It is a no-cost option for the Taycan Turbo GT with Weissach Package.

Chassis

Both Taycan Turbo GT models use an aluminium double-wishbone front suspension layout and an aluminium multilink rear suspension design.

Both models are fitted with Porsche Active Ride suspension with GT-specific tuning. When driving more dynamically, especially in higher-speed conditions, this suspension ensures an almost perfect connection to the road thanks to a balanced distribution of wheel loads.

Porsche Active Ride offers an unprecedented bandwidth between driving comfort and driving dynamics. It keeps the body of the Taycan level at all times, even during dynamic braking, steering and acceleration manoeuvres.

With Porsche Active Ride, all four active suspension dampers are additionally equipped with a motor pump unit. As well as damping, they also perform the function of anti-roll bars, removing the need to fit them.

Two electric motors drive two hydraulic pumps. At lightning speed, the motor pump unit builds up the active actuating forces on the dampers, as needed.

Sensors determine the driving conditions, such as longitudinal and lateral acceleration, the effects of road stimuli on the wheels and the body, and the friction and slip of all tyres on the road surface. Using this data, each motor pump unit generates the exact volume flow required for the desired effect for each wheel.

The dampers actively suppress undesired motion and allow the wheels to be actively pushed into the road (outward deflection) or pulled into the body (inward deflection) at any time.

Porsche Active Ride also lets drivers switch on/off these functions:

- **Active cornering dynamics:** The Taycan can lean into a bend to counteract the car's natural rolling effects.
- **Acceleration and braking comfort:** The car can pitch forwards or backwards to counter squat and dive motions when accelerating and braking.
- **Easy entry:** Raises the Taycan 55 mm when a door is opened to make getting in and out easier.

The following chassis technologies are also fitted to both Taycan Turbo GT models:

- Porsche Torque Vectoring Plus (PTV Plus; an electronically controlled, fully variable rear differential lock).
- Power Steering Plus.
- Porsche Stability Management (PSM) with ABS (anti-lock braking), ASR (anti-slip regulation), ABD (automatic brake differential), and MSR (engine drag torque control).

Brakes

The Taycan Turbo GT models come fitted with lightweight ceramic brakes.

Based on Porsche Ceramic Composite Brakes (PCCB), this brake system has been optimised for weight. Design changes to the brake disc chamber and the brake caliper housing remove more than two kilograms.

The Taycan Turbo GT models' brake sizes and configurations are summarised below:

Front brakes:

- 420 mm diameter discs (40 mm thickness), internally vented
- 10-piston weight-optimised aluminium fixed monobloc calipers (Victory Gold in colour)

Rear brakes:

- 410 mm diameter discs (32 mm thickness), internally vented
- Four-piston weight-optimised aluminium fixed monobloc calipers (Victory Gold in colour)

Porsche Hill Control and an electric parking brake are fitted.

Wheels and tyres

The new Taycan Turbo GT models are equipped with weight-optimised, forged alloy wheels in a one-piece design with rear-milled spokes. Their colour is a Darksilver finish. The wheel centres wear a full-colour Porsche crest.

- **Front**: 9.5J x 21 ET 60 with 265/35 ZR21 XL tyres
- **Rear**: 11.5J x 21 ET 66 with 305/30 ZR21 XL tyres

Both Taycan Turbo GT models come with Tyre Pressure Monitoring (TPM) and a tyre fit set.

Driving performance

With these two new Taycan Turbo GT models, the engineers at Porsche have created an overall dynamic package focussed on accelerating and braking, cornering grip, aerodynamics, stability, and fine-tuning.

The Taycan Turbo GT with Weissach Package earned the title of fastest electric series-production car at the Weathertech Raceway Laguna Seca, in California, on 23 February 2024. Porsche development driver Lars Kern achieved a lap time of 1:27.87min, the fastest lap to-date in a road-approved electric car.

Prior to that, a pre-production version of this same new model set a new class record on the Nürburgring. Kern also posted a lap time of 7:07.55 min. on the Nordschleife. This official lap time is a staggering 26 seconds faster than Kern recorded for his last record lap in a Taycan Turbo S sport sedan equipped with the performance package back in August 2022.

This lap time also stands as the current record for series-production electric cars. It makes the Taycan Turbo GT the fastest four-door of any powertrain type on the Nürburgring.

Performance figures for the new Taycan Turbo GT models are summarised below:

Taycan Turbo GT:

- 0 – 100 km/h: 2.3 seconds
- Top speed: 290 km/h (on a suitable closed track)

Taycan Turbo GT with Weissach Package:

- 0 – 100 km/h: 2.2 seconds
- Top speed: 305 km/h (on a suitable closed track)

Design and aerodynamics

Lightweight construction

Porsche has applied intelligent lightweight construction measures to the Taycan Turbo GT models. This has resulted in weight reduction of up to 75 kg (compared to the Taycan Turbo S).

To help achieve this, Carbon-Fibre Reinforced Plastic (CFRP) is used for various components, such as the trims on the B-pillars, the upper shells on the door mirrors and the side skirt inlays. Full bucket seats made of CFRP, a lightweight luggage compartment, and the omission of the electric soft-closing function on the tailgate also save weight.

Exterior design

Porsche made a number of enhancements to the sharp and purist styling of the new Taycan with the updated model range this year.

Even though the Taycan Turbo variants receive elevated styling differentiation, including the Accent Package in Turbonite – the exclusive highlight colour available only for Turbo models – the Taycan Turbo GT models have more of a racing vibe.

Both bear the coloured Porsche crest on the front bonnet as well as on the hub covers of the lightweight alloy wheels. The 'Turbo GT' logo on the rear lid is painted in matte Black.

The side profile shows various components made of carbon fibre. The trims of the side windows are painted in high-gloss Black.

Customers can choose from six exterior paint colours, all of which are categorised according to the themes of Contrasts, Shades, Dreams, and Legends.

Porsche Exclusive Manufaktur also offers a large catalogue of pre-approved Paint to Sample (PTS) exterior colours.

Aerodynamics

Porsche has developed a front spoiler with aero blades specifically for the Taycan Turbo GT.

It has also fitted an adaptive rear spoiler. Its tear-off edge has a Gurney flap in a high-gloss carbon-

weave finish.

The Taycan Turbo GT has a drag coefficient (cw) of 0.29.

The Taycan Turbo GT with Weissach Package has a drag coefficient (cw) of 0.31.

Interior design

The Taycan Turbo GT is fitted with a Race-Tex interior package with extensive leather items in Black.

When the Weissach Package is chosen, the GT interior package is fitted.

Both models are equipped with lightweight full bucket front seats made of Carbon Fibre-Reinforced Plastic (CFRP) with carbon-weave finish (high-gloss). They have an integrated thorax airbag, electric height adjustment and manual fore/aft adjustment for both the driver and passenger sides.

The Taycan Turbo GT can be optioned (at no cost) with 18-way electric Adaptive Sports Seats with memory package.

The GT multifunction sports steering wheel in leather includes a drive mode switch and steering wheel heating.

The steering wheel has a 12-o'clock marker.

The Taycan Turbo GT logo is embossed in the front seats' headrests.

The standard-fitment Accent package in Black adds this colour to areas such as the decorative trims on the steering wheel and the gear selector.

Weissach Package

The Weissach Package further enhances the motorsport character and performance of the Taycan Turbo GT.

It provides extra aerodynamic measures such as:

- Air deflector elements on the underbody
- A new front diffuser
- A fixed rear wing in a carbon-weave finish with wing supports fixed to the body (able to generate a total downforce load of up to 220 kg.)

Styling-wise, the Weissach logo features on both sides of the rear wing.

The Weissach Package's weight-saving measures are extensive. They focus on eliminating equipment not required for track driving and remove around 70 kg compared to the Taycan Turbo GT without the Weissach Package:

- A tailored, high-quality lightweight carbon cladding with a storage compartment replaces the rear-seat system
- The analogue clock from the Sport Chono package is removed
- Less insulation is fitted to the body
- The foot mats and boot mat are removed
- A single HV recharging port is fitted, and its door is operated manually (not electrically)
- Special sound- and heat-insulating glass reduce weight
- The Sound Package Plus (not the 14-speaker BOSE® Surround Sound system, which is a no-cost option) is fitted to save weight

Display and control concept

The Taycan Turbo GT models, like the updated Taycan range, uses the latest generation of the Porsche Experience. The instrument cluster, central display and optional passenger display use an optimised interface.

- **16.8-inch curved-design instrument cluster for the driver:** Supports the driver with a large display that can be customised with six different and freely configurable views.
- **10.9-inch central display:** Mounted in the centre of the instrument panel, this full HD touchscreen operates the Porsche Communication Management (PCM) system. Like a smartphone, the apps can be customised for quick access.
- **10.9-inch touchscreen display on the front passenger side (optional on Taycan Turbo GT):** Enables access to navigation and infotainment functions. Its design ensures it cannot be seen from the driver's seat. Not available with the Weissach Package.

The Head-Up Display (HUD) has been optimised with a new layout, which includes the power meter and the Sport Chrono display. It is standard equipment on the Taycan Turbo GT but not fitted when the Weissach Package is chosen.

Infotainment and connectivity

The new Taycan uses the latest Porsche Communications Management (PCM) infotainment system.

Summary of PCM highlights:

- High-resolution 10.9-inch touchscreen display in full HD including Online Navigation, mobile phone preparation, audio interfaces and voice control
- Multi-touch gesture control similar to a smartphone screen
- Wireless Apple® CarPlay and Android Auto
- Porsche Connect includes Navigation Plus with RTTI, music and video streaming, online radio, Remote Services via the My Porsche App, and a wide range of other Porsche Connect Services**

A 21-speaker,1,455-Watt Burmester 3D High-End Surround Sound System is optionally available (but not with the Weissach Package).

Light and assistance systems

Lighting technology

Both Taycan Turbo GT models are fitted with Matrix LED headlights, which use speed, camera and navigation data to illuminate the road ahead in the most effective way available.

The matrix beam is an area divided into 11 segments that can be illuminated or dimmed according to the conditions.

HD matrix LED headlights are available on the Taycan Turbo GT without the Weissach package. These advanced headlight units provide precise forward illumination that adapts to the driving situation at lightning speed. New adaptations are calculated every 16 milliseconds.

Driver assistance systems

Both Taycan Turbo GT models are fitted with these advanced assistance systems:

- **Acoustic Vehicle Alerting System (AVAS):** Emits a sound to alert other road users.
- **Adaptive cruise control:** Controls the car's speed to maintain a safe distance from the vehicle ahead. No-cost option on Taycan Turbo GT without the Weissach Package.

- **Emergency Stop Function:** Brings the vehicle to a stop (subject to system limitations) if the driver fails to respond (e.g. due to health reasons) to visual and audible warnings to maintain control of the vehicle.
- **Lane Change Assist:** Uses radar sensors to warn the driver if a vehicle is in their blind spot before they change lanes. Not with the Weissach Package.
- **Lane Keeping Assist:**Helps keep the Taycan Turbo GT in its traffic lane if the driver begins to change lanes without indicating.
- **Surround View with Active Parking Support:**Uses cameras around the vehicle to show the driver an aerial view of the car when parking, making manoeuvring easier. Not with the Weissach Package.
- **Warn and brake assist including pedestrian protection:** Can detect other road users and warn the driver of a collision risk and, if needed, apply the brakes.

By the numbers

- 760 kW / 1,034 PS* (Overboost power with Launch Control)
- 1,240 Nm (Max. torque with Performance Battery Plus)
- 105 kWh (Gross capacity; Performance Battery Plus)
- 605 km electric driving range#
- 18 minutes' recharging time (DC, maximum charging power, 10% up to 80%)^
- 0.29 drag coefficient (cw) (without Weissach Package fitted)
- 2-speed transmission on the rear axle
- 2.2 seconds 0 – 100 km/h (Taycan Turbo GT with Weissach Package)
- 305 km/h top speed (Taycan Turbo GT with Weissach Package; on a suitable closed racing circuit)
- 1:27.87min: Lap time at Weathertech Raceway Laguna Seca, California, in February 2024. This lap, made by the Taycan Turbo GT with Weissach Package, was the fastest lap to-date in a road-approved electric car
- 7:07.55 min: Lap time at the Nürburgring Nordschleife, Germany, in August 2024. This time also stands as the current record for series-production electric cars and makes the Taycan Turbo GT the fastest four-door of any powertrain type on the Nürburgring.

In summary

The Porsche Taycan Turbo GT and the Taycan Turbo GT with Weissach Package redefine all-electric

sports car driving by combining powertrain advancements, lightweight construction and aerodynamic tuning.

Driving dynamics

- Porsche Active Ride suspension
- Porsche Torque Vectoring Plus (PTV Plus)
- Porsche Stability Management (PSM) including ABS anti-lock braking with extended brake functions
- Power steering Plus

Audio and communication

- Porsche Communication Management (PCM) with 10.9-inch full HD touch display including Online Navigation, mobile phone preparation, audio interfaces and voice control
- Multi-touch gesture control similar to a smartphone screen
- Wireless Apple® CarPlay and Android Auto
- Porsche Connect includes Navigation Plus with RTTI, music and video streaming, online radio, Remote Services via the My Porsche App and a wide range of other Porsche Connect Services**

Australian standard specifications

- Tyre fit set
- Fixed panoramic roof (no-cost option only on Taycan Turbo GT)
- Thermally and noise insulating glass including privacy glazing (only on Taycan Turbo GT)
- Adaptive Cruise Control (no-cost option only on Taycan Turbo GT)
- Lane Change Assist (only on Taycan Turbo GT)
- ParkAssist with Surround View (only on Taycan Turbo GT)
- Head-Up Display (only on Taycan Turbo GT)
- Side airbags in rear compartment (only on Taycan Turbo GT)
- Digital radio (DAB+)

Warranty and service pricing

- 3-year new-vehicle warranty
- 8-year / 160,000-kilometre battery warranty
- 2-year / 30,000-kilometre service intervals
- Service pricing varies from state to state due to different labour rates at Official Porsche Centres. For an indication of service pricing please visit the website of your nearest Official Porsche Centre.

Info

More information for consumers: here and here.

More information for media: here or contact press@porsche.com.au

* PS (Pferdestärke, German for horsepower) is the standard unit used in the European Union to measure the power output of a motor in 'metric horsepower'

The published consumption (l/100km and Wh/km), emissions (g/km) and kilometre (km) range figures are determined by Porsche AG testing in accordance with The Economic Commission for Europe standard (ECE) on test vehicles in compliance with ADR 81/02. Actual figures will vary as they are dependent on many factors, including without limitation: individual driving style, road and traffic conditions, environmental conditions, fuel quality, a vehicle's or battery's condition, load and use. Extra features and accessories (eg: equipment, wheels or tyres used etc.) can change relevant vehicle parameters such as weight, rolling resistance and aerodynamics and can also affect the consumption, emission, range and performance values of a vehicle. CO_2 emissions can also be generated at the power source when vehicles are being recharged, unless 100% renewable energy is used. Generally, consumption, emissions, kilometre range and charging times will vary from the published figures in real world Australian driving and charging conditions.

^The specified charging outputs and times (hour/minutes) are dependent on various factors: in general, the charging output and time can vary due to physical and chemical limits, depending on factors such as the available output of the country-specific energy infrastructure, the customer's own domestic installation, the temperature, interior pre-conditioning and charging status, as well as the age of the battery. Charging times may therefore be significantly higher than those specified. To achieve the optimum value of the specified DC charging time (DC = direct current) for a charge status increase from 5 to 80%, a CCS (combined charging system) fast-charging pedestal with > 270kW and > 850V is required, as well as a battery temperature of 30°–35°C. The charging status when commencing charging must not exceed 5%. For physical and chemical reasons, the charging speed decreases as the battery approaches its full capacity. Therefore, it usually makes sense to use fast DC charging to charge

the battery up to 80% or up to the required range. The predominant use of CCS fast charging pedestals leads to a long term increase in charging times. For regular fast DC charging, we recommend a maximum charging output of 50kW. When charging in a domestic environment, AC charging (AC = alternating current) is recommended. Using an (AC) industrial electrical outlet will result in improved efficiency and a much shorter charging time compared to using a household socket. Published figures should only be used for the purpose of comparison between vehicles. Please contact an Official Porsche Centre to obtain specific information about vehicles and features.

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Image Sublines

Path: media/Images/img_1.jpg
Title: DSC05599-Edit 169.jpg
Subline: The new Porsche Taycan Turbo GT

Path: media/Images/img_2.jpg
Title: Twin Electric Motors.jpg
Subline: Electric motors are fitted to both the front and rear axles.

Path: media/Images/img_3.jpg
Title: HV Battery System.jpg
Subline: The Performance Battery Plus in the Taycan Turbo GT

Path: media/Images/img_4.jpg
Title: Transmision.jpg
Subline: The two-speed rear transmission

Path: media/Images/img_5.jpg
Title: Pulse Inverter.jpg
Subline: The Taycan Turbo GT models are fitted with a more powerful 900-amp pulse inverter

Path: media/Images/img_6.jpg
Title: HV Battery.jpg
Subline: The Performance Battery Plus can receive up to 400 kW of charging during recuperation

Path: media/Images/img_9.jpg
Title: Porsche Active Ride.jpg
Subline: Porsche Active Ride offers an unprecedented bandwidth between driving comfort and driving dynamics

Path: media/Images/img_11.jpg
Title: DSC05649-Edit 169.jpg
Subline: 420 mm diameter front brake discs are fitted to the Taycan Turbo GT

Path: media/Images/img_12.jpg
Title: DSC05681 169.jpg
Subline: Carbon-Fibre Reinforced Plastic (CFRP) is used to reduce weight

Path: media/Images/img_13.jpg
Title: DSC05746 169.jpg
Subline: The adaptive rear spoiler fitted to the Taycan Turbo GT

Path: media/Images/img_15.jpg
Title: DSC05652 169.jpg
Subline: The available HD matrix LED headlights

Link Collection

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