



Panamera GTS and Panamera GTS Sport Turismo

Contents

Fuel consumption and emissions	3
Highlights	
Pure performance, sporty equipment, outstanding everyday usability	4
Summary	
Two new GTS models: two sporty additions to the Panamera family	5
Engine and performance	
Eight-cylinder biturbo engine delivers dynamic power,	
efficiency and an emotional drive	7
Chassis and chassis systems	
GTS-specific balance between performance and comfort	12
Design and equipment	
A powerful appearance and extensive equipment	15
Assistance and comfort systems	
First head-up display in a Panamera	17
The first of its kind: Panamera GTS Sport Turismo	
Extravagant design, adaptive roof spoiler and 4+1 seating concept	19

Fuel consumption and emissions

Panamera GTS: Fuel consumption – urban 14.2 I/100 km, extra-urban 8.1 I/100 km, combined 10.3 I/100 km; CO_2 emissions 235 g/km

Panamera GTS Sport Turismo: Fuel consumption – urban 14.8 l/100 km, extra-urban 8.1 l/100 km, combined 10.6 l/100 km; CO₂ emissions 242 g/km

The consumption and CO_2 emission values were calculated according to the new Worldwide Harmonised Light Vehicle Test Procedure (WLTP). The NEDC values derived from this must continue to be specified for the time being. These values cannot be compared to the values calculated based on the NEDC measuring procedure used up to now.

Further information on the official fuel consumption and official, specific CO_2 emissions of new passenger cars is available in the "Guidelines on fuel consumption, CO_2 emissions and power consumption of new passenger cars" [Leitfaden über den Kraftstoffverbrauch, die CO_2 -Emissionen und den Stromverbrauch neuer Personenkraftwagen], which are available free of charge from all sales outlets and from Deutsche Automobil Treuhand GmbH (DAT).

Highlights

Pure performance, sporty equipment, outstanding everyday usability

Bridging the gap in sporting style.

The 338 kW (460 hp) Panamera GTS models bridge the gap between the Panamera S (440 hp) and the Panamera Turbo (550 hp) in spectacularly sporting style.

An emotional experience.

When combined with the standard sports exhaust system, the modified, powerful four-litre V8 biturbo engine provides the driver with an emotional driving and sound experience.

Fit for the track.

The models achieve outstanding longitudinal and lateral dynamics thanks to an adaptive air suspension with three-chamber air springs, sports chassis (-10 mm) and large brakes (390 mm at the front, 365 mm at the rear).

A dynamic appearance.

The Sport Design package features black elements, new 20-inch wheels, and Alcantara and aluminium interior trim for an athletic look.

Feel-good ambience.

Adaptive 18-way sports seats, a heated multifunction sports steering wheel, leather equipment including an Alcantara package, and the Sport Chrono Package are included as standard.

Everything at a glance.

With its GTS models, Porsche is expanding its selection of comfort and assistance systems to include a head-up display with various configurations for the Panamera range.

Impressive from the back.

Thanks to its large tailgate, extra loading space and the 4+1 seating concept, the first Panamera GTS Sport Turismo combines sporty elements with maximum comfort for day-to-day driving.

Summary

Two new GTS models: two sporty additions to the Panamera family

Porsche has added two extra sporty models to its Panamera range. With a powerful performance from the four-litre V8 biturbo engine (338 kW/460 hp), dynamic chassis systems including adaptive air suspension, and their own unique design elements and equipment, the Panamera GTS and Panamera GTS Sport Turismo harness a one-of-a-kind performance package. As you would expect from a factory GTS, the basic equipment package is extensive. For example, the Sport Design package with black exterior elements and large Alcantara surfaces in the interior is included as standard. What's more, Porsche has expanded its portfolio of comfort and assistance systems to include a head-up display with various configuration options for the entire Panamera range.

At the heart of both of the new Panamera GTS models is a four-litre V8 engine with 338 kW (460 hp) of output and maximum torque of 620 Nm, cultivating an emotional sound and driving experience when combined with the standard sports exhaust system. The biturbo engine, which features a gasoline particulate filter, outperforms its predecessor by 15 kW (20 hp) and 100 Nm, accelerating the Panamera GTS and Panamera GTS Sport Turismo from 0 to 100 km/h in 4.1 seconds as it works in conjunction with the standard Sport Chrono Package. The two models achieve a top speed of 292 and 289 km/h, respectively. There are no interruptions in tractive force as power is transmitted to the Porsche Traction Management (PTM) four-wheel drive system by the eight-speed PDK dual clutch gearbox. Their exceptional performance is achieved with moderate consumption of just 10.3 I/100 km (Sport Turismo: 10.6 I/100 km); it has a CO₂ emission level of 235 g/km (Sport Turismo: 242 g/km).

Designed to reflect the sporting prowess of the Panamera GTS models, the chassis systems are impressively dynamic. The adaptive air suspension with three-chamber technology is fitted as standard, which results in flexible control and a wide spring rate spread. The sports chassis in the two GTS models has been lowered by 10 millimetres, while the Porsche Active Suspension Management

Summary 6

(PASM) function has been adapted for an even sportier setup. The result? Outstanding lateral dynamics. Large brakes (390 millimetres in diameter at the front, 365 millimetres at the rear) support the longitudinal dynamics.

When compared to the predecessor, the standard equipment of new Panamera GTS models has been significantly upgraded in a number of areas. The Sport Design package with a new front and rear aprons in black, and additional dark elements highlights the more athletic appearance. The GTS models are equipped with 20-inch Panamera Design wheels as standard. The interior features hall-mark elements of black Alcantara and anodised aluminium. The standard equipment also includes a heated multifunction sports steering wheel with gear-change paddles and Alcantara trim and the Connect Plus module for a wide range of digital services. With the optional Interior GTS package, drivers can customise their vehicle with various design elements, such as a rev counter, designer seams, and GTS logos in the contrasting shades of Carmine Red or Crayon.

The GTS models offer all the same innovations as the second-generation Panamera range. These include the digital Porsche Advanced Cockpit, assistance systems such as Porsche InnoDrive including adaptive cruise control, and optional rear axle steering. The GTS also features one highlight that is new to the entire Panamera range — the head-up display. The display can be configured by the driver and projects all relevant information directly into their direct line of sight in full colour.

As is tradition at Porsche, GTS stands for Gran Turismo Sport. Porsche's first road-approved sports car, the 904 Carrera GTS, was launched all the way back in 1963, bringing racing technology to the streets. This was followed by the 924 GTS and 928 GTS, which cultivated the concept throughout the 1980s and 90s. In 2007, the GTS celebrated its revival with the Carrera GTS. The first generation of the Panamera GTS followed in 2011, initially available as a sports saloon only. Now, the new Panamera GTS is also available as a Sports Turismo. With a large tailgate, low loading sill, increased luggage compartment volume and 4+1 seating configuration, the new GTS variant based on the models introduced in 2017 meets the highest of standards for everyday driving, while also delivering outstanding performance.

Eight-cylinder biturbo engine delivers dynamic power, efficiency and an emotional drive

The new Panamera GTS and new Panamera GTS Sport Turismo both benefit from the same V8 biturbo engine generation as the Panamera Turbo models. During the development phase, Porsche's engineers focused on ensuring maximum efficiency and exceptional performance. At speeds between 6,000 and 6,500 rpm, the four-litre engine in the new Panamera GTS models delivers peak output of 338 kW (460 hp), outperforming the 4.8-litre V8 engine in the predecessor by 20 hp. The maximum torque of 620 Nm - 100 Nm more than the previous model - is available at speeds between 1,800 and 4,500 rpm. The new eight-cylinder model accelerates the Panamera GTS and the Panamera GTS Sport Turismo from 0 to 100 km/h in 4.1 seconds thanks to the standard Sport Chrono Package. The saloon reaches a speed of 200 km/h in just 15.4 seconds; the Sport Turismo achieves the same in 15.6 seconds. The Gran Turismo reaches a top speed of 292 km/h while the Sport Turismo tops out at 289 km/h. Their exceptional performance is achieved with moderate consumption of just 10.3 I/100 km (Sport Turismo: 10.6 I/100 km); it has a CO_2 emission level of 235 g/km (Sport Turismo: 242 g/km).

In view of the stricter particulate emissions limits set out in the new EU emissions standards for the European Union and other markets applying its standards, the launch of the new Panamera GTS models will see all vehicles for these markets fitted with a gasoline particulate filter, which will also be installed in all Panamera models from the new model year. They therefore comply with the Euro 6 d-Temp (EU6 BG) emission standard as well as C6b in China. The structure of this sealed ceramic filter is similar to the particulate filter for diesel engines, though with some adaptations needed to meet the requirements for petrol engines. The exhaust gases are fed through alternately sealed channels, forcing the gas to flow through the walls of the particulate filter. Particulate deposits are burned off in an automatic regeneration process.

In design terms, the eight-cylinder model is a V-engine installed longitudinally with a bank angle of 90 degrees. The four intake and exhaust camshafts can be adjusted by 50 degrees and are powered by a chain drive. The four-valve engine can reach a speed of up to 6,800 rpm and has a displacement of

3,996 cm³. The stand-out technical feature of the V8 biturbo direct petrol injection model is its new central turbo layout with turbochargers located in the inner V, injectors in the centre of the combustion chamber, race track-compatible oil system, very low-wear coating on the cylinder liners and cylinder deactivation.

The standard sports exhaust system with its black twin tailpipes and specially tuned interaction between the engine and exhaust valve control gives the V8 engine its rich, distinctive sound.

Central turbo layout ensures powerful torque at low revs

The V8 engine in the new Panamera GTS models exhibits an incredible degree of agility, even at the higher end of the rev and power range. At the same time, the eight-cylinder unit is able to deliver maximum torque at low speeds. These drive characteristics are due primarily to the biturbo charging technology in the central turbo layout. Carefully designed twin-scroll turbochargers supply compressed air to the V8's combustion chambers. The two turbines rotate in opposite directions and deliver maximum torque, even at the lowest rev levels. The turbochargers achieve a maximum charge pressure of 0.8 bar. A compressor powered by the exhaust gas flow compresses the intake air for each turbocharger. To allow the engine to respond effectively, the process air runs through two separate branches. After flowing through the left and right intercoolers upstream from the V8, the process air from outside the vehicle passes through one throttle valve on each side into the left and right cylinder banks. The intercoolers significantly reduce the temperature of the process air once it has been heated during the compression process. This boosts the density of the air, increasing the oxygen content in the cylinder and improving efficiency as a result.

Central injectors

One key feature of all Panamera engines is the central location of the injectors and their high-pressure injection valves inside the combustion chamber. The V8 engine found in the new Panamera GTS models uses valves with seven nozzle holes. The individually aligned nozzles help to optimise combustion, thereby reducing emissions and increasing efficiency. And Porsche achieves this in every single operating phase. Its engineers have used injectors to employ individual injection strategies while the

engine is starting, while the catalytic converters are heating up, while the engine is warming up and while the engine is warm. Each cylinder bank is equipped with a high-pressure pump with a maximum injection pressure of 250 bar.

Exhaust gas after-treatment with catalytic converters in the inner V

The V8 engines are equipped with a dual-branch exhaust system with pre and main catalytic converters plus upstream and downstream silencers. In design terms, the eight-cylinder engine is similar to the central turbo layout in that its catalytic converters are located in the inner V, close to the engine. This configuration ensures that the emission control system reaches the ideal operating temperature in a short space of time. Furthermore, catalytic converter heating is accelerated during the start-up phase by opening the turbocharger wastegate valve.

Iron alloy in the cylinder linings reduces wear and oil consumption

One of the V8 engine's highlights is the iron coating on the cylinder linings in the cast aluminium block. This significantly reduces internal friction, wear (even when using low-quality fuels), and oil consumption. During the production process, the surface of the cylinders is coated with an exceptionally durable, low-friction iron coating using an atmospheric plasma spray method. The coating is just 150 micrometres thick. This iron alloy almost completely eliminates any lining wear at the reversal point on the piston rings. The design of the lightweight cast pistons has been adapted in line with the new alloy. The piston rings have a chromium nitrite coating, which perfectly matches the iron coating When combined, all of the measures reduce oil consumption by up to 50% compared to its predecessor.

Reliable oil supply, even on the race track

Every Porsche has to be able to hold its own out on the track. The new Panamera GTS models confidently master this challenge — partly thanks to their innovative oil system. Its layout ensures that even the most extreme lateral and longitudinal acceleration forces can be balanced out. A key aspect of this system is the fact that the oil ducts are split into two separate supply branches — one for the engine and one for the cylinder heads. The supply openings in these ducts have been tailored to each component in the oil system. During the start-up phase, this has a positive impact on the time needed to

build up pressure in the oil. The speed at which pressure is built up is also supported by a return valve in the oil pump. This valve makes sure that the large volume of oil in the inner V does not flow back into the oil sump and run empty. The oil pressure itself is built up by a fully variable vane oil pump and can be regulated to the specific engine operating map via a valve. This control valve also comes with a built-in oil pressure limiter, which is automatically activated during the engine start-up phase and at low ambient temperatures. Depending on demand, an electronic switching valve located in the centre of the inner V also controls the map-controlled piston spray nozzles for cooling the pistons. This control function reduces churning losses and controls the amount of oil in circulation. As a result, the GTS models can even cope with the high longitudinal and lateral acceleration forces on the Nürburgring's famous Nordschleife.

Fitted as standard: Sport Chrono Package with Sport Response Button

Perfectly tailored to racetrack driving, the new Panamera GTS models are equipped with a standard Sport Chrono Package with Launch Control and mode switch, plus a Sport Response Button on the multifunction steering wheel. Thanks to its ergonomic position on the steering wheel, the rotary mode switch provides the driver with direct access to the four driving modes (Normal, Sport, Sport Plus and Individual). Sport Plus mode is ideal for the track. This mode adjusts the drivetrain so that it can deliver the ideal vehicle response and maximum acceleration. What's more, active chassis components — such as the adaptive air suspension, Porsche Active Suspension Management (PASM) and the optional Porsche Dynamic Chassis Control Sport (PDCC Sport), Porsche Torque Vectoring Plus (PTV Plus) and rear axle steering — switch to a sportier mode for ultimate performance.

The Sport Response Button is located in the middle of the mode switch. This button delivers the Panamera's maximum power potential for 20 seconds at the mere touch of a button. During this time, the engine response is more direct and spontaneous. The PDK also switches to an even more dynamic shifting map than in Sport Plus mode, immediately lowering the revs to a range between 3,000 and 6,000 rpm (unless the button is pressed in full-load operation). Gear changes take place very late.

Porsche eight-speed PDK for optimum comfort and maximum agility

Like all other Panamera models, the new GTS versions also come with an eight-speed dual clutch gearbox. In general terms, the eight-speed PDK allows for the ideal gear ratio spread and efficient fuel consumption, while still delivering optimum comfort and maximum agility. That is because the seventh and eighth gears are designed as rev-reducing overdrive gears. Maximum speed can be achieved in sixth gear. The Panamera's eight-speed PDK can change gear without interrupting the tractive power because the next gear ratio is essentially already waiting in the wings, ready to be activated within fractions of a second. The sporty yet exceptionally comfortable gear shift patterns of the PDK are the perfect match for the dynamic characteristics of the new Panamera GTS models.

Active four-wheel drive with electronically controlled multi-plate clutch

The Panamera GTS and Panamera GTS Sport Turismo deliver power to the road via the Porsche Traction Management (PTM) function — an active four-wheel drive system with an electronically controlled, map-based multi-plate clutch. Depending on the driving situation, the multi-plate clutch spreads the engine's power between the front and rear axles to achieve optimum performance at all times. The PTM sensors continuously monitor the wheel speeds, the longitudinal and transverse acceleration forces, and the steering angle. The PTM delivers perfect performance, regardless of whether the roads are dry, wet or covered in snow.

Chassis and chassis systems

GTS-specific balance between performance and comfort

As for the overall Panamera concept, the chassis in the new GTS models also combines the comfort of a luxury saloon with the performance of a sports car. However, it has been given an extra dynamic makeover to achieve the hallmark GTS response. The adaptive air suspension used in other Panamera derivatives is also installed as standard in the new GTS models. With its three-chamber technology, this suspension system provides flexible control and good spring rate spread. The sports chassis in the two GTS models has been lowered by 10 millimetres as standard, while the Porsche Active Suspension Management (PASM) has been adapted for an even sportier setup, thereby delivering the performance expected from a GTS model. The result? Outstanding lateral dynamics.

Large brakes support the longitudinal dynamics. What's more, the integrated Porsche 4D Chassis Control function analyses and synchronises all chassis systems in real time to ensure optimum vehicle response. The new Panamera GTS models can deliver an even more dynamic performance with innovative optional systems, such as Porsche Dynamic Chassis Control Sport (PDCC Sport) including Porsche Torque Vectoring Plus (PTV Plus), Porsche Ceramic Composite Brake (PCCB), and rear axle steering.

Adaptive air suspension with three-chamber technology fitted as standard

The Panamera GTS and Panamera GTS Sport Turismo are equipped with an adaptive three-chamber air suspension as standard. This system has raised the bar, particularly when it comes to comfort. The system is equipped with three air chambers per strut, each of which can be activated individually, thus providing a wide array of spring rates. For instance, drivers can set the chassis to a low basic spring rate, which ensures exceptional levels of comfort, because the spring rate can be electronically adjusted in a fraction of second whenever needed – such as when accelerating, braking or reducing rolling motion.

Made for an athlete: Porsche Active Suspension Management (PASM)

The standard Porsche Active Suspension Management (PASM) system is an electronic damping control function. The system responds to the road surface conditions and the current driving style, constantly adjusting the damping for each individual wheel accordingly. The dampers used in the new Panamera GTS models have been specifically refined for a sportier response, making sure the vehicles deliver the expected performance and improving the vehicle's lateral dynamic characteristics. In general, drivers can choose from three driving modes: Normal, Sport or Sport Plus. So, how does PASM work? Sensors record the body and wheel movements generated during fast acceleration, braking, fast cornering or driving on uneven road surfaces. PASM sends the data it records to the Porsche 4D-Chassis Control function. The command centre calculates the current vehicle status and regulates the PASM's damper characteristic curves and the adaptive air suspension spring rates depending on the mode selected. Thanks to 4D Chassis Control, the control parameters can of course be tailored to the other optional electronic chassis systems to deliver maximum performance.

A 48-volt system: PDCC Sport active roll stabilisation including PTV Plus

The optional Porsche Dynamic Chassis Control Sport (PDCC Sport) function with 48-volt technology optimises vehicle dynamics with its integrated electro-mechanical stabilisers. The system responds much quicker than systems with hydraulic actuators, stiffening the stabilisers to minimise roll in the body. In the Panamera, Porsche combines the PDCC Sport function with Porsche Torque Vectoring Plus (PTV Plus). The electronically controlled rear-axle differential lock allows the driving torque to be spread variably between the rear wheels, while wheel-selective braking intervention generates additional steering torque on the rear axle. The result? An even more agile steering response. What's more, PTV Plus noticeably improves traction while accelerating out of corners by locking the differential.

Rear axle steering improves lateral dynamics and longitudinal stability

The new Panamera GTS models can be equipped with optional rear axle steering. At low speeds up to around 50 km/h, the rear wheels steer – at a variable rate based on the vehicle speed – in the opposite direction to the front wheels up to a maximum steering angle of 2.8 degrees. This corresponds to virtual shortening of the wheelbase. The advantages of this include a more dynamic steering response in corners, significantly easier manoeuvring, and better parking in tight spots. At higher speeds, the

Chassis and chassis systems

14

rear wheels steer in the same direction as the front axle, again depending on the speed. The wheel-base is therefore virtually lengthened, thereby increasing stability, for example when changing lanes on the motorway. Rear axle steering allows for a more direct steering ratio on the front axle, so the steering response feels incredibly sporty. Rear axle steering also generally improves active safety, ride dynamics and comfort.

Porsche 4D Chassis Control

Porsche 4D Chassis Control is a central network of control systems. It analyses the current driving situation in all three dimensions (longitudinal, lateral and vertical dynamics), calculating information on the vehicle status. It then shares this status with all chassis systems in standardised form in real time — adding a fourth dimension to chassis control. As a result, the systems provide an integrated response to the current driving situation. One example: When steering dynamically into a corner, the PASM electronic damper control, the adaptive air suspension, the rear axle steering, PTV Plus and PDCC Sport act as a unit to support the steering response and increase agility and stability. Porsche 4D Chassis Control sends a pulse to all chassis systems as soon as the driver starts to steer. This allows the systems to respond at an early stage and achieve maximum performance around corners.

Large brakes for top-class deceleration

The dimensions of the standard brake system - six-piston fixed callipers in the front, four-piston fixed callipers at the rear - have been increased to reflect the power of the new Panamera GTS models. The grey cast iron brakes with red brake callipers ensure top-class deceleration. The internally vented brake discs have a size of 390 x 38 millimetres on the front axle and 365 x 28 millimetres at the rear). The Panamera GTS models are also optionally available with the Porsche Ceramic Composite Brake (PCCB), which has been tried and tested on the track.

Both GTS models are equipped as standard with 20-inch Panamera Design wheels with black painted finish. Size 275/40 ZR 20 tyres at the front and 315/35 ZR 20 tyres at the rear ensure optimum grip.

Design and equipment

A powerful appearance and extensive equipment

The new GTS models underline their unique position as sports cars in the luxury saloon category with the especially sporty design their design and equipment. The Panamera GTS and Panamera GTS Sport Turismo are 5,053 millimetres long, 1,417 millimetres tall and 1,937 millimetres wide. A large wheelbase of 2,950 millimetres extends between the body's short overhangs. Both models are equipped as standard with 20-inch Panamera Design wheels, painted in black with a silk gloss finish.

Standard Sport Design package with black highlights

At the front, the GTS models differ from the rest of the Panamera models due their new Sport Design front apron with a black spoiler lip. As standard, LED headlights, including Porsche Dynamic Light System (PDLS), four-point daytime running lights, cornering lights, headlight cleaning system and dynamic headlight range control ensure ideal visibility at night. Darkened LED matrix headlights including PDLS Plus with 84 individually activatable LEDs are available as an option. Sport Design side skirts with black paint finish visually lower the two GTS models, emphasising their performance-driven design. The side window strips are painted in high-gloss black as standard and the front doors feature GTS lettering. Black is also the dominant colour at the rear, where the Sport Design rear apron, "PORSCHE" logo and model designation all feature the corresponding paint finish. The two twin tailpipes in the standard sports exhaust system are also black. The three-dimensional tail lights with LED technology, integrated four-point brake lights and lighting strip feature the distinctive GTS dark tint. The retractable rear spoiler is integrated seamlessly into the sports saloon's electric tailgate, which is fitted as standard. On the new Panamera GTS, the wing splits when extended to create a larger surface area. This also increases the downforce on the rear axle at higher speeds.

Inside, the Panamera combines a high standard of comfort, the sportiness typical for Porsche and an avant-garde design with a high degree of variability. The two GTS models also feature particularly sporty highlights and offer an extended range of standard equipment. The adaptive, electric 18-way sports seats with memory package offer both the driver and front passenger good side support and plenty of comfort. The centre seat panels come in Alcantara, which also covers the armrests on the

Design and equipment 16

doors, the sun visors, the headliner, and the A, B and C pillars. The standard equipment also includes a heated multifunction sports steering wheel with Alcantara trim, gear-change paddles, and the mode switch for the Sport Chrono Package. GTS logos can be found on the door entry sills, rev counter and head restraints. The rev counter dial is also optionally available in Carmine Red or Crayon.

The interior can be further enhanced with the GTS interior package. This includes seat belts, embroidered lettering on the head restraints, and also decorative stitching on the seats and floor mats in the contrasting colours Carmine Red or Crayon.

Porsche Advanced Cockpit with standard online connectivity

One general feature found in the second-generation Porsche Panamera is the digital display and operating concept – the standard Porsche Advanced Cockpit with touch-sensitive panels and customisable displays. Two seven-inch screens form the interactive cockpit. A 12.3-inch touchscreen in the centre console acts as the central operating and display element in the Porsche Communication Management (PCM) system including online navigation. The Infotainment system is easy and intuitive to use and can be adapted to suit personal tastes. Thanks to the pre-defined tiles, drivers have a quick and easy way to create their own home screen full of their preferred functions, such as their favourite radio stations, sat-nav destinations, telephone numbers or the sports exhaust activation function. An information widget can be added to the right-hand side of the full HD screen, providing users with access to other functions in the PCM. For instance, the interactive area in the middle of the screen can be used to display the sat-nav, while the right-hand side is used for the phone function. Up to six individual profiles can be configured. As well as a number of interior settings, these profiles contain preferred configurations for lights, driving programmes and assistance systems.

Users can connect their mobile phones or smartphones with the Connect Plus module. The Panamera is equipped with an LTE phone module and SIM card reader. Thanks to the built-in SIM card, every Panamera can stay online all the time as standard if wished. Real-time traffic information is available for quick and reliable navigation, ensuring a speedy assessment of the current traffic situation and dynamic route adjustment. A number of other Porsche Connect services are also available. For an in-depth overview of the Connect services available in each country and vehicles, please see www.porsche.com/connect.

Assistance and comfort systems

First head-up display in a Panamera

A range of standard or optional assistance systems ensure a safe and comfortable journey in the new Panamera GTS models. Proven systems such as the Lane Change Assist function and Lane Keeping Assist including traffic sign recognition are now joined by the first head-up display in a Panamera. This display system projects all relevant vehicle information directly into the driver's line of sight in full colour. Other highlights include the optional Porsche InnoDrive system and Night Vision Assist. This new feature uses a thermal imaging camera to identify people and larger animals at a distance of up to 300 metres. It then uses colour-coded warnings in the cockpit to alert the driver. If the new LED matrix main headlights with 84 individually activatable LEDs on each side are on board, people located well outside the dipped beam range are briefly illuminated if they are located inside the calculated corridor, allowing the driver to respond earlier.

Relieving strain on the driver: Porsche InnoDrive and Traffic Jam Assist

The Porsche InnoDrive function including adaptive cruise control can also think ahead. Based on three-dimensional, high-resolution navigation data, the system calculates and activates the optimum acceleration and deceleration values as well as gear and coasting settings for the next three kilometres. Acting as an electronic co-pilot, it automatically takes into account corners, inclines and speed limits. Other vehicles and current speed limits are recorded by the radar- and video-based sensor system and then incorporated into the vehicle response. The range of assistance systems has also been expanded to cover situations where driving a Porsche is not all pleasure — traffic jams. The Traffic Jam Assist system supports the driver by integrated longitudinal and lateral guidance of the vehicle in traffic jams at speeds up to 60 km/h. Controlled by the ACC function, the vehicle is able to follow an identified queue of cars supported by the electro-mechanical steering function, which can easily be overridden at any time.

Head-up display with customisable options

Coinciding with the launch of the new GTS models, Porsche is also introducing an optional head-up display for all Panamera models. Already available in the Cayenne, the system projects full-colour vehicle-relevant information directly into the driver's line of sight. The head-up display is discretely integrated into the dashboard directly in front of the windscreen. For the driver, the display appears around 2.3 metres in front of the vehicle, directly in their line of sight. The height, brightness and rotation of the head-up display can also be adjusted. Settings are configured in a separate menu directly in the Porsche Communication Management (PCM) system. Drivers can choose from a range of information to be projected onto the windscreen, such as sat-nav instructions, assistance system data, warnings and other events. The display area is split into six different sections.

Drivers can choose from four different presets, each of which display a range of vehicle information. The standard view primarily focuses on the activity and status of the assistance systems. The middle of the top line shows the same information as the instrument cluster display. The top-left of the display shows identified traffic signs that apply to the current route. The middle of the bottom line shows the current speed. If route guidance is active, navigation instructions appear on the right of the display. In Sport Chrono mode, additional information is added to the head-up display. The middle of the top line shows the rev counter. If the Sport Response function is active, the top-right corner shows the remaining function time. The gear display appears at the bottom right. The left-hand side provides the driver with information about the lap time and lap number. The compact display strips back the information in the display to the bare essentials. For instance, the top section only shows the current speed limit and navigation instructions. The bottom section displays the current vehicle speed and assistance system status. If necessary, the driver can create a customised view for the display. This enables drivers to select from the individual display elements. User-specific displays are configured in the PCM.

In addition, situational information is displayed regardless of the selected preset. For instance, a large warning symbol appears if the vehicle is at risk of a collision. Symbols also appear to alert the driver if there is an incoming call or if voice control is activated. Since the display automatically switches between day and night, the displays are easier to see at the corresponding time of day. Alternatively, the driver can change the display manually.

The first of its kind: Panamera GTS Sport Turismo

Extravagant design, adaptive roof spoiler and 4+1 seating concept

The new Panamera GTS is not just available as a standard sports saloon. For the first time ever, it is now also available as a Sport Turismo. In design terms, the GTS model offers all the benefits of the new Sport Turismo range and its avant-garde elements. The roof line has been raised in contrast to the sports saloon version, making it easier to get in and out at the rear while also increasing the headroom. The capacity of the luggage compartment benefits from the wide-opening tailgate with standard electric activation and the low loading sill at a height of just 622 millimetres. If the Sport Turismo is equipped with comfort access, a simple foot movement is all it takes to open or close the tailgate as the vehicle recognises authorised users via the remote key. Just like all Sport Turismo models, the Panamera GTS is equipped with a three-seater rear bench as standard. Since the two outer seats — as sporty and comfortable as you would expect from this series — are designed as individual seats, this results in a 2+1 configuration at the rear. Customers can also opt for two electrically adjustable individual seats for the rear. When loaded up to the top edge of the rear seats, the GTS Sport Turismo offers a stowage capacity of 520 litres. The three rear seat backrests can be folded down separately or together (ratio 40:20:40) and can be unlocked electrically from the luggage compartment. This configuration increases the loading volume to a maximum of 1,390 litres.

Porsche also offers an optional load compartment management solution for the Panamera Sport Turismo. The variable system is designed to safely transport objects of all shapes and sizes and includes two securing rails integrated into the luggage compartment floor, four lashing eyes, and a luggage compartment partition. A flexible luggage compartment blind is included as standard.

If it is wished to charge a laptop on the way to an important meeting, this can be done using the optional 230 V socket in the luggage compartment.

Roof spoiler for up to 50 kilograms of extra downforce

The Panamera Sport Turismo's standard roof spoiler is unique in this vehicle category. Its angle can be adjusted to one of three settings depending on the driving situation and selected driving mode. It can generate up to 50 kilograms of extra downforce on the rear axle. As part of the Porsche Active Aerodynamics (PAA) system, the spoiler is retracted at speeds up to 170 km/h and follows the rear sloping roof line at an angle of minus seven degrees. From speeds above 170 km/h, the roof spoiler automatically moves to the performance position at plus one degrees, increasing the ride stability and lateral dynamics. In the Sport and Sport Plus driving modes, the roof spoiler already moves into this position at speeds from 90 km/h. As an active support feature, the PAA automatically adjusts the spoiler angle to plus 26 degrees at speeds from 90 km/h if the optional panorama sliding roof is open. This balances out any turbulent air movement and reduces noise levels accordingly.