



PORSCHE



The new Cayenne
Press Kit

Contents

The new Porsche Cayenne in brief Enhanced performance and comfort	4
Engine, transmission and all-wheel drive Enhanced performance and faster shifting with the completely newly developed powertrain	5
The chassis of the new Porsche Cayenne Optimum balance between performance and comfort	6
Design and body Lightweight construction with sports car genes	8
Ergonomics and comfort More space for increased comfort and driving pleasure	9
Infotainment and connectivity Your personal Cayenne	11
Assistance systems Comprehensive systems increase comfort and safety	14
Pricing Starting MSRP and availability	25

The new Porsche Cayenne in brief

Newly Added Standard Equipment

- LED headlights including four-point daytime running lights and LED rear lights
- All model variants now include turbocharged engine
- Standard 19" wheels (replaces 18" standard wheel size of previous model)
- Roof spoiler painted in exterior color
- Connect Plus including navigation module and integrated LTE SIM card
- LED interior lighting
- Rear seats with 10 position adjustment
- 4D Chassis Control
- Driver personalization with capacity for up to six profiles
- Thermally insulated glass

Enhanced performance and comfort

The completely redeveloped Cayenne is even closer to its roots as a Porsche sports car than its predecessor thanks to intelligent lightweight construction, a powerful engine, exceptional driving dynamics and new driver assistance systems. The concept has proved to be a popular combination; since its launch in 2002, Porsche has delivered over 770,000 Cayenne units.

The Cayenne uses a 3.0-liter single-turbo V6 that creates 335 hp (250 kW), enabling acceleration from 0 to 60 mph in 5.9 seconds, or 5.6 seconds with the Sport Chrono Package. Its top track speed is 152 mph. The new Cayenne is significantly quicker than the model it directly replaces with a gap as large as

1.6 seconds in the 0 to 60 mph sprint and an increase of 9 mph in top track speed.

Redeveloped with innovative technologies

All of the core components of the Cayenne are new. A more powerful and efficient engine combines with the new eight-speed Tiptronic S transmission, which responds more quickly than the transmission in the previous Cayenne. A new lightweight chassis construction helps in significantly improving driving dynamics as compared to the preceding Cayenne. New technologies such as 4D Chassis Control, rear axle steering, a three-chamber air suspension, dynamic anti-roll bars powered by a 48-volt electrical system and tungsten-carbide-coated high-performance Porsche Surface Coated Brakes (PSCB) play a key role in this performance. These systems also set the vehicle even further apart by achieving a level of driving comfort closer to that of a high-end sedan. Going off-road is even easier, too, as the driver can now choose between five pre-programmed drive and chassis modes, depending on the terrain.

Digital networking: Porsche Advanced Cockpit and new Porsche Communication Management
The Porsche Advanced Cockpit integrates display and control elements in a single design. The center console and the new Porsche Communication Management (PCM) 12.3-inch touchscreen act as the driver's interface to all vehicle functions. Users can also customize both the home screen and the "info widget," which takes advantage of the generous screen size. Specifying custom layouts is simple; users need only to drag and drop tiles in their preferred order and to

populate them with their desired functions. The system can store up to six profiles.

The new Cayenne offers online navigation including real-time traffic information, an LTE telephone module with integrated SIM card, intelligent online voice control, a Wi-Fi hotspot, four USB ports, new Porsche Connect services and Apple® CarPlay®. Drivers can also access a wide variety of digital features and services via the new and simplified Porsche Connect App.

Engine, transmission and all-wheel drive

Enhanced performance and faster shifting with newly developed powertrains

Under the hood of the 2019 Porsche Cayenne there is a 3.0-liter turbocharged V6 that delivers 335 hp (250 kW) and 332 lb-ft of torque, offering a significant Improvement in performance as compared to the naturally aspirated engine in the preceding model. The Cayenne accelerates from zero to 60 mph in

5.9 seconds (or 5.6 seconds with the Sport Chrono Package), and achieves a top track speed of up to 152 mph.

Turbocharged engine with central turbo layout

By placing the single twin-scroll turbocharger inside the cylinder V, the engine has significantly more compact dimensions, placing it deeper inside the vehicle to lower the center of gravity. The shortened exhaust paths between the combustion chambers and the turbocharger quicken engine response and build power quickly.

Sporty and more responsive: The new eight-speed Tiptronic S

The new transmission offers faster shifting speeds with smoother starting characteristics and a reduction in traction interruption while shifting. New sun gear and planet gear sets result in a wider gear spread that allows first gear to be shorter than in the preceding model, and eighth gear to be longer. Gears one through six are used for acceleration, while seventh and eighth are left intentionally long for comfortable high speed cruising.

Clearly differentiated driving modes enable the driver to benefit from the new transmission tuning. In “Normal” mode, the transmission shifts to the higher gears quickly and smoothly to save fuel. In “Sport” mode, the Tiptronic S feels very sporty, allowing fast gear changes and quick acceleration. With the optional Sport Chrono Package, the driver can use the mode switch on the steering wheel to select driving modes directly – a feature that premiered with the 918 Spyder.

The auto start/stop function has also been subject to further development, and now switches off the engine as the car coasts to a stop when approaching a traffic light. Auto start/stop deactivates automatically in Sport and Sport Plus driving modes.

The new transmission also has benefits for towing. The transmission can transfer very high torque at start-up and in motion. First gear is also around four percent shorter compared to the previous transmission model. This allows sensitive throttle applications at low engine speeds, which is also a significant advantage off-road.

Sport Chrono Package with PSM Sport available for the Cayenne

Just like in the 911, the driver selects the driving mode via the mode switch on the steering wheel. In addition to Normal, Sport and Sport Plus modes, the driver can also select the “Individual Mode.” Performance Start is available in Sport Plus mode for optimum acceleration from a standstill. This optimizes all chassis systems for performance, and if equipped, sinks the air suspension to the lowest level.

The Sport Response button in the center of the mode switch offers maximum responsiveness for 20 seconds or until the button is pushed a second time within that period. The instrument cluster shows the driver how long the Sport Response function will remain active via a countdown timer. The performance boost is available as often as desired.

As in sports cars, the Sport Chrono Package also includes a separate PSM Sport mode. In a safe environment, ambitious drivers can take the Cayenne closer to its limits in this setting while PSM remains active in the background. PSM Sport mode requires manual selection manually and is available in any driving mode.

Active Porsche Traction Management (PTM) for all models

In all new Cayenne models, Porsche now uses Porsche Traction Management (PTM) all-wheel drive, with an electronically and map-controlled multi-plate clutch. The system deploys variable and adaptive strategies to control the distribution of the propulsion force between the rear axle and the front axle. This has benefits both for driving on- and off-road. In addition, PTM monitors driving conditions at all times.

The new Cayenne offers the same high level of off-road capabilities as the predecessor model. Combined with the optional three-chamber air suspension, the SUV is ideally equipped for forays onto challenging terrain, with its ground clearance of 9.4 inches, a ramp-over angle of over 21 degrees, and a fording depth of 20.6 inches. The optional Porsche Dynamic Chassis Control (PDCC) system also offers benefits when off-roading.

The optional Off-road Package adds rock rails with integrated skid plates and reinforced protection for the engine and rear axle. Additional off-road-specific information in the PCM and the compass display on the dashboard round off the package.

The chassis of the new Porsche Cayenne

Optimum balance between performance and comfort

The chassis – designed completely from scratch – pushes the boundaries of sportiness and comfort to new levels. New active systems such as rear-axle steering, Porsche Dynamic Chassis Control (PDCC) electromechanical anti-roll bars and three-chamber air suspension are key to this heightened versatility. The new 4D Chassis Control system manages all of these systems. Sporty drivers will also appreciate the new staggered tires and the Porsche Surface Coated Brake (PSCB), which makes its global debut in this car.

New front axle concept with sports car genes

An aluminum front axle featuring a separated link design replaces the traditional double wishbone axle of the previous Cayenne. The old chassis sub frame, which was constructed of steel and attached to the body using rubber bearings, is no longer necessary. In its place, an aluminum auxiliary frame stiffens the axle construction and supports the engine via its integrated bearings. There are two major benefits to the new axle concept. First, it contributes to the total vehicle weight reduction of 120 lbs. – achieved in spite of increased standard equipment. Secondly, it helps to optimize steering response, steering precision and straight line driving. The new axle layout also greatly reduces vibrations caused by wheel imbalance and powertrain influences.

On the rear axle of the Cayenne Porsche is continuing to fit a multi-link suspension with lightweight steel links and steel springs as standard. However, models equipped with the optional adaptive air suspension replace the steel links with forged aluminum links at the rear. The damper responsiveness and spring comfort also improve thanks to optimized elastokinematics that enhance agility, precision and comfort. The use of a rear axle steering system in this car for the first time was one of the key factors in the redesign of the rear axle.

World premiere of the Porsche Surface Coated Brake

In the new Cayenne, Porsche is launching an innovative new braking technology: The Porsche Surface Coated Brake (PSCB). At the core of this new technology are discs with an exceptionally hard tungsten- carbide coating, combined with specially developed brake pads. Compared to conventional cast iron brakes, the discs generate significantly less brake dust. The increased friction values of the brakes also ensure improved responsiveness. PSCB delivers stable braking even under extreme stress. As with the Porsche Ceramic Composite Brake (PCCB), which is still available as an option, the PSCB uses ten- piston calipers at the front and four-piston calipers at the rear.

A side effect of the new technology is the unique appearance of the coated discs. After an initial period of day-to-day driving, the pads polish the surface to a gleaming shine, creating a mirror-like finish. The white brake calipers enhance the aesthetic effect. PSCB is included as standard on the Cayenne Turbo, and is available as an option for all other Cayenne models in combination with 20, 21 and 22-inch wheels.

Larger wheels – now available with staggered tires for the first time

The new Cayenne is more of a sports car than ever before. The stronger focus on performance is evident not only in the staggered tires – fitted on this car for the first time – but also in the introduction of a new and larger generation of tires in dimensions ranging from 19 to 22 inches. The options now range from sizes 255/55 (front) and 275/50 (rear) on 19-inch wheels to 285/35 (front) and 315/30 (rear) on wheels with a 21-inch diameter. The combination of lower-profile tires on the front axle and wider tires on the rear axle has been tried and tested in Porsche sports cars for decades. Staggered tires enhance agility, stability and driving dynamics, while the larger tire size and adjusted air pressures also boost comfort.

New generation of active control systems boosts versatility

Based on the new basic chassis design, Porsche has developed a virtually brand-new generation of active chassis systems for the Cayenne. The only exception is the Porsche Active Suspension Management (PASM) damper system, which Porsche revised for the new model. Depending on the road conditions and driving style, the PASM actively and continuously regulates the damping force for each wheel individually.

The first Cayenne with rear axle steering

For the first time, the Cayenne is available with rear axle steering as an option. With this system on board, the Cayenne takes on the driving dynamics of a premium sports car. Thanks to this system, the new Cayenne provides quicker turn-in and builds up lateral acceleration at the rear axle significantly sooner. The new steering precision achieved by the Cayenne is unique for a vehicle in this segment. Rear axle steering also boosts comfort and safety in day-to-day driving. The car's turning radius is reduced from 39.7 feet to 37.8 feet.

At speeds of up to approximately 49 mph, the axles steer in opposite directions. At higher speeds, both axles steer in the same direction, resulting in even greater driving stability, for example when changing lanes on the highway at high speeds. The maximum steering angle used on the rear axle is three degrees.

More responsive: Electromechanical roll stabilization

The optional Porsche Dynamic Chassis Control (PDCC) active roll stabilization system in the new Cayenne uses electromechanical actuation for significantly quicker adjustment than the previous electro-hydraulic system. A new 48-volt system powers PDCC and is capable of adjusting the torsional rigidity of the anti-roll bars on the front and rear axles in milliseconds, actively stabilizing the vehicle body. The design features an anti-roll bar divided in two, with the halves joined together by a pivot motor. Depending on the car's roll angle, the motor rotates the two halves in opposite directions, keeping the vehicle upright. The electromechanical system is also more compact and requires less energy to operate than the system used in the previous generation Cayenne.

In the Cayenne's off-road modes, the PDCC largely disengages the anti-roll bar halves, or even actively rotates them. This enables greater axle articulation, and helps maintain contact with the ground to ensure optimal traction off-road. On fast roads, this function also means that the replication effects of the anti-roll bar are reduced to zero, and the spring and wheel movements can be damped completely independently of one another.

Adaptive three-chamber air suspension for greater comfort and sporty performance

For the air suspension in the Cayenne, Porsche has developed a three-chamber system that offers improved comfort, enhanced dynamics on sporty drives and increased ground clearance off-road. The new adaptive air suspension uses three air chambers for each spring strut to create an exceptionally wide range of spring rates. For maximum comfort, the chassis is set to a very low basic spring rate. If strong pitching or rolling motion occurs, the system immediately switches to a higher spring rate for additional stabilization.

In addition to the normal level, five further vehicle levels are available. With the exception of the loading level, these are set automatically depending on the driving situation and the selected driving mode. Regardless of the automatic setting, the driver can manually set the desired level via the PCM at any time, with the exception of the “low” setting, which is exclusively controlled by the system at speeds above 130 mph. This setting improves stability and reduces drag at high speeds. Depending on the mode, ground clearance while driving varies between 6.3 and 9.4 inches. An exceptionally deep loading level is also available by pressing a button in the luggage compartment when the vehicle is stationary.

Porsche 4D Chassis Control connects and manages all active chassis systems

With Porsche 4D Chassis Control, the new Cayenne centralizes control of every equipped chassis system. In previous generations, these systems worked largely independent of each other, using their own sensors and responding to the behavior of the other chassis systems. Now the system centrally analyzes longitudinal, transverse and vertical acceleration. The optimum vehicle condition is calculated from the results and provided to all relevant systems, enabling the chassis systems to respond proactively.

Design and body

Lightweight construction with sports car genes

A Porsche Cayenne is instantly recognizable, and the new generation has developed and enhanced this unmistakable identity. The new, but familiar exterior design strongly reflects Porsche brand identity, and underlines the ambition of the Cayenne to be the sportiest vehicle in its class. With an exterior length increased by 2.4 inches without any change to the wheelbase (113.9 inches) and a roof height reduced by 0.35 inches compared with its predecessor, the elegant, streamlined impression of the Cayenne, which is 193.6 inches long and 78 inches wide (excluding mirrors), has been noticeably enhanced.

The front of the new Cayenne is synonymous with performance. The pronounced hood with the distinctive ‘power dome’ emphasizes the fenders that lead into the redesigned headlight contour. Three-dimensional light modules are the most distinctive visual characteristic of the standard LED headlights. The lateral trim strips on the central air intake now point outwards, emphasizing the width of the vehicle and highlighting its athletic appearance. Large air intakes for optimum engine cooling are the most visually prominent aspect of the new front fascia. Air blades on the exterior of the air intakes channel the cooling air into the openings.

Side view with athletic proportions

The new Cayenne has lost nothing of its compact appearance, although it is more than two inches longer while retaining the same wheelbase. The side windows are narrower than on the previous model, with a sharper decline towards the rear in keeping with the low roofline. Both elements make the vehicle appear lower to the ground and more streamlined.

Signature Porsche: Wide rear end with integrated light strip

The rear end of the new Cayenne features horizontal lines to emphasize its depth and width. The three-part light strip extending between the taillights alone clearly identifies the new SUV generation as a Porsche from afar. As well as the actual light strip, other high-quality glass-look features include the three dimensional “Porsche” logo – a further nod to the sports car. The new color coordinated roof spoiler features straight lines, and the tear-off edge has a more subtle design than that of the predecessor model.

Lightweight construction and active aerodynamics

In designing the new Cayenne body, Porsche has consistently applied the same lightweight construction principles that it uses in its sports cars. As a result, the new Cayenne body uses a mix of steel and aluminum that combines significant weight advantages with high rigidity. The materials used include micro-alloyed, high-strength steels and multiphase steels that provide highly dynamic torsional rigidity in the body shell. Areas subjected to lower levels of stress use aluminum on a large scale. For instance, the outer shell of the new Cayenne is made of aluminum, including the roof, floorplan assembly, front section, doors, quarter panels, hood and tailgate. Furthermore, recycled plastics are used wherever these materials fully satisfy technical requirements.

In total, the body shell is 297 lbs. lighter than the previous generation Cayenne, although the expanded range of standard equipment partially offsets this reduction. In spite of this, the Cayenne is 120 lbs. lighter than its predecessor is. The innovative lithium-iron polymer starter battery – which weighs 22 lbs. less than comparable traditional lead batteries – makes a further contribution to the weight savings and a longer service life than a traditional lead acid battery.

Active cooling air flaps and air curtain

The new aerodynamics concept also includes active cooling air flaps for all Cayenne models. This technology resolves the conflict between providing the necessary cooling and optimal aerodynamics. The flaps reduce air resistance in the close position and open to satisfy cooling requirements. Active flaps regulate the flow through all cooling air openings, and are controlled independently. Another innovation is the “air curtain,” which allows the air to escape from the wheel arches in front of the wheels in a targeted manner, while also accelerating it. This reduces the air turbulence that normally occurs around the wheels. The lateral air intakes at the front of the car are equipped with air blades, which direct even more of the flow into the air intakes.

The underbody of the new Cayenne is almost completely covered. This design feature improves the airflow under the car, which in turn optimizes the aerodynamic performance. In the Cayenne, the new fixed roof spoiler runs in a straight line, and is almost completely finished in the vehicle color.

Ergonomics and comfort

More space for increased comfort and driving pleasure

As in the Porsche 911, the Cayenne features a rising center console. More than just a design

element, it provides the shortest and most ergonomic path from the steering wheel to the most important vehicle functions. The multifunction steering wheel follows the same principle.

The Cayenne features increased spaciousness and comfort throughout. For example, the seats are finished in leather as standard in all models. This means that the seat centers, seat bolsters and center headrest strips are finished in leather at the front and back. The steering wheel, gear selector, armrests in the doors and the center console are also finished in leather. The ambient lighting creates a pleasant interior atmosphere in the dark. The optional ionizer helps to reduce particles and germs flowing into the cabin through the air vents.

The standard seat in the Cayenne and Cayenne S is the comfort seat, featuring eight-way electric adjustment. The seat offers secure lateral support for sporty drivers and comfort on longer journeys. However, there are two optional upgrades. First, the comfort seat is available with 14-way adjustment for improved comfort and support. Second, it is possible to upgrade further to an 18-way adaptive sport seat with an integrated headrest similar to the front seats in a Panamera.

Generous rear with variable luggage compartment

The rear seat system has a length adjustment range of up to 6.2 inches, and offers ten adjustment positions in two-degree increments from 11 to 29 degrees for the split backrest. The rear seats also feature a cargo position, with the backrest in an almost vertical position to increase the luggage compartment volume by up to 3.5 cubic feet compared to the previous model. If even more space is required, the backrests fold forward asymmetrically to create a flat loading floor. The luggage compartment adjusts to provide a volume of between 27.2 cubic feet and 60.3 cubic feet.

New: Thermally and noise insulated laminated glass

Increased comfort ensuring pleasant driving conditions for all vehicle occupants represents one of the key benefits of the new Cayenne. Each model features heat-insulating glass as standard that reduces heat-up of the passenger compartment. This leads to reduced use of the air conditioning system, which in turn leads to lower noise levels and fewer draughts in the interior of the vehicle.

A new option is the thermally and noise insulated laminated glass. This reflects infrared radiation, thus reducing heat-up of the interior in strong sunshine. The use of a new acoustic film within the laminated glass design also yields a significant improvement in two key areas:

- Almost 100% of harmful UV rays are blocked. This protects the health of the occupants and increases the service life of the interior in regions with particularly strong sun exposure.
- The new laminated glass reduces noise from the outside even more effectively, thus ensuring an even quieter interior. Drive-past noise on wet roads, for example, is almost completely absorbed.

Optional sun blinds

Customers may also specify optional electric sun blinds for the rear side windows so that

passengers can block direct sunlight for added comfort.

Panoramic Roof System creates feeling of enhanced spaciousness

The enhanced Panoramic Roof System is available as an option on the new Cayenne. In comparison with the predecessor model, the glass panels sit farther forward to create an enhanced sense of spaciousness for all passengers. The Panoramic Roof System consists of two glass elements, which together form an area measuring 7.2 square feet. The front panel is a slide/tilt sunroof, while the rear section is a fixed roof. The dark tint of the glass filters out more than 95 percent of harmful UV radiation from the sun. Where necessary, the integrated roll-up sunblind in the same color as the interior can reduce incoming sunlight further.

Infotainment and connectivity

Your personal Cayenne

The new Cayenne represents a major step towards the intelligent vehicle. With Porsche Connect Plus, which is standard equipment on all new Cayenne models, the driver has continuous access to the Internet and a wide range of services.

With the Porsche Advanced Cockpit, the Cayenne offers a new type of interaction between the driver and vehicle. Porsche developed this system for the Panamera and adapted it for the Cayenne. The instrument cluster features the traditional Porsche central tachometer flanked by two seven-inch displays.

New PCM as an intelligent control center

The 12.3-inch PCM display is functionally similar to a tablet. Using predefined tiles, customers can create a home screen with their preferred functions, such as favorite radio stations, navigation destinations, or virtually any other vehicle system. On the right-hand side of the screen, an “info widget” offers access to various PCM functions. For example, this allows the navigation display to appear in the center of the screen while still displaying the call function on the right. It is possible to save up to six profiles. As well as a large number of interior settings, a profile stores preferences for lights, driving programs and assistance systems.

The Cayenne is equipped with a standard 10-speaker, 150 Watt stereo, but customers can also specify two optional upgrades. The first is a BOSE® Surround Sound System with 14 loudspeakers and a separate subwoofer, 14 amplifier channels and a total output of 710 Watts. The top-of-the-range system is the latest version of the Burmester® 3D High-End Surround Sound System, featuring the new Auro 3D® format, which creates a realistic concert hall atmosphere within the car. The system includes

21 loudspeakers with a two-way center system, an active 400 Watt subwoofer and a total output of 1,455 Watts.

New apps and new services from Connect Plus

With the standard Porsche Connect Plus infotainment package, drivers can now access Amazon Music, Smart Home functions provided by Nest, and Radio Plus, an intelligent combination of traditional radio reception and online radio, all through Porsche Communication Management (PCM). The new Cayenne connected through an integrated, LTE-compatible SIM card. This function is also included as standard. Porsche has also developed a simplified smartphone app for the key Connected Car functions.

Nest Smart Home device users can also see information about their homes with the vehicle. The service transmits data from smoke detectors and images from installed cameras via the Internet. It also enables control of the temperature in the house directly from the vehicle.

Radio Plus is another innovation. This service extends the range of your personal favorite station through an integrated Internet radio function so that it is practically unlimited, provided the chosen station offers an online radio channel.

Once the Cayenne leaves the range for terrestrial radio reception via FM or digital radio, the system automatically switches to online streaming. This improves the reception quality in areas with poor radio coverage.

Online navigation

Online navigation with real-time traffic information makes navigating to your chosen destination very easy. The simplified search for navigation destinations uses the central finder, which is accessible via the magnifying glass icon in the header of the PCM. This enables destination searches using simple terms.

Simultaneous processing of on-board and online information serves to optimize route calculation, which relies on both online and on-board data. Destinations are easy to create before a journey within PCM and using the Porsche Connect App on a smartphone or outside of the vehicle via the “My Porsche” online platform.

New: Five programmed modes for on- and off-road

The various off-road settings are no longer selected via individual buttons in the center console as they were on the previous generation, but instead via a specific menu on the screen. In this menu, the five newly defined off-road modes are displayed in 3D. Depending on the selections made, the control system optimally conditions the engine idling, the gear shifting, the PTM all-wheel drive system, torque distribution to the rear axle, and the PSM stabilization program to suit the application. If the relevant equipment is fitted, the modes also adjust the air suspension including ground clearance, the PASM damper system, PDCC rolling-motion compensation and the rear axle steering to suit the off-road profile.

The car is configured for road use as standard. If the driver enters easy off-road terrain, such as a gravel track or a wet grass field, he can select the “Gravel” mode. For muddy forest tracks or deeply rutted roads, the driver can use the “Mud” setting. There are also modes for sand and a “Rock” option for the especially rugged terrain. When combined with the optional Off-road

Package, the menu offers additional displays for the steering angle, transverse gradient and longitudinal incline, which help drivers to get the best out of the vehicle when driving off-road. If the vehicle is equipped with Surround View, a Top View function is also available that shows the vehicle within its surroundings.

Assistance systems

Comprehensive systems increase comfort and safety

Park Assist with reversing camera and Surround View

The standard front and rear Park Assist provides visual and acoustic information to the driver when maneuvering and parking. The system uses ultrasonic sensors fitted to the front and rear of the vehicle and a backup camera. Using four individual cameras, the Park Assist system with Surround View calculates a 360° view, which helps with parking and maneuvering. The resolution of the camera image displayed on the PCM screen has now almost doubled, making the picture significantly sharper.

Adaptive cruise control with stop-and-go function

The Cayenne is equipped with a cruise control system as standard. The system is available between 19 and 149 mph. Optional adaptive cruise control increases the range of functions considerably. Using a radar sensor positioned in the middle of the central air intake and the vehicle cameras, the system monitors the distance to vehicles in front and adjusts the distance automatically.

Thanks to the stop-and-go function, the vehicle is able to resume motion automatically even after braking to a standstill. If the car stops for longer than three seconds, a nudge to the accelerator pedal or a restart via the control stalk is necessary to resume driving.

The stopping distance reduction system provides an initial visual warning, followed by an acoustic warning if the vehicle approaches the car in front too quickly. In a further stage, the system jolts the brakes briefly. If necessary, braking initiated by the driver will be increased to full braking. If the driver does not react, the system automatically initiates emergency braking. In this case, the side windows and panoramic roof system close automatically. The seat-belt tensioners for the driver and passengers are also activated. At the same time, the system activates the hazard warning lights to warn vehicles approaching from behind.

InnoDrive as an electronic co-pilot

The new Porsche InnoDrive with adaptive cruise control is also available. Using the navigation data, it calculates the optimum acceleration and deceleration values for the next 1.8 miles and activates them via the engine and the Tiptronic S as well as the brake system. In doing so, the electronic co-pilot takes corners, gradients and maximum speeds into account. It detects the current traffic situation using a radar and video sensors and adjusts the control process accordingly.

The system even recognizes roundabouts and adjusts the vehicle speed to match the

circumstances ahead. When Sport mode is activated, InnoDrive switches to a more dynamic map. Using the integrated adaptive cruise control system, the radar and video sensors also monitor the distance to the traffic ahead, and permanently adjust this distance accordingly.

Anticipatory pedestrian protection

For the first time, the Cayenne is now equipped with an anticipatory pedestrian protection system as standard. The system issues a visual and audible warning if a pedestrian or cyclist is located in the collision area. To enable this, the technology evaluates signals from the front camera. If the vehicle is moving towards a person too quickly, the brakes are applied. If the driver then also brakes, the vehicle comes to a complete stop. If the driver does not react, the system automatically initiates emergency braking.

Lane Keep Assist (LKA) including traffic sign recognition

Lane-changing maneuvers in fast-moving traffic are one of the most frequent risks in day-to-day driving. The optional Lane Keep Assist (LKA) system monitors the car's position using a camera, and responds by providing steering support if the driver leaves the lane without indicating. In addition to steering assistance, users can activate an additional audible and visual warning in the instrument cluster using the PCM. The system is active at or above 41 mph.

The Lane Keep Assist (LKA) system is combined with traffic sign recognition technology. Traffic sign recognition uses the same camera and detects normal speed limits, temporary speed displays, overtaking restrictions and indirect instructions, such as place-name signs. The traffic sign recognition technology is situation-dependent, and also uses other vehicle systems. If the rain sensor detects wet conditions, for example, the speed limit display system will take this into consideration and show weather-related speed limit indicators.

Lane Change Assist with Rear Turn Assist

The latest, enhanced version of the Lane Change Assist system can also be used as a complement to Lane Keep Assist (LKA). The system uses a radar sensor to detect the distance and speed of traffic behind the car in adjacent lanes. If the speed and distance to the driver's vehicle are deemed a risk for changing lanes, a warning is shown in either the left or right exterior mirror. The system detects vehicles at a distance of up to 229 feet, and is active after 19 mph. A further feature of the new Cayenne is Rear Turn Assist. After approaching an intersection, the Rear Turn Assist system displays an optical warning for objects nearing the vehicle in its blind spot. When pulling out with one of the indicators active, the driver is assisted by the Rear Turn Assist until reaching the activation speed of the Lane Change Assist.

Night Vision Assist with thermal imaging camera

Night Vision Assist uses an intelligent thermal imaging camera to detect people and animals when driving in the dark, and flags up their presence and position to the driver. The system operates at distances of up to 984 feet. The electronics are able to classify the relevant thermal source and to distinguish an animal from a parked motorcycle with a warm engine, for example. Night Vision Assist is deactivated in built-up areas to avoid possible false warnings such as dogs on a leash on the pavement.

New LED light system with adaptive matrix headlights

Porsche has equipped the new Cayenne with cutting-edge light technology. The latest LED technology is used in the headlights and the rear lights in all models. LED main headlights are standard equipment in the Cayenne while the Porsche Dynamic Light System (PDLS) is optionally available. LED-Matrix Design main headlights with the Porsche Dynamic Light System Plus are the new top-of-the-range option.

Pricing**Starting MSRP and availability**

The 2019 Porsche Cayenne carries a starting MSRP of \$65,700 excluding \$1,050 for delivery, processing and handling and is available as of fall, 2018.