



PORSCHE



The new Macan

Press Kit

Contents

Highlights	3
Summary	
Full connectivity, new design and even more equipment for the successful model	4
Engine and performance	
Agility and efficiency	6
Chassis and chassis systems	
New setup improves driving dynamics	9
Design and equipment	
Unique appearance with sports car DNA	11
Assistance and comfort systems	
Greater assistance for the driver	17

Highlights

The sports car in its segment.

The new Macan underlines its outstanding position as the sports car in its segment with new powerful and efficient powertrains.

Porsche design DNA.

Distinctive exterior features such as the new LED tail light panel ensure that the Macan is ready for the future in the style of the Porsche design DNA.

Full connectivity.

The Macan offers comprehensive connectivity and new digital functions thanks to its new Porsche Communication Management system with 10.9-inch touchscreen.

Greater assistance and comfort.

Porsche has extended its range of comfort and assistance systems in the Macan with new options such as Traffic Jam Assist, ioniser, heated windscreen and GT sports steering wheel.

High-quality appearance.

With new premium colours and perfectly finished materials, the new Macan also incorporates a high quality standard and stands for value stability.

Summary

Full connectivity, new design and even more equipment for the successful model

Porsche has comprehensively upgraded the Macan in terms of design, comfort, connectivity and driving dynamics. The Macan therefore remains the sporty role model in its segment. In keeping with the Porsche design DNA, the compact SUV features a three-dimensional LED light panel on the rear of the vehicle. LED technology is also standard for the headlights in future. The most eye-catching new features in the interior are the 10.9-inch touchscreen of the new Porsche Communication Management (PCM), the newly arranged and designed air vents and the optional GT sports steering wheel familiar from the 911. The PCM provides access to new digital functions such as intelligent voice control and the standard online navigation. The range of comfort equipment is extended by Traffic Jam Assist, an ioniser and a heated windscreen, among other things.

Two engine versions will be available at the market launch: The Macan comes to the starting line with an enhanced 2.0-litre turbocharged four-cylinder engine. This unit produces 180 kW (245 hp) and delivers a maximum torque of 370 Nm. The Macan S is powered by a new V6 engine with 3.0-litre displacement and twin-scroll turbocharger in central turbo layout. The engine has a power output of 260 kW (354 hp) and a torque of 480 Nm. The seven-speed dual-clutch transmission (PDK) and the PTM all-wheel drive are perfectly matched to the new engines. Both Macan models are equipped with a gasoline particulate filter and meet the requirements of the emission standard Euro 6d-Temp.

The driving dynamics of the Macan remains its core feature. The revamped chassis increases driving pleasure by ensuring a more neutral response while at the same time offering unchanged stability and improved comfort. The new Macan again features mixed tyres, which is not typical for the vehicle segment. Like with the Porsche sports cars, it is possible to optimally exploit the driving dynamics advantages of the intelligent PTM all-wheel drive. Newly developed tyres with improved performance characteristics also permit improved lateral dynamics.

With the new Porsche Communication Management (PCM), the Macan opens up all the possibilities of the digital Porsche world. The full-HD touchscreen has increased in size from 7.2 to 10.9 inches. As in the Panamera and Cayenne, the user interface can be adapted to suit personal requirements with predefined tiles. With full connectivity as standard, the new system offers improved online navigation and Porsche Connect Plus. The connection to the navigation-related "Here Cloud" plays an important part here. This provides the driver with up-to-date online data at all times for fast route calculation. Other services and functions include web radio with automatic switching between FM/DAB/online sources, the intelligent Voice Pilot voice control system and also remote functions such as security and emergency services. The Porsche Connect app and Porsche Car Connect app enable the driver to communicate with the Macan via their smartphone. The Offroad Precision app can be used to make the off-road experience in the Macan even more emotionally charged and to document trips.

An expanded range of options with enhanced assistance systems is available for new Macan. The optional GT sports steering wheel creates a link to the Porsche 911. A mode switch integrated into the steering wheel – including Sport Response button – is part of the optional Sport Chrono Package that can be fitted in the Macan. The new Traffic Jam Assist uses adaptive cruise control to allow more relaxed driving at speeds of up to 65 km/h. The new system keeps the Macan in lane by targeted steering interventions.

Engine and performance

Agility and efficiency

The new Macan has completely revamped drive systems. Porsche now equips the Macan S with a newly developed 6-cylinder V engine. The turbocharged engine with a displacement of three litres delivers 260 kW (354 hp) and develops a maximum torque of 480 Nm. This corresponds to an increase of 10 kW (14 hp) compared with the previous model. As a result, the acceleration time from standstill to 100 km/h is reduced by 0.1 second to 5.1 seconds with the Sport Chrono Package, the top speed is reached at 254 km/h.

There is a further developed four-cylinder turbocharged engine with a displacement of two litres under the bonnet of the Macan. This delivers 180 kW (245 hp) and has a maximum torque of 370 Nm. The Macan accelerates from zero to 100 km/h in 6.7 seconds and reaches a top speed of 225 km/h. The new petrol engines are equipped with a gasoline particulate filter in Europe and comply with the emission standard Euro 6d-Temp.

New V6 engine with central turbo layout

The six-cylinder engine of the Macan S is a high-tech power unit. Used for the first time in the Panamera, the engine has been introduced for the Cayenne and now also for the Macan. The most conspicuous feature is the mono turbocharger located in the inner V in the so-called central turbo layout. The short exhaust gas paths between the combustion chambers and the turbocharger ensure outstanding and immediate responsiveness, which perfectly complements a dynamic driving style.

The new twin-scroll turbocharger provides high torque in the low engine speed range. At the same time, it contributes to enhanced responsiveness. With twin-scroll technology, the exhaust gas flows are continuously fed to the turbine wheel as separate streams. This significantly reduces any charge cycle disadvantages. The further-developed combustion chamber geometry with central injector facilitates efficient mixture preparation. In addition to the increase in the power output per litre from 113 to 118 hp, the exhaust emissions have also been improved. Up to three injections per working cycle optimise combustion and thus reduce the noxious constituents in the exhaust gas.

Both cylinder heads of the V engine have integrated exhaust manifolds. In addition to the reduction in weight and the number of components, this design has the advantage that the exhaust manifold can be integrated into the cooling circuit. This increases the efficiency at high loads, and the fuel consumption decreases.

Optimised inline four-cylinder engine

The inline four-cylinder engine of the Macan is designed as an especially sporty and efficient power unit – with a boost pressure of one bar, charge air cooling, direct petrol injection and variable valve timing. VarioCam Plus continuously adjusts the intake and exhaust camshafts and additionally controls the exhaust valve lift. Thanks to the enhanced combustion chamber geometry, the Macan complies with all globally valid emission limits. In Europe, the combination with a particulate filter results in a slight reduction in the nominal power output from 185 kW (252 hp) to 180 kW (245 hp). The exhaust tract of the four-cylinder engine is equipped with one gasoline particulate filter (GPF), while two filters are used on the six-cylinder engine. The exhaust gas is routed into alternately closed channels downstream of the catalytic converter and flows through the particulate filter walls. The filter is regenerated by active and passive measures and is designed to be maintenance-free for the service life of the vehicle. The thermal management of the engines has been optimised once more by demand-based coolant pump control. This means that the engine and catalytic converters reach their optimum operating temperature more quickly.

Spontaneous power development is one of the main characteristics of the Macan. The Porsche dual-clutch transmission (PDK) was adapted so that the potential of the new engines can be fully exploited. In Sport mode, the transmission is now even more responsive and allows very fast gear changes. In Normal mode, the PDK shifts rapidly and comfortably to higher gears. This saves fuel and increases comfort when driving long distances. In combination with the adaptive cruise control (ACC), the modified PDK now also offers coasting mode, which additionally reduces fuel consumption under real driving conditions. The optimised Auto Start Stop function also makes a further contribution to increased efficiency. This function now already switches off the engine when coasting to a stop at a traffic light. The Auto Start Stop function is automatically deactivated in Sport and Sport Plus driving modes.

New: Sport Chrono Package with mode switch

The Sport Chrono Package is now also operated in the Macan by means of the mode switch integrated in the steering wheel. In addition to the Normal, Sport and Sport Plus driving modes, it is also possible to select an Individual mode. The driver can store an individual setup here and can activate it directly with the mode switch. The Sport Response button in the middle of the mode switch allows the driver to boost the responsiveness of the Macan for 20 seconds at the push of a button so that the maximum performance is immediately available. The sports car among compact SUVs then reacts to accelerator pedal commands much more spontaneously and achieves optimum acceleration values more quickly. The Sport Response function can be activated any number of times.

In combination with the optional Sport Chrono Package, the Porsche Stability Management (PSM) additionally offers the separately selectable mode PSM Sport. With this especially sport setup, ambitious drivers can get even closer to the limit range of the Macan. The PSM always remains active in the background. PSM Sport mode can be activated independently of the currently selected driving mode.

Chassis and chassis systems

New setup improves driving dynamics

The Macan is the sporty role model in the compact SUV segment. It owes this position above all to a chassis that is typical for sports cars. This provides unique lateral dynamics without neglecting everyday comfort. The chassis engineers examined every chassis component for further optimisation potential for the facelift. With detailed improvements and a completely new setup, the Macan again raises the bar for sporty driving.

On the front axle, spring forks made of aluminium replace the previous steel components. The spring forks are spread over the drive shafts and connect the springs and dampers with the front-axle carrier. The new light alloy design is more rigid and reduces the unsprung masses by around 1.5 kilograms. As a result, the Macan steers even more precisely and the suspension is even more comfortable. The spring characteristics of the optional air suspension have also been improved thanks to optimised rolling pistons and new shock absorber hydraulics.

Newly tuned anti-roll bars are based on the improved spring characteristics. The directional control is now designed for more neutral handling – and the Macan feels more like a sports car than ever before. The further-developed chassis concept also includes 19- and 21-inch wheels with a rim width reduced by half an inch on the front axle. This means that the tyres are guided more precisely and turn-in ability is improved. All tyres are from a new generation that is specially tailored to the driving characteristics of the Macan. The wheel diameters range from 18 inches to 21 inches. The mixed tyre sizes are between 235/60 R 18 and 265/40 R 21 on the front axle and between 255/55 R 18 and 295/35 R 21 on the rear axle.

As before, the active damper control system PASM, height-adjustable air suspension and Porsche Torque Vectoring Plus (PTV Plus) are optionally available.

Enhanced brakes with more precise pressure point

A lot of detailed work has also gone into the brakes of the new Macan. The driver notices this above all through the changed pedal feeling. The driver presses a so-called organic sheet pedal made of moulded, glass fibre-reinforced thermoplastic sheet material with back-injected plastic rib structure. This pedal weighs around 300 g less than the previous steel part and acts on the brake master cylinder via a shortened lever arm. As a result, the brake response is more immediate and the driver also feels a very precise pressure point through the very rigid connection. Sporty drivers in particular will value this optimised feedback. The even sportier orientation of the new Macan is reflected in the larger front brake discs on the S model. The disc diameter has been increased by 10 mm to 360 mm, and the disc thickness has grown by 2 mm to 36 mm. All new brake linings are copper-free. The Macan S can be optionally equipped with the PCCB ceramic brake system.

The new engine mount with a so-called driving dynamics support ensures an even better connection between the engine and chassis. Engine roll on the engine mounts is thus suppressed more effectively under load. This also influences handling when cornering. The turn-in behaviour is more direct and agile. If the driver accelerates when driving out of the bend, the movement of the engine has a significantly reduced effect on handling. The tracking of the Macan is improved as a result, and the cornering forces of the outer tyres can be used in a more controlled manner.

Design and equipment

Unique appearance with sports car DNA

The Macan combines pronounced sports car genes with all-round characteristics. This combination is typical for Porsche and has been further extended with the facelift, providing the basis for the further-developed design language. The leaner design provides the new Macan with an even more distinctive and confident appearance. The DNA of the sports car icon 911 and the technology pioneer 918 is reflected in numerous details. The sports car characteristics are underlined by greater emphasis of the horizontal lines at the front and rear. In the interior, the new 10.9-inch touchscreen display of the Porsche Communication Management (PCM) with full-HD resolution catches the eye. This is harmoniously integrated in the dashboard and signals the significant enhancement of the interior.

A clearer view: LED headlights as standard

The front end of the Macan has been comprehensively revamped. The wraparound bonnet remains a characteristic feature, providing the compact SUV with its flowing silhouette. The headlights have also been completely redesigned and are now always realised using LED technology. In daylight, the sculptural interior of the headlights in the three-dimensional light modules catches the eye. This is a visual expression of the future-oriented lighting technology in the Macan. The LED headlights comprise a central 25 W LED module for main and dipped beam which is supported by four additional modules. The four LED units arranged in a square around the central module form the four-point daytime running lights typical for Porsche. They also support the central LED unit in optimum illumination of the road directly in front of the vehicle. There is an LED unit located under the central element that improves illumination of the road when main beam is switched on. The lighting system can be further optimised in two option levels: The LED headlights with the Porsche Dynamic Light System (PDLS) have an output of 35 W, additionally feature cornering light and automatically switch between main and dipped beam. PDLS Plus additionally dynamically adapts the main beam range and includes a junction light function.

The front end of the new Macan appears wider due to the more vertical lines of the side air intakes. This effect is supported by omission of the fog lights. The fog light function is now performed by the LED light technology of the headlights. The newly designed front lights also contribute to the wider look. They have moved from the edge of the air intake to the cooling air opening and seem to almost float there. The parking sensors in the lower front area are now discretely integrated into the aerodynamically optimised airblades.

The Macan also offers new views from the side: newly designed up to 21-inch alloy wheels are optionally available here. In addition, the side blades can now also be ordered in Brilliant Silver and High-Gloss Black.

LED tail light panel in the style of the brand identity

The comprehensively revamped rear end is based on the clear design of the predecessor model. A characteristic Porsche design feature has been added with the three-part, three-dimensional LED light panel. This connects the two tail light clusters with each other. The three-dimensional "PORSCHE" logo is positioned on the light panel. The newly designed tail light contour in the tailgate graphically lengthens the vehicle, breaks the height and emphasises the width. The visual centre of gravity is lower, a further style indication of the enhanced driving dynamics. The brake lights with their four-point design also reflect the brand identity. The tailpipes of the exhaust system are harmoniously integrated in the rear apron and round off the rear end dynamically in downward direction.

High-quality interior with new PCM and feeling of greater width

Sports car ergonomics, digitalisation and comfort form a perfect combination in the enhanced interior of the Macan. The optional GT sports steering wheel with a diameter of 360 millimetres and leather or Alcantara® covering has been adopted from the 911, for example. The DNA of the 918 Spyder can also be found in the new Macan: the mode switch with Sport Response button of the optional Sport Chrono Package was originally used in this super sports car.

Located above the elevated centre console typical for Porsche, the new 10.9-inch full-HD touchscreen display of the Porsche Communication Management blends in harmoniously. It has been possible to reduce the number of buttons in the display area thanks to the new interface. The air vents have been upgraded with metal trim elements and are now integrated horizontally in the centre console under the new PCM. This makes the dashboard appear wider and flatter.

The new Macan already offers especially high-quality equipment as standard: the seat surfaces are covered with Alcantara® and the seat bolsters with high-quality leatherette, for example. The steering wheel, selector lever and armrests are finished in leather. Additional full-leather interiors in various colours are also optionally available. Further personalisation of the leather interiors is possible through the Porsche Exclusive Manufaktur.

Every Macan leaves the factory equipped with a particle/pollen filter with anti-allergen coating. The optional ioniser also improves the air quality in the air flow. For this, the air for the climate control system is routed through an ioniser before it flows into the vehicle interior. This reduces the number of germs and other pollutants contained in the air. The air quality in the passenger compartment is improved, benefiting the well-being of the vehicle occupants. The ioniser is controlled by a separate button on the centre console.

New PCM with larger touchscreen and Porsche Connect Plus

The new Macan is fully interconnected as standard: the enhanced Porsche Communication Management (PCM) offers permanent access to internet-based functions and services via the touchscreen, which has been increased in size from 7.2 to 10.9 inches. For this purpose, Porsche has equipped all new Macan models with the Connect Plus module. The driver can use the online navigation function as standard. Like on the Panamera and Cayenne, the home screen can be personalised easily and quickly with predefined tiles. The standard LTE communication module ensures optimum voice quality and data transmission. Customers can also optionally use their own SIM card for data transmission with the integrated card reader.

The further-developed online navigation function with real-time traffic information is now even simpler, faster and more comprehensive. The basis for the simple search for navigation destinations is the central "finder" – represented by a magnifying glass in the header bar of the monitor. This allows the user to search for destinations with simple terms. The finder also offers a host of additional information such as fuel prices, car parks with free spaces including prices and opening hours, or also user ratings for hotels and restaurants.

Voice input of navigation destinations is also just as simple thanks to the new Voice Pilot. Thanks to online voice recognition, voice inputs are now much more intuitive than before. For example, a navigation destination can be entered without stating address details.

In addition, the Voice Pilot does not just permit control of navigation functions. The system also understands commands for controlling music and vehicle functions. Thanks to the online connection of the system, the voice recognition function is always up-to-date.

Navigation calculation has also been optimised. This is achieved by simultaneous processing of inputs both on-board and online. Route calculation for navigation therefore takes place at the same time both online and in the PCM. The PCM decides independently which navigation function has calculated the best route, but always starts with the result that has been calculated first. The driver can also save routes that have been driven more than three times in the PCM with the "Smart routing" function. The PCM therefore learns possible destinations of the driver and can optimise route calculation. Destinations can also be conveniently created before a journey not just in the PCM but also on a smartphone using the Porsche Connect app or on the "My Porsche" platform. The destinations are synchronised by identification with the Porsche ID in the vehicle, app and "My Porsche" web portal.

The navigation system processes so-called swarm data with the new Risk Radar service. This is anonymously recorded and transmitted data from correspondingly equipped vehicles on the traffic and road situation. On the basis of information from the vehicle sensors, this data can provide warnings about fog, slippery roads and accidents, for example. In this way, the new Macan can help to minimise dangers and prevent accidents.

One for all: Porsche Connect app for Apple and Android smartphones

The newly designed Porsche Connect app now provides the driver with even simpler and more comprehensive access to vehicle and Connect functions by smartphone. The app is divided into the three main areas "Navigation", "My Vehicle" for vehicle-specific functions and "Me" for user-specific services and settings such as linking of the Connect app with an Amazon Music account. In the "My Vehicle" area, the driver can see whether doors, tailgate and windows are closed in a vehicle view, and can also unlock or lock the vehicle if desired. Information on the range, oil level and vehicle maintenance can also be accessed. The monitoring and security functions can also be controlled.

Users of Smart Home devices from Nest can receive information about their home in the vehicle at any time. The service provides online data of networked smoke alarms and pictures from installed cameras, for example, or permits the temperature at home to be controlled from the vehicle.

The Macan can also now be optionally equipped with a smartphone tray. Here, it is not necessary to plug in a cable in order to establish a direction connection between the phone and the external antenna of the vehicle. A connection with the vehicle's external antenna is established as soon as the Bluetooth®-paired smartphone is placed in the centre console tray. This reduces the battery consumption of the smartphone and optimises reception quality.

Offroad Precision app for more fun off-road

With the Offroad Precision app, Porsche gives Macan drivers the chance to document, analyse and improve off-road journeys. The "Trip" area functions in the same way as popular running apps for mobile phones. All relevant data is automatically stored when recording is activated: driver, vehicle, route, times, GPS data. Route and elevation profiles are automatically calculated from this, which can then be viewed on a map later on. At the same time, the journey can be recorded as a video either using a smartphone or an externally controlled action cam. The trips can be shared in social media using the "Sharing" function. In the "Personal progress" app mode, the individual driver performance is rewarded with a bonus system. In a tutorial, the app additionally provides new off-road drivers with

detailed basic knowledge on how to drive a Macan off-road. The tutorial also contains an overview of off-road parks. Here, drivers can acquire initial experience in off-road driving in a safe environment. The Offroad Precision app is available for iOS and Android.

Assistance and comfort systems

Greater assistance for the driver

Porsche has again extended its range of assistance systems for the Macan. More powerful sensors as well as data and image processing allow realisation of new functions. For example, the adaptive cruise control system has been developed into a Traffic Jam Assist function.

Using the radar sensor located in the middle of the central air intake, the adaptive cruise control system monitors the distance from vehicles driving in front and automatically adapts this. Vehicles that cut in from adjacent lanes are also detected. If necessary, the system will brake to a standstill when following a vehicle in front. Thanks to the stop-and-go function, the vehicle is able to independently move off again after braking to a standstill. If the vehicle is stopped for longer than three seconds, it is sufficient to briefly press the accelerator or resume the function with the control stalk in order to let the vehicle move off again.

Traffic Jam Assist provides assistance in queues

The additional Traffic Jam Assist function extends the stop-and-go function by steering assistance. Using the optimised radar and video sensor systems, the system detects lane markings and vehicles driving ahead in the same lane or adjacent lane in a speed range from zero to 65 km/h. When the system is active, the vehicle can be kept in lane by targeted steering interventions. When in a traffic jam or slow-moving traffic, this leads to a considerable reduction in the strain on the driver and significantly increased comfort. The reduced stopping distance function is part of the adaptive cruise control system and thus also of Traffic Jam Assist. This function provides multi-level warnings and braking interventions in there is a risk of collision with pedestrians or vehicles. Other assistance systems for lane keeping and lane changes as well as speed limit display are also still optionally available.

ParkAssist with reversing camera and Surround View

Porsche supports the driver of the new Macan in everyday traffic with a three-stage system of parking assistance functions. The optional ParkAssist at front and rear informs the driver with visual and acoustic warnings when manoeuvring and parking. This function uses ultrasonic sensors located at

the front and rear of the vehicle. ParkAssist can also be optionally supplemented with a reversing camera. This supports manoeuvring by displaying a colour camera image with dynamic guide lines and distances from potential obstacles on the screen of the PCM. ParkAssist with Surround View calculates a birds-eye view from four individual cameras that helps when parking and manoeuvring. The display on the PCM screen now has a much higher resolution.

New comfort options: heated windscreen and heat-insulating glass

Glass options are available in different levels so that the comfort of the Macan can be personalised to meet individual needs. A heated windscreen is optionally available for the compact SUV for the first time. For this, a special film is integrated in the windscreen that does not need any heating wires.

The Macan can also be optionally equipped with enhanced thermally and noise insulated laminated glass. A new acoustic film in the laminated glass design provides improvements in three key areas: almost 100% of harmful UV rays are completely blocked, noise from the outside is reduced even more effectively, and the protection against breaking into the vehicle is increased.

The thermally and noise insulated glass is optionally available in combination with privacy glass. With this equipment option, which is also available separately, all windows behind the B-pillar are heavily tinted. This tinting reduces visible light to below 20 percent for the rear side windows (below 30 percent in combination with the thermally and noise insulated glass) and below 30 percent for the rear window. To further increase privacy, the privacy glass can be supplemented with the optional sun blinds for the rear side windows.