Oktober 2024

The new Audi A5 family

The equipment, data and prices specified in this document refer to the model range offered in Germany. Subject to change without notice; errors and omissions excepted.

All terms marked in blue in the text are explained in detail in the technology lexicon at https://www.audi-mediacenter.com/en/audi-technology-lexicon for a detailed explanation.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Top-level information

The new Audi A5 models: modern sportiness meets premium proportions

Ingolstadt/Neckarsulm, October 23, 2024 – Audi is opening the next chapter in its successful history in the mid-size segment with the new A5 family. Thirty years after the first Audi A4, the sharpened design language of the latest generation, now called the Audi A5, impresses with its premium proportions. Both body styles, Sedan and Avant, perfectly embody the sporty essence of the Audi design philosophy. A new design language in the interior creates a generous feeling of space, placing the displays on a digital stage. A new operating concept increases interaction with the vehicle. Efficient, partially electrified combustion engines and evocative S models round off the range.

As the latest generation debuts, the Audi A4, a long-standing bestseller, has been renamed the Audi A5 and will be produced in Neckarsulm. It is available in four new variants: the A5 Sedan* and S5 Sedan*, and the A5 Avant* and S5 Avant*. These variants are the first models launched on the Premium Platform Combustion (PPC).

Audi CEO Gernot Döllner on the new model family: "In addition to expanding our all-electric portfolio, we are launching a new generation of models with efficient combustion engines. The Audi A5 family, with its sporty design, completely new interior, and future-proof electronic architecture, will be the first. The advanced MHEV plus technology enables partially electric and thus even more efficient driving."

The Sedan and Avant models have the same vehicle length, measuring 4,829 mm. This places them firmly within the upper mid-size segments. Compared to their predecessors, the new models have increased in length by 67 mm.

The long wheelbase of 2,900 millimeters with short overhangs reflects the premium proportions. It contributes to ride quality during long distances and the generous interior space. At the same time, Audi is improving key attributes of the new A5. Many of our customers' favorite features now come as standard, such as navigation, an electrically opening and closing trunk lid, and a phone tray with inductive charging.

Optional extras allow the vehicle to be tailored to individual preferences. These include, for example, a 10.9-inch passenger display, a Bang & Olufsen Premium Sound System with 3D sound and headrest speakers, a panoramic glass roof that spans almost the entire passenger compartment and features segmented switchable transparency, and an electric steering column adjustment with memory function. Customers can also purchase special equipment bundled in packages that build on each other.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Dynamic exterior design

At first glance, the entirely redesigned A5 family has a powerful and clean design. The modified proportions with a long wheelbase, large wheels, and flat, sporty body embody progressive dynamism and premium standards. This is particularly evident in the side view; the length of the stretched hood gives the car a prestigious appearance. The power of the optional quattro drivetrain, distributed to both axles, is visually manifested in the powerfully modeled, three-dimensionally flared blisters, which flow smoothly into the body of the new A5.

In the Sedan, the sporty, compact greenhouse (the roof structure) tapers toward the rear in a sweeping curve, flowing seamlessly into the flat rear window like a coupé and ending at the visually short trunk with a striking spoiler lip. The tailgate is a convincing symbiosis of design and functionality, new to this vehicle segment. It opens with the rear window, and its size makes access to the luggage compartment considerably easier. This results in a completely new Sedan concept for Audi.

In the Avant, the dynamically taut roofline transitions into a form-fitting integrated roof spoiler that spans the sporty, shallow rear window. The correspondingly raked D-pillars, which sit firmly on the massive rear quattro blisters, emphasize the dynamic side view of the A5 Avant*.

The front is dominated by the wide and significantly flatter Singleframe with a three-dimensional honeycomb structure – the S5* has larger honeycombs and L-shaped inserts. Together with the slim and precisely drawn headlights, it shapes the face of the vehicle, giving it a striking and focused expression. The strong rake of the front section creates the appearance of very short overhangs. Three-dimensionally modeled air curtains arranged under the headlights give the bumper a powerful and sporty appearance. With the S line exterior package and on the S5*, they are accentuated further by a wide intake duct in a contrasting color.

Distinctive grooves in the hood, termed “Spooncuts”, emphasize the sporty character. The hood is flush with the front end, thanks to the “Softnose” integrated into the bumper. This allows a greater distance between the hood and the Singleframe and, therefore, a visually lower, more dynamic face.

The sculptural geometry in the transition to the light strip under the rear window visually emphasizes the width of the new Audi A5 with light and shadow effects. This gives the new Audi A5 Avant* a decidedly more dynamic character.

On both body styles, the shape of the side windows reinforces the sporty, elongated appearance of the silhouette. The pronounced blisters above the front and rear wheels are reminiscent of the Audi Ur-quattro and are a core element of the Audi design DNA. "Making technology visible" is a central design principle of the brand with four rings.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The new flush-mounted door handles, which enable the doors to be unlocked electrically via an inductive sensor, fit logically into the clear design. The exterior mirrors are positioned on the door waist rail like a sportscar. In addition to aerodynamic advantages, they complete the overall dynamic impression of the new Audi A5 when viewed side-on. The sill area has a distinctly sporty design – a contour under the doors adds visual lightness and agility. A contrasting sill trim enhances the sportiness of the exterior S line and the S model.

The striking, unmistakably styled rear combines sporty, evocative design and intelligent technology. The combination of the sculptural geometry with the continuous, three-dimensionally offset light strip gives the rear of the new Audi A5 a presence and visual dynamism. On the S5 sedan*, an added spoiler lip provides additional downforce. Further highlights are the clear, modern design of the bumper with a dark diffuser – even sportier on the exterior S line – and the high-quality, rectangular exhaust tips. On the TFSI, the exhaust tips are integrated into the diffuser on both sides; on the TDI variants, they appear as a rectangular twin tailpipe on the left-hand side. The S model has the iconic round twin tailpipes on the right and left in a new, sharpened design.

Three versions and eleven colors

The range comes in three exterior versions: Exterior basic, Exterior advanced, and Exterior S line. The S model also has its own exterior. The front air intakes are larger on the exterior S line and S model, and the rear diffuser is significantly sportier. The sill trims for the exterior S line and the S model contribute to the dynamic character. The trim around the side windows is finished in anodized aluminum as standard. The exterior S line stands out with details in anodized matt anthracite aluminum, while the S model features design elements in anodized matt silver aluminum.

The black exterior package is also available for the exterior S line and the S model. Here, the Audi rings at the front and rear are finished in anthracite gray. The radiator grille and grille inserts, side sill trims, door handles, the Singleframe and the diffuser attachment at the rear, window trims, and mirror housings are black, as are the aluminum trim strips around the side windows. The tailpipes also feature blacked-out exhaust tips.

Customers can choose from eleven colors, including Arkona White solid finish. Glacier White, Mythos Black, Chronos Gray, and the latest colors – Grenadine Red and Horizon Blue, are available as metallic paint finishes. Firmament blue, Floret silver, and Daytona Gray pearl effect, which is exclusive to S models and vehicles with the exterior S line, complete the range.

In addition, Audi Sport offers Ascari blue metallic for the exterior S line and S model. The new magnetic gray is reserved exclusively for "edition one", the exterior S line, and the S model. "Edition one" is a two-year limited edition sporty version of the Sedan and Avant, with exclusive design elements such as trim pieces in matt magnesium gray chrome.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Three equipment packages with tech options

Depending on customers' requirements, they can order the new Audi A5 models with various equipment packages that bundle a wide range of optional extras. The "Tech", "Tech plus" and "Tech pro" packages build on each other: The most comprehensive package, "Tech pro", includes exclusive options and all the optional extras from the other packages.

Highlights of the packages include:

- Tech: full LED headlights, 3-zone automatic air conditioning, Audi MMI plus,
- Tech plus: Matrix LED headlights, front passenger display, comfort package plus,
- Tech pro: Digital OLED rear lights, heated steering wheel, heated front and rear seats, adaptive damper control.

The wheel range

The new Audi A5 models for the German market come with 17 or 18-inch alloy wheels as standard, depending on the exterior and engine specification. For the S line exterior and the S model, 19-inch wheels come as standard. There is a choice of 17-inch wheels, which are also available with aero trims in scandium gray, three 18-inch wheels, five 19-inch wheels, and four 20-inch wheels. Audi Sport is responsible for two of the 19-inch and all 20-inch wheels, including a 19-inch wheel in full black. One highlight is the new, forged Audi Sport wheel in 20-inch size. It is the only wheel in the portfolio with a tri-color design.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Interior design: technology meets comfort

The interior design of the new Audi A5 is based on four characteristic features. Firstly, the interior has a **human-centric design**, i.e., it is consistently geared towards the needs of the users. The second special feature is the **Digital Stage**, which is clearly arranged in front of the occupants in the Audi MMI displays. With its **Material Driven Design**, the new Audi A5 meets the demand for a generous sense of space with a high level of comfort. The clear layout and logical operation also provide an overview of all situations and form the fourth feature, **Visual Clarity**.

Human Centric

The precise structure of the new interior combines technology, aesthetics, and sustainability in a skillful balance. The deliberate placement of elements in the foreground or background creates a three-dimensional spatial architecture individually tailored to the occupants in terms of design and ergonomics and conveys a generous sense of space.

Digital Stage

The digital stage with the Audi MMI panoramic display and the optional MMI passenger display define the interior. The clearly aligned displays are perfectly integrated into the interior. The slim, free-standing Audi MMI panoramic display features a curved design and OLED technology (organic light-emitting diodes). While the curved shape of the display ensures optimum access to the touch control area, the design of the outer contour is strongly reminiscent of the Singleframe typical of Audi.

The panoramic display emphasizes the driver-oriented dashboard. It provides a sharpened cockpit feeling, giving the driver a perfect overview. Special ambiance lighting sets the scene for the digital stage and makes the curved display appear to float.

Directly below, the black panel architecture extends from the driver's side to the passenger's side, creating space for the optional MMI passenger display. Active Privacy Mode allows the infotainment system to be used while traveling without visually distracting the driver. At the same time, it offers the option of assisting with navigation, for example. In the base version, a black high-gloss panel is installed here instead.

Material Driven Design

In contrast to the digital and technical areas, the new interior of the Audi A5 features the so-called “Softwrap”. This design element runs from door to door across the entire dashboard, visually stretching the interior horizontally.

Together with the fabric panels in the doors and the armrests, this creates a homely ambiance. The material-driven design philosophy offers the potential to customize the interior according to users’ ideas. In addition to the “Softwrap”, the colors and high-quality materials extend seamlessly to the seats.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The materials were selected with functional aspects in mind, ensuring a clear design differentiation between the various areas of the vehicle interior. Comfort-oriented areas are emphasized with generous surfaces and soft materials. In contrast, the precisely designed control areas are consistently finished in high-quality, high-gloss black to ensure the necessary clarity when interacting with the vehicle. The Smart Door Panel is an excellent example of this material philosophy. The control element is integrated as a black panel into the handle of the driver's door and blends seamlessly with the modern interior. The control panel includes key functions such as mirror adjustments, seat and door controls, and other settings, such as window defrost and heated mirrors.

Visual Clarity

The interior’s functionality and aesthetics are realized down to the smallest detail. This design approach is evident in the door opener and air vents. These connect to each other via a trim piece that visually continues from the control panel to the door trim. The contour light and the exit warning function are integrated into this finely crafted element. The Bang & Olufsen lettering is also illuminated in such-equipped vehicles. Low-lying, slim, horizontally aligned air vents harmoniously complete the overall picture. This exceptionally high-quality area demonstrates how the clever integration of functions leads to clarity in design.

Interior light design

The clear-cut interior design of the Audi A5 is also highlighted in the dark. The contour light in the dashboard and doors emphasizes the width of the interior. The indirect light below the Audi MMI Panorama Display and in the center console gives elements a visual floating effect. The high-quality materials in the doors are illuminated to great effect.

Added to this is the dynamic interaction light (IAL), which has a variety of functions to support interaction between the car and its occupants. It spans the entire width of the interior as a generous arc. LEDs are installed in the light strip, which means that the IAL fulfills three central functions. Firstly, it sets the scene for the interior. Secondly, the welcome function indicates when the vehicle is locked and unlocked. Thirdly, it provides support in terms of safety, such as visualizing the dynamic turn signal light. The light strip pulses in the direction the driver indicates, and an arrow denotes the indicator in the instrument cluster

However, the IAL remains an additional display and does not replace the urn signal in the Virtual Cockpit. The dynamic interaction light is part of the ambiance lighting package plus.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

New standards in digital light

Audi is underlining its leading role in lighting design and technology with the new Audi A5. The headlights and tail lights have a three-dimensional design and offer optional digital light signatures, bringing the physical and digital worlds together. The Audi A5 family offers optional digital daytime running lights with LED technology at the front and second-generation digital OLED rear lights at the rear.

With around 60 segments per digital OLED panel, the rear lights of the A5 are increasingly becoming a display in the rear of the vehicle. This enables car-to-x communication and increases safety on the road. The HCP4, one of five domain computers, controls the communication light and the active digital light signature, among other things.

In the case of the second-generation digital OLED rear lights, six OLED panels with 364 segments generate a new image several times per second using a specially developed algorithm. At the rear, all digital OLED segments are used for the active digital light signature. The overall light intensity of the rear lights and indicators does not vary.

With the second-generation digital OLED combination rear light, the Audi A5 family is taking lighting design, functionality, and road safety in its class to a new level. The digital OLED technology shapes the appearance and increases the range of functions. The technology sets new standards in terms of personalization: With a total of eight digital light signatures – included with the Matrix LED headlights in combination with the digital OLED tail lights – customers can personalize the appearance of their A5/S5 Sedan* or A5/S5 Avant* more extensively than ever before. The selection is possible via the MMI touch display (Multi Media Interface), and the options can also be displayed via the myAudi app. The digital OLED rear lights of the new A5 can communicate with the immediate surroundings (car-to-x).

Furthermore, Audi has taken the safety functions to a new level. Proximity detection, known from the first generation of digital OLED rear lights, has been expanded in the A5. The second generation of digital OLED rear lights includes the communication light. For example, it alerts other road users of accidents and breakdowns. In addition to the regular tail light graphics, the communication light in the rear lights displays a specific static tail light signature with integrated warning symbols in critical driving or traffic situations. The brake lights in the Audi A5 are located behind the individual digital OLED panels – a unique arrangement for Audi. This creates a striking three-dimensional body with the LED tail light and the typically segmented digital light signature, which extends across the vehicle's full width, including the LED light strip.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Audi MMI panoramic display and head-up display

The slim, free-standing Audi MMI panoramic display has a curved design and OLED technology. It consists of the Audi virtual cockpit with an 11.9-inch visible screen diagonal and a 14.5-inch MMI touch display.

The panoramic display gives the interior a generous and airy feeling of space. With its curved shape, it is oriented towards the driver so that they can operate all functions easily without taking their eyes off the road too long. Special ambiance lighting makes the Curved Display seem to float at night. Audi complements the Digital Stage for the front passengers with the optional 10.9-inch MMI front passenger display, which is also perfectly integrated into the dashboard design. This allows the front passenger to visit websites, stream video content, navigate, or find a fuel station. Thanks to the dynamic privacy mode, the driver cannot see distracting content, such as videos, while driving.

The new Audi A5 can be optionally equipped with a new, configurable head-up display (HUD). Audi is thus taking a significant step forward in this display technology.

A wide range of information can be displayed in the HUD, such as speed, active assistance systems, navigation instructions, or media data. For the first time, the driver has the option of controlling the vehicle and infotainment functions via the head-up display. The controls allow scrolling through lists with direct selection using the steering wheel buttons. Thanks to the maximum utilization of the installation space and the adapted display technology, the visible image area is more than 85 percent larger than before, and the display is even more precise.

The Audi assistant will have access to further online content in the future, such as weather and general knowledge. A connection to ChatGPT (provided via Microsoft Azure's OpenAI Service) brings knowledge from the internet into the vehicle in natural language. The Audi assistant automatically recognizes whether, for example, to execute a vehicle function, search for a destination, or obtain a weather forecast. Only when the Audi system is unable to answer questions, for example, those requiring general knowledge, are they forwarded to ChatGPT. From the driver's perspective, this happens seamlessly, as all functions are integrated into the Audi assistant.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

E³ enables high-performance networking of the vehicle

With the new electronic architecture E³ 1.2 for the A5, customers can experience digitalization in the vehicle more directly than ever before. The name E³ stands for End-to-End Electronic Architecture. Its core elements are five high-performance computers, which at Audi are called "High Computing Performance" (HCP). They cover all vehicle functions – from the drivetrain and the assistance systems to the infotainment and comfort systems to the safety systems and back-end networking. The E³ architecture is a scalable electronic architecture used throughout the Volkswagen Group.

One focus of the development was on high-performance and secure networking of domain computers, control units, sensors, and actuators in order to master more complex systems and maintain modularity. Another goal was a high-performance, seamless back-end connection for car-to-x swarm data applications and computationally intensive offboard functions. Audi plans to implement the electronic architecture in all future models.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Extensive range of driver assistance systems

Audi provides a wide range of driver assistance systems in the new A5, the functions of which significantly improve users' everyday lives and road safety for all road users. A rear parking aid with distance display, cruise control and speed limiter, lane departure warning, efficiency assistant, and attention and drowsiness assistant are standard features from market launch.

Additional assistance packages can be configured as an option for an extra charge. These include Adaptive Cruise Assist plus, which uses high-resolution map data and swarm data from other vehicles aggregated in the cloud to optimize traffic sign recognition and assist with acceleration, maintaining speed and distance, and lane guidance. Active Front Assist combines four assistance functions: Front Emergency Brake Assist, Evasion Assist, Turn Assist, and Front Cross Traffic Assist. Other assistance systems available include traffic-sign-based cruise control, Park Assist plus, and Rear Turn Assist.

As the vehicle is parked, the MMI display shows the rear seat warning, which warns drivers not to forget anyone, especially children, in the rear seats. If a rear door is open before starting the journey, an additional message appears in the Audi virtual cockpit. A more comprehensive function is available as an option: sensor-based occupant detection in the rear, where a radar sensor in the headliner scans whether there are people in the back seats.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Platform with efficient combustion engines and hybridization

The new A5 series is based on the Premium Platform Combustion (PPC), a platform architecture for conventionally powered vehicles with longitudinally mounted engines. This platform works with the E³ architecture. At the same time, the PPC enables gradual electrification – initially in the form of mild hybrids. The PPC combines great variability and state-of-the-art technology with high economic viability.

Lower fuel consumption, more agility, and greater comfort with MHEV plus

The new MHEV plus system, which is based on a 48-volt onboard electrical system, supports the combustion engine, reduces CO_2 emissions, and increases performance at the same time. The new powertrain generator enables partially electric driving, which helps to reduce fuel consumption. Compared to an MHEV system, the MHEV plus system offers significant advantages in terms of CO_2 emissions and fuel consumption. In the 2.0 TDI (150 kW front/quattro) (combined fuel consumption in l/100 km: 5.7-4.8; combined CO_2 emissions in g/km: 147-125; CO_2 class: E-D), these are up to 10 g/km or 0.38 l/100 km and in a 3.0 TFSI with V6 engine (270 kW quattro) (combined fuel consumption in l/100 km: 8.0-7.4; combined CO_2 emissions in g/km: 182-169; CO_2 class: G-F) up to 17 g/km or 0.74 l/100 km (according to the WLTP standard test procedure)[1] .

The powertrain generator can contribute up to 18 kW (24 PS) of electric power to the drive. When decelerating, the powertrain generator feeds energy back into the battery (recuperation) with up to 25 kW of power. On slight inclines and when maneuvering slowly, the car can be moved solely by the powertrain generator. Partially electric driving can be used when driving slowly in the city, in slow-moving traffic, for example, or outside city limits when coasting to the next village. The powertrain generator is mounted on the transmission output shaft.

Regenerative braking at up to 25 kW, made possible by the drivetrain generator compared to the previous model, allows the battery to be recharged more quickly. This, in turn, can be used to drive the car and the electrical system and operate the air conditioning for a short time if required.

---

[1] The advantages described regarding CO_2 emissions and fuel consumption include the influence of the additional weight of the MHEV plus system compared to the MHEV system. Further CO_2 -effective effects at vehicle level, which may result from deviations in the drivetrain, weight or driving resistance of the vehicle under consideration with the MHEV plus system compared to a reference vehicle with MHEV technology (e.g., further development of the combustion engine or basic transmission, changes in rolling resistance, aerodynamics or weight) are not taken into account.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

This significantly reduces fuel consumption and, at the same time, increases comfort and performance. When starting, the car's reaction time is reduced, and it is noticeably more agile. Another advantage of the system is the option of using an electrically powered air conditioning compressor. This means that even when the combustion engine is switched off – for example, when coasting or at a red light – the air conditioning can continue to operate at full power and keep the interior at a comfortable temperature.

The integrated brake control system (iBRS), which can blend between regenerative braking and normal friction brakes, is used in all drivetrains. With this technology, the brake pedal and brake hydraulics are entirely decoupled. On models with MHEV plus technology, it allows frictionless braking and achieves the necessary deceleration via recuperation alone – without using the hydraulic wheel brakes. The mechanical wheel brakes only kick in when the brake pedal is pressed harder. Brake feel remains unaffected by this.

The focus of the sophisticated operating strategy of the advanced hybrid system is not on the electric range but on draining and filling the battery in fast cycles to provide and recuperate sufficient electric power at all times. To ensure the 48-volt lithium iron phosphate battery's high charging and discharging performance, it is cooled via a low-temperature water circuit that ensures an optimum operating temperature between 25 and 45 degrees Celsius.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Engines at market launch

The efficient engines in the Audi A5 family cover a wide range, from the conventional entry-level model to the comfortable long-distance runner and the dynamic sports car. The packages for the engine, transmission, degree of electrification, and drive layout (front-wheel drive or all-wheel drive) are geared toward customer expectations.

The entry-level engine is a **2.0 TFSI** with 110 kW (150 PS) (combined fuel consumption in l/100 km: 7.6-6.6; combined CO_2 emissions in g/km: 173-150; CO_2 class: F-E). The engine is also optionally available with an output of 150 kW (204 PS) (combined fuel consumption in l/100 km: 7.9-6.6; combined CO_2 emissions in g/km: 179-151; CO_2 class: G-E).
These TFSI engines are equipped with a turbocharger featuring variable turbine geometry (VTG) and utilize a modified combustion process that is particularly economical under partial load. VTG technology enables a harmonious and agile build-up of torque in gasoline engines, even at low engine speeds. The four-cylinder turbo engine is available with a dual-clutch gearbox.
The 110-kW version is available as a front-wheel-drive-only model, and the 150-kW version with front-wheel drive or quattro ultra all-wheel drive.

The **2.0 TDI** with 150 kW (204 PS) (combined fuel consumption in l/100 km: 5.7-4.8; combined CO_2 emissions in g/km: 149-125; CO_2 class: E-D) sets new standards in the A5 with ist MHEV plus technology. This two-liter powerplant of the EA288 Evo generation inherits the optimized combustion engine with a cylinder pressure sensor from its predecessor, twin dosing for exhaust emission control, and two balance shafts for smooth engine operation. It develops a maximum torque of 400 Nm between 1,750 and 3,250 rpm. The 2.0 TDI is available with a dual-clutch transmission and front-wheel drive or quattro ultra all-wheel drive. The engine is partially electrified to increase efficiency and comfort using the new 48-volt MHEV plus system. Partially electric driving reduces CO_2 emissions through high recuperation performance. Comfort is further enhanced on the TDI by a 48-volt belt starter-alternator for a smooth engine start. When starting, the car's reaction time is reduced, and it is noticeably more agile.

The sports car in the range, the S5, is based on a 3.0-liter V6 TFSI engine with 270 kW (367 PS) (combined fuel consumption in l/100 km: 8.0-7.4; combined CO_2 emissions in g/km: 182-169; CO_2 class: G-F) and optimized combustion process; for the first time having a turbocharger with variable turbine geometry (VTG) and MHEV plus technology. The revised S tronic dual-clutch transmission in the Audi S5*, designed for more torque, also ensures lower weight on the front axle and makes it more agile. Partial electrification using the new 48-volt mHEV plus system leads to reduced CO_2 emissions thanks to partially electric driving and high recuperation performance. Compared to an S4 Sedan TDI (predecessor model), the S5 Sedan TFSI* reduces CO_2 emissions by up to 14 g/km. Its fast, dynamic torque build-up underlines the sportiness of the S5*. The standard use of a quattro sports differential with torque vectoring in combination with an adjustable all-wheel drive clutch is tuned for lateral dynamics at the highest level.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

More dynamic chassis and steering design

The handling characteristics typical of the Audi brand have also been further developed in the new A5. As a result of extensive detailed work on the suspension and steering, the Audi A5 offers precise and effortless handling, which can alternate significantly between comfort and sportiness with the optional adaptive suspension. From now on, only Audi progressive steering will be used in the new A5.

A stiffer steering connection and stiffer suspension mounts on the front axle ensure controlled and precise handling. In addition to the standard steel spring suspension, a sports suspension and the S sports suspension with adaptive damper control are available as options. The sports suspension comes as standard on Audi A5 models with exterior S line and in the S models. Both variants of the sports suspension lower the ride height by 20 millimeters.

Brake torque vectoring was developed by Audi and used for the first time in the Audi Q8 e-tron*, bringing a noticeable improvement in driving. The system is activated immediately when turning into a bend. As a result of a targeted brake intervention, the vehicle can turn in even more quickly and agilely and counteract understeer situations.

The new Audi A5 is offered with the entry-level 110 kW (combined fuel consumption in l/100 km: 7.6-6.6; combined CO_2 emissions in g/km: 173-150; CO_2 class: F-E) engine solely as a front-wheel drive model; quattro ultra all-wheel drive is available as an option with all other performance levels of the base models. This quattro technology distributes torque flexibly to drive as efficiently as possible while fully utilizing all the advantages of all-wheel drive for even greater driving safety and driving dynamics.

The torque can be distributed over a wide spread between the front and rear axles by the multi-plate clutch, as the driving situation requires. For high fuel efficiency, the rear axle automatically disengages completely under partial load if the driving situation permits. The quattro sports differential with torque vectoring and an adjustable all-wheel drive clutch is fitted as standard in the S5 models. This gives the Audi S5* excellent lateral dynamics.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Market launch and price

Audi is opening the next chapter in the successful history of the mid-size segment with the new A5 family. The new Audi A5 and the Audi S5* will be launched in Germany and numerous other European countries in November 2024. The Audi A5 family became available to order in Germany in July 2024. The Audi A5 Sedan TFSI 110 kW (combined fuel consumption in l/100 km: 7.5-6.6; combined CO_2 emissions in g/km: 171-150; CO_2 class: F-E) will be offered in Germany at an entry price starting at EUR 45,200 with navigation, electric trunk lid, and a phone tray with inductive charging as standard. This version of the Audi A5 Avant* starts at 46,850 euros. The Audi S5 Sedan* starts at 78,500 euros, while the S5 Avant* starts at 80,150 euros.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The facts

The most important facts about the new Audi A5

Positioning

- First combustion-engine vehicle series with a new name
- Fascinating design language with sporty design and premium proportions
- New interior creates an individually tailored display landscape and generous sense of space
- New operating concept increases interaction with the vehicle
- A5 offers a personal connectivity experience
- The A5 family has the first Audi models to be equipped with Premium Platform Combustion (PPC)
- A5/S5 Sedan* and A5/S5 Avant* position themselves in the upper mid-size segment: vehicle dimensions increase in length and width
- New electronic architecture E^3 1.2 with new hardware and software for the A5 family
- Expanded standard equipment and optional highlights
- Digital lighting technologies make the A5 ready for the future of car-to-x communication
- Further developed MHEV plus technology in TDI/S models ensures more efficient drivetrains and enables partially electric driving as well as electric parking and maneuvering
- Optimized driving characteristics increase driving enjoyment and provide a sporty, comfortable, precise, and effortless Audi driving experience
- Innovations in the suspension, steering, and body emphasize the sportiness of the Audi mid-range model

Exterior design and bodywork

- Sporty premium proportions: new sedan concept with large rear hatch and enhanced Avant design
- Flat Audi front with horizontal honeycomb grille and very slim headlights
- Progressive, clean bumper with aerodynamically effective air curtains in the base
- Exterior package S line and S model strongly differentiated from the base model at the front, with side air intakes and accentuated three-dimensional air curtains
- Large, flared wheels and powerfully sculpted blisters reminiscent of the Audi quattro
- Door handles flush with the body in an aerodynamic flush design
- Vehicle length: 4,829 millimeters (Sedan and Avant, plus 67 millimeters compared to the previous model)
- Vehicle width without mirrors: 1,860 millimeters (sedan and Avant, plus 13 millimeters)

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

- Vehicle height: Avant 1,460 millimeters (plus 11 millimeters), Sedan 1,444 millimeters (plus 24 millimeters)
- Wheelbase: 2,897 millimeters (Sedan and Avant, plus 68 millimeters)
- Trunk capacity: Sedan up to 445 liters, Avant up to 476 liters. With the rear seats folded down, storage space can be extended up to 1,299 liters (Sedan) and 1,424 liters (Avant)

Lighting technology

- Second generation of digital OLED combination rear lights: a new level of lighting design, functionality, and road safety
- Aesthetics in motion: Active digital light signature in the Matrix LED headlights and the digital OLED rear lights moves light intelligently in a new way
- Dynamic lighting effects when unlocking and leaving the car
- Personalization through eight digital light signatures for digital daytime running lights via MMI and myAudi app with optional Matrix LED headlights and optional digital OLED rear lights 2.0 as the top option
- Car-to-x communication via second-generation digital OLED rear lights with proximity detection and communication light (specific tail light signature with warning symbol)
- Around 60 segments per digital OLED panel, six digital OLED panels with 364 segments in the rear light
- Proximity detection is expanded to include the communication light

Interior, displays, and operation

- New interior design with four characteristic features: "Human Centric", "Digital Stage", "Material Driven Design", and "Visual Clarity"
- Interior concept with clear structures that are consistently geared towards the needs of the users
- Large screens for vehicle operation and infotainment: slim, free-standing Audi MMI panoramic display in curved design and OLED technology, with 11.9-inch visible Audi virtual cockpit and 14.5-inch MMI touch display
- Optional 10.9-inch MMI passenger display with Active Privacy Mode, which cannot be seen by the driver while driving
- Optional panoramic glass roof with PDLC technology (Polymer Dispersed Liquid Crystal) for switchable segmented shading or full shading
- Dynamic interaction light (IAL) as part of the ambiance lighting package pro
- Optional and individually configurable head-up display with extended display

Infotainment and networking

- Innovative operating concept with Android-based touch control and the voice-based "Audi assistant"

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

- "Audi assistant" with over 800 voice-controlled functions for vehicle, infotainment, and climate control
- Integration of ChatGPT software into the "Audi assistant"
- Over-the-air update capability, for example, for wireless updates of infotainment packages
- Optional 3D Bang & Olufsen Premium Sound System with 20 speakers, including four in the front headrests with the optional sports seat or sports seat plus
- Audi connect services in the vehicle via eSIM with 5G mobile communications standard and 3 GB data volume per month
- Smartphone tethering function possible (use of smartphone data volume)
- Phone tray with inductive charging function, 15-watt charging power, and active smartphone cooling
- Integrated app store with numerous third-party apps available directly on the central or optional passenger display
- Functions on demand: subsequent expansion of vehicle functions in the areas of infotainment and lighting (e.g. high beam assistant)

Assistance systems

- Standard safety features: rear parking aid with distance display, cruise control, lane departure warning, efficiency assistant, and attention and fatigue detection
- Optional packages with numerous driving assistants:
- Emergency Assist reacts to a lack of driver activity by warning the driver visually, acoustically, and haptically. If there is no reaction, the car brakes and steers itself to a standstill
- Adaptive Driving Assistant plus uses high-resolution map data and swarm data from other vehicles aggregated in the cloud to optimize traffic sign recognition and assist with acceleration, maintaining speed and distance, and lane guidance
- Active Front Assist combines four assistance functions: Front Emergency Brake Assist, Evasion Assist, Turn Assist, and Front Cross Traffic Assist
- Parking assistant plus for convenient and fully automated parking and reversing
- Traffic sign-based speed limiter with speed adjustment

Drive and efficiency

- Use of the latest combustion technology in Premium Platform Combustion (PPC)
- Market launch with two TFSI engines, a diesel engine, and the S models
- Gasoline engines with modified Miller cycle combustion and turbochargers with variable turbine geometry (VTG)
- Entry-level model with front-wheel drive, all other A5 base model engines optional with quattro ultra drivetrain, S model with quattro with sports differential as standard
- Seven-speed dual-clutch transmission as standard

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

- Tank capacity for TDI models increased to 60 liters
- Further developed MHEV plus technology: partial electrification in the S model and the TDI unit as a further developed mild hybrid (MHEV plus) with 48-volt system: partially electric driving as well as electric parking and maneuvering possible
- Electric drive components belt starter generator and powertrain generator with 18 kW output and up to 230 Nm of additional torque
- Electrically driven air conditioning compressor on models with MHEV plus ensures air conditioning of the interior even when the combustion-engine vehicle is switched off
- Water-cooled 48-volt lithium iron phosphate battery with high charging and discharging capacity
- Significant reduction in fuel consumption and, therefore, CO_2 emissions
- Integrated and blending-capable brake control system (iBRS) for frictionless braking and required deceleration through recuperation without using the mechanical wheel brake on drives with mHEV plus technology
- Fuel savings thanks to MHEV plus technology: in the 2.0 TDI (150 kW front/quattro) (combined fuel consumption in l/100 km: 5.7-4.8; combined CO_2 emissions in g/km: 149-125; CO_2 -class: E-D) up to 10 g/km or 0.38 l/100 km and in a V6 3.0 TFSI (270 kW quattro) (fuel consumption combined in l/100 km: 8.0 -7.4; CO_2 -emissions combined in g/km: 182-169; CO_2 -class: G-F) up to 17 g/km or 0.74 l/100 km (in the WLTP standard driving cycle)[1]

Chassis and steering

- Precise and effortless driving feel: revised steering and optimized suspension tuning
- Rigid connection of the newly developed progressive steering with stiffer torsion bar, optimized wishbone bearings, and increased camber on the front axle for precise handling
- Stiffer axle design for more immediate reaction to steering inputs
- Tire development with a focus on driving performance and low rolling resistance
- Optionally available performance tires in 19 and 20-inch dimensions, standard on the S model
- ESC in conjunction with a more neutral setup: more dynamics and tighter curve radii
- Audi drive select: clearly perceptible spread of steering and suspension characteristics between comfortable and sporty: comfort, dynamic, efficiency, and balanced modes
- Optional: two sports suspensions, each with 20 millimeters lowering and even more dynamic tuning

---

[1] The advantages described regarding CO_2 emissions and fuel consumption include the influence of the additional weight of the MHEV plus system compared to the MHEV system. Further CO_2 -effective effects at vehicle level, which may result from deviations in the drivetrain, weight or driving resistance of the vehicle under consideration with the MHEV plus system compared to a reference vehicle with MHEV technology (e.g., further development of the combustion engine or basic transmission, changes in rolling resistance, aerodynamics or weight) are not taken into account.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Production and sustainability

- Production of the new Audi A5 family at the Audi site in Neckarsulm
- New systems for pre-treatment and corrosion protection of the bodywork, dip coating using the rotation process
- Environmentally friendly integrated "wet-on-wet" painting process and subsequent drying for lower energy consumption, as well as state-of-the-art dry separation with air recirculation for lower energy and water consumption
- Automated processes in demanding door, trunk, and fender assembly. Higher throughput, minimization of external factors, and relief for employees
- Advanced processes to ensure the highest quality, for example, precise inline measuring equipment and quality control of welded and bonded joints with the support of augmented reality software
- Temporary fixation of body components with a world-first, virtually smokeless joining process. The process supports corrosion protection and increases process speed
- Water-saving production with its own closed water cycle at the Unteres Sulmtal wastewater treatment plant; target for 2025: reducing freshwater use by 70 percent.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The model in detail

The Audi A5: new design for more sportiness

Audi is opening the next chapter in its successful history in the mid-size segment with the new A5 family. Thirty years after the first Audi A4, the sharpened design language of the latest generation, now called the Audi A5, impresses with its premium proportions. Both base body variants, Sedan and Avant, perfectly embody the sporty essence of the Audi design philosophy. A new design language in the interior creates a generous feeling of space, placing the displays on a digital stage. The new operating concept enhances interaction with the vehicle. Efficient, partially electrified combustion engines and evocative S models round off the range.

Positioning and strategy

Thirty years ago, the Audi A4 revolutionized the mid-size car segment. With the debut of the latest generation, this best-selling legacy continues under the name Audi A5. It has grown significantly in length and width, positioning it in the upper mid-size segment. Audi offers four new variants of the A5: the A5 Sedan* und S5 Sedan* as well as the A5 Avant* and S5 Avant*. These models are the first to be based on the Premium Platform Combustion (PPC).

Audi CEO Gernot Döllner on the new model family: "In addition to expanding our all-electric portfolio, we are launching a new generation of models with efficient combustion engines. The Audi A5 family, with its sporty design, completely new interior, and future-proof electronic architecture, will be the first. The further developed mild hybrid technology mHEV plus enables partially electric and thus even more efficient driving."

With the PPC, Audi can realize different vehicle types with high technical standards in various market segments. The flexibility of the PPC ensures that future Audi models can retain their independent character and play to the strengths typical of their Audi DNA even better. The new E³ electronic architecture, already familiar from the Audi Q6 e-tron*, represents the next step in digitalizing the model portfolio.

The Audi models based on the PPC are characterized by high driving enjoyment, exciting individualization options for the exterior and interior, and technologically advanced powertrains. The Audi A5 is the first PPC model to be launched on the market with new and further developed engines and new MHEV plus technology in the TDI unit and S models.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The PPC allows the integration of the technology required for hybridization of the drivetrain and is also designed for plug-in hybrids with a large lithium-ion battery in the future. The partially electrified MHEV plus powertrains improve responsiveness while reducing CO_2 emissions and enabling partially electric driving, including maneuvering during parking.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Exterior design

Even at first glance, the completely redesigned A5 family has a powerful and clean design. The modified proportions with a long wheelbase, large wheels, and flat, sporty body embody progressive dynamism and premium standards. This is particularly evident in the side view thanks to the stretched hood, as its length gives it a prestigious appearance. The power of the optional quattro drive, distributed to both axles, is visually manifested in the powerfully modeled and three-dimensionally flared blisters, which flow smoothly into the body of the new A5.

In the Sedan, the sporty, compact-looking greenhouse (roof structure) runs to the rear with a sweeping curve, flows seamlessly into the shallow rear window like a coupé, and ends at the visually short trunk lid with a striking spoiler lip. The tailgate, which is new in this vehicle segment, offers a convincing symbiosis of design and functionality. The opening includes the rear window, and its size makes access to the luggage compartment considerably easier. This results in a completely new sedan concept for Audi.

In the Avant, the dynamically taut roofline merges into a form-fitting integrated roof spoiler that spans the sporty, flat rear window. The equally steeply raked D-pillars, which sit firmly on the massive rear quattro blisters, emphasize the dynamic side view of the A5 Avant*.

Wide Singleframe, short overhangs

The front is dominated by the wide and significantly flatter-proportioned Singleframe with a three-dimensional honeycomb structure – the S5* has larger honeycombs and L-shaped inserts. Together with the slim and precisely drawn headlights, it shapes the face of the vehicle, giving it a striking and focused expression.

The strong rake of the front section creates the appearance of very short overhangs. Three-dimensionally modeled air curtains arranged under the headlights give the bumper a powerful and sporty appearance. They are accentuated even further on the S5* and the exterior S line by a wide intake duct in a contrasting color. Distinctive grooves in the hood, so-called “Spooncuts”, emphasize the sporty character. The hood is flush with the front end thanks to the “Softnose” integrated into the bumper. This allows a greater distance between the hood and the Singleframe and, therefore, a visually lower, more dynamic facia.

In the side view, the greenhouse stretches far to the rear as a taut arch over the powerful body. The dynamic silhouette of the new A5 Sedan* is characterized by a coupé-like roof shape with shallow tapering C-pillars and a stubby, sporty rear spoiler. On the Avant, which includes roof rails as standard, the rear window is significantly more inclined than its predecessor.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The sculptural geometry under the rear window in the transition to the light strip visually emphasizes the width of the new Audi A5 models with light and shadow effects. This gives the new Audi A5 Avant* a decidedly more dynamic character.

On both body styles, the side window graphics reinforce the sporty, elongated effect of the silhouette. The blisters jutting powerfully from the shoulder area at the front and rear wheels – a core element of the Audi design DNA – are reminiscent of the Audi Ur-quattro. "Making technology visible" is a central design principle of the four rings. The new flush-mounted door handles, which enable the doors to be unlocked electrically via an inductive sensor, fit logically into the clean design. The exterior mirrors are positioned on the door waist rail like a sportscar and, in addition to offering aerodynamic advantages, complete the overall dynamic impression of the new Audi A5 when viewed side-on. The sill area has an emphatically sporty design – a contour under the doors adds further structure and lends the vehicle body visual lightness and agility. On the exterior S line and the S model, the sportiness is further enhanced by a contrasting sill trim.

The striking, unmistakably styled rear combines sporty, evocative design and intelligent technology. The combination of the sculptural geometry with the continuous, three-dimensionally offset light strip gives the rear of the new Audi A5 presence and visual dynamism. On the new S5 sedan*, an added spoiler lip provides additional downforce. Further highlights seen from the rear are the clear, modern design of the bumper with a dark diffuser – even sportier in the exterior S line – and the high-quality rectangular exhaust tips. On the TFSI, they are embedded in the diffuser on both sides; on the TDI variants, they appear as a rectangular twin tailpipe on the left. The S model has the iconic twin round tailpipes on the right and left in a new, sharpened design.

Three exterior trims and eleven colors

The range is divided into three exterior versions: exterior basic, exterior advanced, and exterior S line. The S model also has a different exterior. The front air intakes are larger in the exterior S line and S model, and the rear diffuser is significantly sportier. The sill trims for the exterior S line and S model contribute to the dynamic character. The trim strips around the side windows are finished in anodized aluminum as standard. The exterior S line stands out with details in anodized matt anthracite aluminum, while the S model features design elements in anodized matt silver aluminum.

A black exterior package is available for the exterior S line and S model. With this package, the Audi rings at the front and rear are finished in anthracite gray. The radiator grille and grille inserts, side sill trims, door handles, the Singleframe and rear diffuser, window well trims, and mirror housings are in black. The exhaust system features blacked-out tips, and the roof rails in the Avant are finished in black aluminum.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Eleven colors are available for the new A5, including Arkona White solid finish. Glacier White, Mythos Black, Chronos Gray, and the latest colors – Grenadine Red and Horizon Blue, are available as metallic paint finishes. Firmament blue, Floret silver, and Daytona gray pearl effect, which is exclusive to S models and vehicles with the exterior S line, complete the range. In addition, Audi Sport offers Ascari blue metallic for the exterior S line and S model. The new magnetic gray is reserved exclusively for "edition one", the exterior S line, and the S model. "Edition one" is a two-year limited edition sporty version of the Sedan and Avant, limited to, with exclusive design elements such as trim pieces in matt magnesium gray chrome.

Dynamic design and high level of equipment on the S models

The new Audi A5 has already redefined dynamic design. Its facia with narrow headlights and a new honeycomb grille emphasize the vehicle's sporty side. The new Audi S5* continues this design philosophy and further sharpens the sporty character. Large air intakes in the front underline the motorsport-inspired design while supplying the V6 TFSI with fresh air and cooling the high-performance braking system. The distinctive honeycomb grille of the S5 model has a unique design with aluminum-look inlays.

The exterior mirror caps, typical of S models, are also finished in an aluminum look and have the same accent color. Dynamic and clearly drawn lines define the profile and, at the same time, give the vehicle enormous visual forward momentum. The strongly flared quattro blisters and the stretched, precise shoulder line emphasize high dynamics on the one hand and point to the quattro permanent all-wheel drive on the other. The strongly contoured aluminum-look side sill trims also catch the eye. The rear view is characterized by a spoiler lip on the trunk lid of the S5 Sedan* and a roof edge spoiler on the S5 Avant*.

Both S models feature a striking diffuser insert in matt titanium black with a honeycomb pattern and an inlaid aluminum-look band. The arrangement of the two chromed twin tailpipes in the diffuser insert is also iconic to all Audi S models. Striking 19-inch wheels in various designs emphasize the sporty appearance of the Audi S5* – 20-inch wheels are also available as an option.

The interior of the S models continues the sporty character, which is also characterized by the large Audi MMI panorama display with two high-resolution screens. Special features of the S models include a flattened multifunction sports leather steering wheel with the S logo and sport seats with strong lateral contours, specific S embossing, and contrasting stitching. As the top equipment option, the sports seat plus with diamond quilting, integrated headrest, seat ventilation, massage, and decorative trim with illuminated S lettering is available to order.

The new Audi S5 models include a high level of equipment as standard, with numerous extras only usually available as extra-cost options. For example, these include the Audi MMI experience plus system and Audi sound system, the Audi application store and smartphone interface, 3-zone automatic climate control, and high beam assist.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The wheel range

The new Audi A5 models for the German market come with 17 or 18-inch alloy wheels as standard, depending on the exterior design and engine specification. For the S line exterior and the S model, 19-inch wheels come as standard. There is a selection of 17-inch wheels, which are also available with aero trims in scandium gray, three 18-inch wheels, five 19-inch wheels, and four 20-inch wheels. Audi Sport offers two 19-inch wheels from the portfolio (including an all-black option) and all 20-inch wheel types. One highlight is the new, forged Audi Sport 20-inch wheel, which is the only wheel in the portfolio with a tri-color design.

Three equipment packages with tech options

Depending on customers' requirements, the new Audi A5 models can be ordered with different equipment packages that bundle a wide range of optional extras. The "Tech", "Tech plus", and "Tech pro" packages build on each other: The highest-level, the "Tech pro" package, includes exclusive options and all the optional extras from the other packages. Certain options are only available in conjunction with the Tech packages.

Highlights of the packages include:

- Tech: full LED headlights, 3-zone automatic air conditioning, Audi MMI plus
- Tech plus: Matrix LED headlights, front passenger display, comfort package plus
- Tech pro: Digital OLED rear lights, heated steering wheel, heated front and rear seats, adaptive damper control

Aerodynamics and aeroacoustics

The sporty design of the new Audi A5 pays tribute to its predecessor's excellent aerodynamics and achieves a cd value of 0.24 for the Sedan and 0.27 for the Avant. The extensively clad underbody with a front spoiler lip and aerodynamically designed front and rear sections play essential roles in the aerodynamic concept.

Air curtains ensure the airstream flows around the front wheels and flanks, minimizing turbulence. These elements have been integrated into the new design of the Audi A5 models and optimized aerodynamically. In addition, flow elements in front of the front wheels improve the drag coefficient. As a result, the airflow does not hit the wheels directly but is diverted around them.

Models with some engines have an electronically controlled cooling air intake behind the Singleframe grille, which optimizes the airflow around the engine bay. The SKE consists of two electrically operated louvers in a frame behind the grille. These blinds are normally closed and only open when the engine requires additional cooling under high load or the air conditioning condenser needs airflow. From 160 km/h, the SKE opens completely to reduce the lift values on the front and rear axles.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

To exploit the full potential of this technology, Audi has optimized the seal between the bumper and the cooling package. Here, the number of variants and components has been drastically reduced. This reduction minimizes flow losses thanks to fewer component joints and achieves aerodynamic advantages.

On the Audi A5 Avant*, aero trims at the rear ensure a clean airflow. The low roof spoiler contributes to this. The exterior mirrors have also been aerodynamically optimized. Aerodynamically optimized rims in the 17-inch to 19-inch range were developed to achieve low air resistance. Aero trims can be fitted to the 17-inch alloy wheels to complete the aerodynamic concept.

The aeroacoustics of the new A5 are also at a top level. Considerable optimization work has been devoted to the exterior mirrors in particular. The philosophy of the tried-and-tested door rail mirror from the previous A4 generation has been retained in the Audi A5. The mirror base is mounted on the outer door panel instead of in the window triangle. This means air turbulence does not hit the side window; instead, it stops at the door shell and minimizes wind noise. The mirror itself is newly developed, and its design has been specifically adapted to the new design language.

A diffuser between the wing mirror and the side window slows down the airflow and reduces wind noise. There are also three grooves on the mirror cap, which generate small-scale turbulence. As a result, the incoming airstream stays in contact with the mirror surface. The Audi A5 comes as standard with acoustic glazing on the windscreen, i.e., a composite of two thin glass panes with a flexible film in between. This means that the windows are acoustically decoupled and transmit less sound. The front door windows are also available with acoustic glazing for exceptionally high comfort.

The overall vehicle acoustics

The new platform made it possible to improve the overall acoustic impression of the new Audi A5. High-frequency acoustics and vibration comfort were enhanced. The combination of a stiffer body compared to the predecessor model, larger support points for the rear axle, and the newly developed comfort-oriented chassis and drivetrain mounts can be experienced in the improved vibration comfort of the vehicle. Tire noise comfort has been further improved compared to the predecessor using tires specially adapted for the new A5.

Intensive work has also been devoted to the new gasoline engines' balanced, dynamic sound character. The evocative engine sound of the S model has been individualized for the various driving modes. Purely electric driving is brought to life with a signature Audi interior and exterior sound. When designing the windows and the insulation/damping package, great attention was paid to shielding disturbing ambient and driving noise.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Room concept and functionality

The new Audi A5 family is available in two body styles: the A5/S5 Sedan* and the A5/S5 Avant*. In terms of vehicle length, the dimensions of the Sedan and the Avant are identical down to the centimeter. With an overall length of 4.83 meters, this places them firmly within the upper mid-size segment. Compared to their predecessors, the new models have increased in length by 67 millimeters. The long wheelbase of 2,900 millimeters with short overhangs contributes to the long-distance ride quality and the generous interior space. The luggage trunk lid opens electrically and includes the rear window, making access to the luggage compartment considerably easier.

The Sedan and Avant measure 1.86 meters in width without mirrors and 2.10 meters with mirrors. In terms of pure body width, this is an increase of 13 millimeters, which primarily benefits the front seat passengers in the form of greater elbow room and more shoulder space. At 1,460 millimeters for the Avant and 1,444 millimeters for the Sedan, there is a slight increase in vehicle height, which pays off in the form of more headroom for rear-seat passengers. There is also an increase in comfort in terms of knee and legroom in both rows of seats.

The trunk of the new A5 Sedan* offers up to 445 liters of luggage capacity – depending on the engine. It can be expanded to up to 1,299 liters thanks to the standard 40:20:40 folding rear seats. In the Avant, the trunk can hold up to 476 liters with the seats fully occupied and up to 1,424 liters with the rear seats folded down. The loading sill for both body styles is at a back-friendly 66.8 centimeters. The storage and luggage compartment package and an electrically operated tailgate are included. As an option, the tailgate can also be opened and closed using a foot gesture. The “kick” position is indicated by a projection light.

Depending on the engine, the new Audi A5 can tow up to 1,800 kilograms (trailer with brakes, on a twelve percent gradient). In the Audi S5*, it is up to 1,900 kilograms.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Lighting technology

With the new A5 models, Audi is underlining its leading role in lighting design and technology in its class. The new active digital light signature was introduced with the Audi Q6 e-tron* and is now available for the Audi A5 family. It gives onlookers a new impression of vibrancy and points the way to the future of Audi lighting technology.

The optional digital OLED technology extends the range of functions many times over. This significantly contributes to road safety, as demonstrated by the communication light in the digital OLED combination rear lights. The second-generation digital OLED combination rear lights take the new A5 family to the next level in terms of lighting design, functionality, and road safety.

The Audi A5 also sets new standards in terms of personalization. With eight selectable digital light signatures included with the optional Matrix LED headlights and the top-of-the-range digital OLED rear lights 2.0, customers can design the appearance of their A5 according to their preferences. This customization can be easily done via the Audi MMI touch display and demonstrated via the myAudi app.

"Audi recognized the potential for using OLED technology in rear lights at an early stage and is the only car manufacturer to have consistently developed and digitalized this lighting technology," says Stephan Berlitz, Head of Lighting Development. "Digital OLEDs are more efficient, lighter, and more homogeneous than conventional lighting systems," he continues, giving a glimpse into the future: "Due to their strong contrast, they will gradually become exterior displays and thus an essential enabler for communication with the surroundings."

The active digital light signature

Headlights and rear lights that appear alive at first glance – this is how customers can imagine the active digital light signature of the A5/S5 Sedan* and the A5/S5 Avant*. A software module in one of the domain computers of the Audi A5 makes this form of light signature possible. The second-generation digital OLED rear lights generate a new image several times per second using six digital OLED panels with 364 segments and a specially developed algorithm. This conveys an impression of liveliness and personal interaction with the car and becomes visible through the constant movement.

In the Matrix LED headlights, the active digital light signature is created by the interaction of the algorithm with 33 dimmable segments. Thanks to the perfect symbiosis between the lighting design and the new function, the light in the new Audi A5 is more vivid than ever. All digital OLED segments in the rear lights are used for this purpose. The individual light segments interact so that the light signature does not vary in overall light intensity.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Second-generation digital OLED combination rear lights

With the next generation of digital OLED technology in the rear lights of the Audi A5/S5 Sedan* and A5/S5 Avant*, Audi is significantly expanding the range of functions, design options, and particularly road safety. For the first time, the digital OLED rear lights can communicate with the immediate surroundings (car-to-x). Compared to the first generation, the number of segments per digital OLED panel has increased from six to around 60. A set of six digital OLED panels with a total of 364 segments are used in the rear lights of the A5 models.

The new E³ electronic architecture makes it possible to control this significantly increased number of segments via a separate software module on one of the domain computers. The increase in segments per digital OLED panel paves the way for developing the combination rear light into a display that further enhances car-to-x communication and road safety.

This innovative digital OLED technology 2.0 creates the conditions for a totally new rear light design and ensures unique homogeneity and very high contrast in the display. Moreover, the display panel does not require additional lighting sources and is, therefore, very efficient. Together, these properties break down the boundaries between two- and three-dimensionality in design once and for all. Uniquely, the brake lights in the Audi A5 sit behind the individual digital OLED panels. Together with the LED tail light and the typically segmented digital light signature, this creates a striking three-dimensional element that extends across the vehicle's full width, including the LED light strip. Audi creates three-dimensional shapes on two-dimensional surfaces. In addition to an expressive LED light strip integrated at the rear, 3D glass creates a successful separation between the tail light signature and the other light functions.

Audi is also taking an innovative approach to the front of the vehicle. The digital daytime running lights with LED technology and the headlight module are optically separated horizontally. This ensures greater clarity in the design and makes the vehicle appear lower overall.

The individual LEDs in the digital daytime running lights – 52 in total – were precisely tailored by the designers to the design philosophy of the new A5. They stretch across the entire width of the Matrix LED headlights. The area of the digital daytime running lights – at the top of the headlights – is a prismatic structure arranged in two rows, one above the other. The design across the width of the headlights creates a link between the Matrix LED headlights and the exterior. In this way, they speak a common language.

Intelligent headlights and rear lights

Audi has also taken the safety functions to a new level. The proximity detection familiar in the first generation of digital OLED rear lights has been extended in the A5. Second-generation digital OLED rear lights include a communication light that, for example, warns other road users of accidents and breakdowns. In addition to the regular tail light graphics, the communication light in the rear lights displays a specific static tail light signature with integrated warning symbols in critical driving or traffic situations.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The brake lights in the Audi A5 are located behind the individual digital OLED panels – a unique arrangement at Audi. This creates a striking three-dimensional body with the LED tail light and the signature segmented digital light signature extending across the vehicle's full width, including the LED light strip.

The communication light of the Audi A5 obtains its data from the swarm. Its second-generation digital OLED rear lights activate the communication light with warning symbols for Emergency Assist, RECAS (rear-end collision alert signal), hazard lights, emergency call (eCall), breakdown call (bCall), and during emergency braking.

The communication light also adds an extra dimension to the exit warning system functionality. Previously, it only informed the occupants exiting the car if another vehicle or bicycle was approaching. Now, the exit warning system also warns road users coming from the rear using a signature specially adapted for this situation, which lights up within the tail light graphics. In this way, the Audi A5 considers other road users in its safety concept and increases road safety for everyone.

In addition, the communication light uses a specific light signature at the front and rear to indicate the status of the vehicle's parking assistant when it is in an automated parking process. This makes it clear to road users in the immediate vicinity that the vehicle is in a safe state.

Digital light signatures in the MMI and the myAudi app

With the optional Matrix LED headlights and digital OLED rear lights 2.0, the new Audi A5 offers an entirely new form of personalization thanks to eight digital light signatures. Drivers have two options for selecting a signature – via the myAudi app or directly in the vehicle via the MMI. When purchasing the Matrix LED headlights and the second-generation digital OLED rear lights, a total of eight signatures are included. A coming-home and leaving-home staging is coordinated with the respective digital light signature. If the myAudi app is used, customers can also select their personal light signatures when they are not in the vehicle. The vehicle adopts the selected light graphics the next time it starts.

Customers can also watch the dynamic lighting scenarios of the Coming Home and Leaving Home functions displayed by the vehicle. This also applies to the digital OLED combination rear lights 2.0 communication light and proximity detection. On request, the Matrix LED headlights can provide a live demonstration of sign glare suppression and object suppression. The high beam assistant can be retrofitted via Functions on Demand. It is also an integral part of the Tech equipment package and comes as standard in the S model.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Interior and infotainment

The interior design philosophy

In its concept, the interior conveys clear structure on the one hand but also emphasizes homely ambiance on the other. The colors and high-quality materials, some of which are made from recycled plastics, extend seamlessly to the seat upholstery. The materials were selected not only from a functional point of view but to ensure a clear design differentiation between the various areas in the interior. Comfort-oriented spaces are emphasized with generous surfaces and soft materials.

The interior design of the new Audi A5 is based on four characteristic features. Firstly, the interior has a **Human-Centric** design, i.e., it is consistently geared towards the needs of its users. The second special feature is the **Digital Stage**, which is clearly arranged in front of the occupants in the form of the Audi MMI displays. With its **Material Driven Design**, the new Audi A5 meets the demand for a generous sense of space with high comfort. The clear layout and logical operation also provide an overview of all situations and form the fourth feature, **Visual Clarity**.

Human Centric

The precise structure of the new interior blends and balances technology, aesthetics, and sustainability. The deliberate placement of elements in the foreground or background creates a three-dimensional spatial architecture individually tailored to each occupant in terms of design and ergonomics and conveys a generous sense of space.

Digital Stage

The Digital Stage with the Audi MMI panoramic display and the optional MMI passenger display shape the interior. The clearly arranged displays are perfectly integrated into the interior. The slim, free-standing Audi MMI panoramic display features a curved design and OLED technology (organic light-emitting diodes). While the curved shape of the display ensures optimum accessibility of the touch area, the design of the outer contour is strongly reminiscent of the typical Audi Singleframe.

The panoramic display emphasizes the driver-orientated dashboard and provides a sharpened cockpit feeling, giving the driver a perfect overview. Special ambiance lighting sets the scene for the digital stage and makes the curved display appear to float.

The “black panel” architecture directly below extends from the driver's to the passenger's side, creating space for the optional MMI passenger display. Active Privacy Mode allows passengers to use the infotainment system without the driver becoming visually distracted. At the same time, it offers support with tasks, such as navigation. In the base version, a black high-gloss panel is installed instead.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Material Driven Design

To bring contrast and balance to the digital and technical areas, the new interior of the Audi A5 features the so-called “Softwrap”. It runs from door to door across the entire width of the dashboard and visually stretches the interior horizontally. Together with the cloth panels in the doors and armrests, this creates a homely ambiance. This Material Driven Design philosophy allows customers to customize the interior to fit their tastes. The interior colors and high-quality materials extend to the seats and the Softwrap. The seats, Softwrap, door mirror, and armrests in the sporty interior S line equipment line feature Cascade cloth and Dinamica microfiber manufactured using sustainable materials primarily from recycled polyester.

The Cascade cloth is reminiscent of natural materials such as wool and is not additionally dyed. It is based on recycled materials such as selvages and recycled polyester. The edging is made from Impressum cloth, which is mainly produced from recycled plastic fibers. Dinamica looks and feels like suede but is made from up to 47 percent recycled polyester sourced from discarded textiles, among other things. The applications in the door and center console complete the overall look. The natural brown apple wood comes mainly from old apple trees from southern Germany.

The materials were also selected from a functional point of view and to clearly differentiate between the various areas of the vehicle interior. Comfort-oriented areas are emphasized with generous surfaces and soft materials, such as Dinamica microfiber containing recycled material. In contrast, the precisely designed control areas are finished in high-quality, high-gloss black to ensure the necessary clarity when interacting with the vehicle. The “Smart Door Panel” is an excellent example of this material philosophy. The control element in the “black panel” styling is integrated into the handle of the driver's door and blends seamlessly into the modern interior. It contains the most essential functions, such as mirror settings, seat and door functions, and settings to aid visibility, such as light controls, window defrost, and heated mirrors.

Visual Clarity

Functionality and aesthetics are realized in the interior down to the smallest detail. This design approach is evident in the door opener and air vents. These are formally connected to each other via trim that visually continues from the control panel to the door. The contour light and the exit warning function are integrated into this detailed element. The Bang & Olufsen lettering is illuminated in appropriately equipped vehicles. Low-lying, slim, horizontally aligned air vents harmoniously complete the overall picture. This exceptionally high-quality area demonstrates how the clever integration of functions leads to clarity in design.

Interior light design

The Audi A5 family’s distinctive interior design is also unmistakable in the dark. The contour lighting in the dashboard and doors emphasizes the width of the interior. The indirect light below the Audi MMI Panorama Display and in the center console creates a visual floating effect. The high-quality materials in the doors are illuminated to great effect.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Added to this is the dynamic interaction light (IAL), which has a variety of functions to support interaction between the car and its occupants. It spans the entire width of the interior as a generous arc. LEDs are installed in the light strip, which means that the IAL fulfills three central functions. Firstly, it sets the scene for the interior. Secondly, the welcome function indicates when the vehicle is locked and unlocked. Thirdly, it provides support in terms of safety, such as visualizing the dynamic turn signal light.

However, the IAL always remains an additional display and does not replace a turn signal in the Virtual Cockpit. The dynamic interaction light is part of the ambiance lighting package plus.

Audi MMI panoramic display

The digital stage belongs to the Audi MMI panoramic display and the MMI passenger display. The slim, free-standing Audi MMI panoramic display has a curved design and OLED technology. It consists of the Audi virtual cockpit with an 11.9-inch visible screen diagonal and a 14.5-inch MMI touch display. The panoramic display gives the interior a generous and airy feeling of space. With its curved shape, it is oriented towards the driver so that they can operate all functions easily without taking their eyes off the road for long. Special ambiance lighting makes the curved display seem to float at night.

Audi complements the digital stage for the front passengers with an optional 10.9-inch MMI passenger display, which is also perfectly integrated into the dashboard design. This allows the front passenger to visit websites, stream video content, navigate, or search for a gas station. Thanks to the dynamic privacy mode, the driver cannot see distracting content, such as videos, while driving. If the front passenger display is not being used or if no passengers are detected, digital decor is displayed as a background image. In the base version, a black high-gloss surface is installed in this position instead.

The Audi virtual cockpit has also been redesigned. In the future, the most important display – the central "round instrument" will be in the middle: It provides the driver with traffic-relevant information and always displays driver assistance functions while driving. In addition, the Audi virtual cockpit visualizes other road users and shows the situation the vehicle's sensors are detecting. The trip computer and the infotainment function controls are to the left and right of this. The driver can also switch between different views in the Audi virtual cockpit to create their own personalized display. Broadly, the new Audi virtual cockpit has been streamlined from the ground up and focuses on the essentials.

Audi assistant and Android operating system

Audi's new MMI operating approach focuses on a touch-based concept with extensive voice control. The aim is to enable fast, safe, and simple operation at all times while driving. The new Audi operating concept follows the global trends in consumer electronics: more innovative functions are anticipated worldwide, while at the same time, the requirements for fully networked vehicle functions and voice control are also growing.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Therefore, the information architecture on the 14.5-inch MMI touch has been completely revised: The menus have a flatter design, and settings can now be accessed with fewer clicks. The new dashboard combines the most important functions at a glance, provides recommendations suggested by artificial intelligence, and can be highly personalized by the driver. For infotainment, Audi relies on an Android-based software platform that is totally customized for the brand and tailored to customers' needs. It also allows owners to install their favorite apps from the smartphone world in their vehicles.

On the center console, in addition to 12-volt and USB-C connections with up to 100 watts of charging power, fixed switches and rotary controls for essential vehicle functions are within easy reach – from the start button for the engine and the gear selector to the switches for the hazard warning lights, ESP, or Audi drive select. The ambiance lighting highlights the curved display in a particularly impressive way at night.

In the models with the new E^3 1.2 electronic architecture, Audi is expanding the existing self-learning voice assistant, Audi assistant. Passengers can activate the assistant as usual with "Hey Audi" or via the push-to-talk button on the steering wheel to ask their questions.
The Audi assistant automatically recognizes whether to execute a vehicle function, search for a destination, or, for example, obtain a weather forecast. Only when the Audi system is unable to answer questions, for example, those requiring general knowledge, are they forwarded to ChatGPT. From the driver's perspective, this happens seamlessly, as all functions are integrated into the Audi assistant. Data security has the highest priority. Questions and answers are deleted after processing to ensure the highest possible data protection. In addition, ChatGPT has no access to vehicle data at any time.

The Audi assistant dashboard is also new and is the central representation of the Audi assistant. Here, users will find proactive suggestions from the Audi assistant, tips on operation, and useful routines that enable drivers to set and enjoy various settings automatically in the future.

Head-up display and Bang & Olufsen premium sound system

The Audi A5 has a configurable Head-Up Display (HUD) that has been developed further compared to its predecessor. Audi is thus taking a significant step forward in this display technology. The HUD can display a wide range of information in a clearly structured manner, such as speed, assistance systems, navigation instructions, or media data.

In an exciting first, the new Audi A5 gives the driver the option of controlling the vehicle and infotainment functions via the head-up display. The controls also allow the driver to scroll through lists with direct selection using the steering wheel buttons – another new feature. This makes it even easier to select recent destinations, for example, without taking one's eyes off the road. Calls can also be answered via the head-up display, and recent calls are displayed and can be selected in the corresponding menu. Media is also controlled via the HUD: in entertainment mode, drivers can use list controls to select their favorite radio station or podcast, for example.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The new head-up display in the Audi A5 models offers the option of integrating driver assistance systems. The new integrated driver assistance display in the head-up display is a 3D visualization of the driver assistance view. For example, if the system detects other cars, cyclists, pedestrians, buses, or trucks, these are displayed in the HUD.

If the vehicle is turning and detects another road user, the system actively indicates their presence in the respective turning direction. A calm mode is also available for the HUD display, which reduces the information displayed to a minimum. In this mode, only the speed or navigation instructions are shown, for example.

Other individual display modes are available depending on the model variant and equipment. The new Audi S5 models have a specific HUD view, the "S-Mode", which displays the current speed, the current gear in manual mode, and a G-meter.

Thanks to the maximum utilization of the installation space and the adapted display technology, the visible image area is over 85 percent larger than before, and the display is even more precise. Thanks to an exceptionally high-quality glass mirror, the image in the windshield is incredibly sharp, high-contrast, and bright, making it perfectly legible at all times. The refresh rate is 60 hertz, which ensures a smooth display.

Music in the car exactly as it was recorded: The optional Bang & Olufsen Premium Sound System with 3D sound and optional headrest speakers in both front seats for the sports seat and some variants of the sports seat plus ensure a natural, acoustically precise, impressive sound experience.

Two highly efficient amplifiers are at the heart of the Bang & Olufsen Premium Sound System, which drive 20 loudspeakers with 810 watts of power. Four are integrated into the front seat headrests (if available), enabling personal surround sound, personal navigation announcements, and phone calls. Additional loudspeakers in the A-pillar and the mid-range speaker create an incomparable 3D surround sound.

The "Symphoria" technology developed by the Fraunhofer Institute plays an integral part in this. It adds dimensions essential for natural sound: Width, depth, and height. This creates a feeling of space in the car. The vehicle interior appears acoustically larger, and music can unfold in its most original form. Compared to the Audi sound system, the Bang & Olufsen Premium Sound System has Vehicle Noise Compensation (VNC), which compensates for disturbing interior noise. Customers can also enhance their sound experience at any time with features that can be added via Functions on Demand. The Bang & Olufsen Premium Sound System is also a real eye-catcher: illuminated lettering showcases it at night.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Panorama glass roof with PDLC technology

A new panoramic glass roof that spans almost the entire interior/passenger compartment enhances the new Audi A5 models. On request, the interior can be darkened or brightened using PDLC technology (polymer-dispersed liquid crystal), which can switch from a light to a darker tint at the touch of a button. In the A5 Sedan*, the panoramic roof extends over six individually switchable segments, while the A5 Avant* has nine such segments. These electrically switchable glass elements contain two PDLC film elements with eponymous liquid crystals floating in between. If no voltage is applied, the crystals form an opaque layer, making the glass roof non-transparent. When electricity is applied, the crystals align, and the roof becomes transparent. At the touch of a button and whenever the user chooses, individual patterns called "zebra patterns" with roof segments alternately switched off and on are available.

Infotainment and connectivity

Customers experience digitalization in the new Audi A5 from an entirely new perspective thanks to the E³ electronic architecture. The new infotainment system uses Android Automotive as its operating system. In addition, content can be updated over the air – for example, from infotainment packages. Apps such as Amazon Music or YouTube are available via the Audi Application Store, which is directly integrated into the system and does not require a smartphone. The integrated eSIM is compatible with the 5G mobile communications standard. It establishes a connection to the Internet and comes from the factory with 3 gigabytes (GB) of data volume per month for three years, which can be increased for an additional charge if required. Alternatively, smartphones can be connected to the vehicle via the tethering function. The infotainment system calculates the data volume using the smartphone data plan.

The phone tray with inductive charging function and mobile phone coupling antenna ensures a smooth connection between supported smartphones and the Audi MMI; new features of the phone tray include increased charging power (previously 5, now 15 watts) and a cooling function. It ensures that the smartphone works and charges reliably. The Audi connect services "Remote & Control" have been extended to ten years. With these functions, drivers can control the vehicle remotely using their smartphone, switch on the air conditioning, or open and close windows. They can also view important data such as the vehicle's location, fuel level, and estimated range.

E³ enables high-performance networking in the vehicle

With the new electronic architecture E³ 1.2 for the A5, customers can experience digitalization more directly than ever before. The name E³ stands for End-to-End Electronic Architecture. Its core elements are five high-performance computers, which Audi calls "High Computing Performance" (HCP). They cover all vehicle functions – from the drivetrain and assistance systems to the infotainment and comfort systems to the safety systems and back-end networking. The E³ architecture is a scalable electronic architecture used throughout the Volkswagen Group.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

One focus of development was on high-performance and secure networking of domain computers, control units, sensors, and actuators to master more complex systems and maintain modularity. Another goal was to achieve a high-performance, seamless back-end connection for car-to-x swarm data applications and computationally intensive offboard functions. Audi plans to implement the electronic architecture in all future models.

Optional extras via Functions on Demand

The configuration and customization of the vehicle do not end with the ordering and delivery of the Audi A5 models. With Functions on Demand, customers can book functions from the areas of infotainment and lighting online – as required and at any time. This means that the car can be continuously adapted to individual needs even after delivery, for example, if the function is not needed permanently. Customers can purchase functions for different periods of time – monthly, annually, or permanently.

The infotainment package includes automatic level adjustment and music revitalization to improve the sound of compressed music files. Another function is the "**Virtual Surround Sound**", which enables a virtually generated surround experience. The vehicle occupants are in the center of the action and enveloped by the sound of the music. The "**Virtual environments**" function simulates sound spaces and environments: Users' favorite music can be experienced as if they were in a concert hall, jazz club, or open-air concert.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Drive technology

The efficient engines in the Audi A5 family cover a wide range, from the conventionally powered entry model to the comfortable long-distance tourer and the dynamic sports car. The engine packages, transmission, degree of electrification, and drivetrain layout are geared toward customer expectations.

The new MHEV plus system in the Audi A5 and S5

The mild hybrid system in the new Audi A5 and Audi S5* consists of three main components: a 48-volt battery, a belt alternator starter (BAS), and a new powertrain generator with integrated power electronics.

The new MHEV plus system in the Audi A5 model series offers significant advantages in terms of CO_2 emissions and fuel consumption compared to the previous MHEV system. In the 2.0 TDI (150 kW front/quattro) (combined fuel consumption in l/100 km: 5.7-4.8; combined CO_2 emissions in g/km: 149-125; CO_2 class: E-D), these are up to 10 g/km or 0.38 l/100 km and in a 3.0 TFSI with V6 engine (270 kW quattro) (combined fuel consumption in l/100 km: 8.0-7.4; combined CO_2 emissions in g/km: 182-169; CO_2 class: G-F) up to 17 g/km or 0.74 l/100 km (according to the WLTP standard test procedure).[1]

The powertrain generator can contribute up to 18 kW (24 PS) of electric power to the drive. When decelerating, the powertrain generator recuperates energy back into the battery (regenerative braking) with up to 25 kW of power. On slight inclines and when maneuvering slowly, the car can be moved solely by the drive train generator. For example, partially electric driving can be used when driving slowly in the city, in slow-moving traffic, or outside city limits when coasting to the next village. The powertrain generator is mounted directly onto the transmission output shaft.

The lithium-ion battery is based on lithium iron phosphate (LFP) and has a storage capacity of 37 ampere-hours, corresponding to just under 1.7 kilowatt hours (gross). Its maximum discharge capacity is 24 kW. The battery is integrated into a low-temperature water cooling circuit, ensuring the temperature remains within optimum conditions between 25 and 60 degrees Celsius.

---

[1] The advantages described regarding CO_2 emissions and fuel consumption include the influence of the additional weight of the MHEV plus system compared to the MHEV system. Further CO_2 -effective effects at vehicle level, which may result from deviations in the drivetrain, weight or driving resistance of the vehicle under consideration with the MHEV plus system compared to a reference vehicle with MHEV technology (e.g., further development of the combustion engine or basic transmission, changes in rolling resistance, aerodynamics or weight) are not taken into account.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

This is the first time that Audi has used an LFP battery for its mild hybrid systems. Compared to conventional lead-acid batteries, these offer advantages in terms of size, storage capacity, and weight and are also very cycle-resistant. This means they lose only an insignificant amount of capacity even after several thousand charging cycles. They can also be charged with high charging currents and are very resilient when delivering electrical power.

The belt alternator starter is responsible for starting the engine and supplying electrical energy to the battery. The belt drive has acoustic advantages and achieves a higher starting speed. This results in a fuel consumption advantage and greater starting comfort. In addition, the belt alternator starter can recover the engine's kinetic energy when switched off, placing the cylinders in the optimum position for restarting.

The powertrain generator is the most powerful electric drive module in the new MHEV plus system. It marks the biggest distinction from Audi’s earlier MHEV technology, which works exclusively with a belt alternator starter. The powertrain generator can contribute up to 18 kW (24 PS) of electrical power to the drive. It sits in a compact unit with integrated power electronics directly on the transmission's output shaft. The position directly behind the gearbox offers several advantages: The power supplied or recuperated by the powertrain generator does not have to go through the transmission. This arrangement means it can be used for both front-wheel drive and all-wheel drive models.

It also makes it possible to move the vehicle purely electrically, even without a combustion engine, when driving slowly – for example, in slow traffic. This is also possible when parking or maneuvering at low speeds. It additionally results in significantly improved vehicle acceleration, as the powertrain generator is the first drive component to deliver torque to the wheels. As a result, the new Audi A5 offers noticeably better responsiveness, and a clear gain in agility is evident, especially during the first few meters when pulling away.

The powertrain generator can support the combustion engine in the speed range between 0 and 140 km/h. This means that MHEV plus briefly provides additional electrical power, enabling the combustion engine to operate as efficiently as possible. Over the entire speed range, the powertrain generator can recoup energy through regenerative braking until the vehicle comes to a standstill. The recuperation power of the powertrain generator is up to 25 kW. The integrated blending-capable brake control system ensures frictionless braking and the best possible recuperation without using the friction brake.

This makes it possible to cover some distances electrically in city traffic with frequent recuperation phases and when moving along in traffic. Thanks to the electric air conditioning compressor, MHEV plus allows continuous operation of the air conditioning system even when the combustion engine is switched off, for example, during red light phases.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Sophisticated MHEV plus operating strategy

The charging strategy for a purely battery electric vehicle (BEV) is simple: the fuller the battery, the greater the available range and the more power it can deliver. The optimum state of charge for a BEV is around 80 percent. This target margin is set lower for a hybrid system. As a rule of thumb, a battery charged to 50 to 60 percent can work most efficiently because it can deliver high currents to the electric motor and store them during recuperation.

The focus of the hybrid system is not on the electric range but on emptying and filling the battery in fast cycles. This allows as much energy as possible to be recovered and used efficiently for propulsion again in a timely way.

The control software evaluates the vehicle's operating status for the interaction between the combustion engine vehicle, powertrain generator, and belt alternator starter. Characteristic maps are stored for the sensible use of the two electric motors and desired torque for drive or recuperation. The battery charge status is also taken into account. The aim is to achieve a stable driving state – the control system arrives at different results depending on the situation. This is because the operating strategy differs not only depending on which combustion engine is installed – the electric components in the drivetrain are always the same – but also on the transmission mode engaged or the style in which the accelerator pedal is pressed and how the Audi A5 is driven. The result for the Audi A5 is not a fast lap time but the lowest possible fuel consumption without compromising driving dynamics.

In driving mode D, the additional electric power from the powertrain generator only kicks in when the accelerator pedal is pressed more than 80 percent – in other words, when the car is deliberately accelerated hard in kickdown. If the characteristic value is below 80 percent, the belt alternator starter takes on the function of delivering additional electric power. If the dual-clutch transmission is set to the sportier S position, the powertrain generator engages considerably earlier.

During sporty driving, the system control also allows the battery to be discharged more deeply because it anticipates that braking will cause electricity to flow back into the battery. At the same time, the system raises the target charge level to over 65 percent so that a lot of energy is available at the exit of the bend to support the combustion engine electrically. The use of the powertrain generator also has advantages in terms of driving dynamics, as the additional torque makes the vehicle more agile when exiting corners.

The powertrain generator is decoupled from the drivetrain at speeds above 140 km/h and when driving in transmission mode D at a slower pace. This is the case at highway speeds going uphill, for example, when the powertrain generator cannot contribute any power. To avoid unwanted drag at the expense of efficiency, the system decouples the powertrain generator from the drivetrain.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The new Audi A5 can also be driven electrically, for example, when the vehicle rolls towards a town limit and then maintains speed with the help of the powertrain generator. Fixed limit values regulate the engagement of the combustion engine: If the battery is at a lower state of charge, the combustion engine switches back on when the power requirement exceeds 14 kW. For emission-free electric parking or maneuvering – not only on level roads but also on slightly sloping terrain – the threshold value for switching on the combustion-engine vehicle is 10 kW of powertrain generator power.

The efficiency improvements in the drivetrain combined with the increased tank capacity of up to 60 liters for diesel models (56 liters for petrol models) ensure a noticeably improved range. This contributes significantly to the long-distance capability and travel comfort of the Audi A5.

2.0 TFSI engines as entry-level version

The entry-level engine is a 2.0 TFSI with 110 kW (150 PS) (combined fuel consumption in l/100 km: 7.6-6.6; combined CO_2 emissions in g/km: 173-150; CO_2 class: F-E). Alternatively, the same engine is optionally available with an output of 150 kW (204 PS) (combined fuel consumption in l/100 km: 7.9-6.6; combined CO_2 emissions in g/km: 179-151; CO_2 class: G-E). The 110-kW variant is only available with front-wheel drive, and the 150-kW variant with front-wheel drive or quattro ultra all-wheel drive.

Many technical modifications raise the 2.0 TFSI to a new level of efficiency. These include the fact that the engines operate using the modified Miller cycle combustion process. It brings advantages, especially under partial load – i.e., in the engine's most common operating range. In the Miller cycle, the intake valves are closed early, and the compression of the injected fuel-air mixture is high. The fuel-air mixture can be run in stoichiometric operation over the entire map. This allows the engine to operate in the optimum range. Fuel consumption and CO_2 emissions are reduced.

In the new A5, Audi is using an exhaust gas turbocharger with variable turbine geometry in a TFSI engine for the first time. This improves the responsiveness and efficiency of the direct injection engine. It enables a more harmonious and agile build-up of torque at low engine speeds. The turbine guide vanes are closed further if the driver accelerates in the lower speed range. This reduces the inlet cross-section into the turbine housing and directs the exhaust gas directly onto the blades. The turbine wheel rotates faster, the amount of fresh air moved increases, and the boost pressure builds up quickly. As the amount of exhaust gas increases or the boost pressure requirement is low, the guide vanes are opened again.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Further optimizations in the 2.0 TFSI include using a friction-optimized timing chain drive and the integration of charge air cooling into the intake manifold. There is also improved oil supply to the crankshaft thanks to a change in the bore concept and a vane cell oil pump with increased delivery volume. An increase in injection pressure to 500 bar brings benefits in terms of emissions; this is achieved by relocating the high-pressure pump to be driven by the intake-side balance shaft.

Audi A5 Sedan / A5 Avant	**TFSI 110 kW**	**TFSI 150 KW (quattro)**
Displacement in cm^3	1,984	1,984
Max. power in kW (PS) at rpm	110 (150) at 3,900–6,000	150 (204) at 4,300–6,000
Max. torque in Nm at rpm	280 at 1,400–3,600	340 at 1,200–4,000
Maximum speed in km/h	216	248 (245)
Acceleration 0 to 100 km/h in s	9.8	7.8 (7.6)
Combined fuel consumption in l/100 km	7.6–6.6	7.9–6.6
CO_2 emissions combined in g/km	173–150	179–151
Drive	Front-wheel drive	Front-wheel drive or quattro
Gearbox	Seven-speed S tronic	Seven-speed S tronic

2.0 TDI engine with MHEV plus

The 2.0 TDI with 150 kW (204 PS) (combined fuel consumption in l/100 km: 5.7-4.8; combined CO_2 emissions in g/km: 149-125; CO_2 class: E-D) sets new standards in the A5 with its MHEV plus technology. This two-liter powerplant of the EA288 Evo generation inherits from its predecessor the optimized combustion engine with cylinder pressure sensor, Twin Dosing for exhaust emission control, and two balance shafts for smooth engine operation. It develops a maximum torque of 400 Nm between 1,750 and 3,250 rpm. The 2.0 TDI is available with a dual-clutch transmission and front-wheel drive or quattro ultra all-wheel drive.

To increase efficiency and comfort, the engine is partially electrified using the new MHEV plus system with a 48-volt on-board electrical system. Partially electric driving reduces CO_2 emissions thanks to the high recuperation performance. The comfort of the TDI is further enhanced by the 48-volt belt starter generator, which ensures a smooth engine start.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

When starting, the car's reaction time is reduced and it is noticeably more agile. Other technical refinements of the 2.0 TDI include separate cooling water circuits for highly flexible thermal management, a cylinder pressure sensor for optimum combustion and minimized internal friction for high efficiency.

Audi A5 Sedan / A5 Avant	**TDI 150 kW (quattro) with MHEV plus**
Displacement in cm^3	1,968
Max. power in kW (PS) at rpm	150 (204) at 3,800–4,200 + 18 (24) additional electrical power
Max. torque in Nm at rpm	400 at 1,750–3,250
Maximum speed in km/h	242 (241)
Acceleration 0 to 100 km/h in s	7.7 (6.9)
Combined fuel consumption in l/100 km	5.7–4.8
CO_2 emissions combined in g/km	149–125
Drive	Front-wheel drive (quattro optionally available)
Gearbox	Seven-speed S tronic

3.0-liter V6 TFSI engine with MHEV plus

Athletic, evocative, and real eye-catchers: the new Audi S5 models are the most powerful in the range at launch and set the benchmark for the sporty mid-size segment. The 3.0-liter V6 turbo engine delivers 270 kW (367 PS) (combined fuel consumption in l/100 km: 8.0-7.4; combined CO_2 emissions in g/km: 182-169; CO_2 class: G-F) and generates a maximum torque of 550 Nm. The top speed of the S5 models is 250 km/h. The V6 TFSI is supported by the MHEV plus system, which provides additional electric power and enables partially electric driving.

Partial electrification using the new MHEV plus system with a 48-volt onboard electrical system reduces CO_2 emissions thanks to partially electric driving and high recuperation performance. Compared to an S4 Sedan TDI (predecessor model), the S5 Sedan TFSI* reduces CO_2 emissions by up to 14 g/km.

The revised S tronic dual-clutch transmission in the Audi S5*, designed for more torque, also reduces weight on the front axle and makes the vehicle more agile. The standard use of quattro with sports differential with torque vectoring in combination with an adjustable all-wheel drive clutch is tuned for lateral dynamics at the highest level.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The new 3.0-liter V6 TFSI (EA839evo generation) is the logical further development of the unit that has been in series production since 2015. The following changes have been made to the engine: redesigned turbocharger with variable turbine geometry (VTG), indirect charge air cooling, optimization of load changes, use of Miller cycle combustion, and modifications to the injection system. In conjunction with the MHEV plus system, very positive characteristics are achieved in terms of driving dynamics, comfort, and CO_2 emissions.

In the V6 TFSI in the Audi S5 models, an exhaust gas turbocharger with variable turbine geometry ensures boost pressure builds up even at low engine speeds. Revised intake ports in the cylinder head, optimized timing, and a compression ratio increased from 11.2:1 to 12:1 achieve an efficient combustion process with more complete combustion of the air-fuel mixture. Two indirect water-to-air intercoolers integrated with the engine replace the previous system with a direct air-to-air intercooler. The water side is integrated into the low-temperature circuit. In addition to more efficient cooling, particularly at low speeds and high loads (hill climbing, towing), the complexity of the application and the integration in the front end of various vehicle variants is significantly reduced. The very short intake paths also improve engine response.

Audi S5 Sedan TFSI	
Displacement in cm^3	2.995
Max. power in kW (PS) at rpm	270 (367) at 5,500–6,300
Max. torque in Nm at rpm	550 at 1,700–4,000
Maximum speed in km/h	250
Acceleration 0 to 100 km/h in s	4.5
Combined fuel consumption in l/100 km	7.8–7.4
CO_2 emissions combined in g/km	178–169
Drive	quattro
Gearbox	Seven-speed S tronic

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Audi S5 Avant TFSI	
Displacement in cm^3	2.995
Max. power in kW (PS) at rpm	270 (367) at 5,500–6,300
Max. torque in Nm at rpm	550 at 1,700–4,000
Maximum speed in km/h	250
Acceleration 0 to 100 km/h in s	4.5
Combined fuel consumption in l/100 km	8.0–7.6
CO_2 emissions combined in g/km	182–171
Drive	quattro
Gearbox	Seven-speed S tronic

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Driving dynamics and ride quality

The new Audi A5 family offers the latest evolution of the brand's signature driving characteristics. The unmistakable feeling where dynamics and comfort are balanced for effortless and precise driving – this is the essence of the brand's DNA. This applies to every driving situation, whether relaxed cruising, sporty driving on winding roads, dead straight highways, accelerating on the outskirts of town, overtaking, or challenging roads with changing road conditions. The Audi DNA was, therefore, also at the top of the specifications when developing the Audi A5.

As a result, the Audi A5 offers precise, effortless, and largely neutral handling, which can be discernibly adjusted in the range between comfort and sportiness when choosing the optional suspension with adaptive dampers up to a dynamic, i.e., slightly oversteering configuration. Overall, the new Audi A5 achieves a noticeable increase in comfort thanks to its optimized suspension and steering setup. The larger tires, which roll more smoothly than their predecessors, contribute to this.

Sporty suspension setup

The new Audi A5 rolls off the production line with a dynamically tuned steel suspension as standard. Alternatively, an S sports suspension (standard on the Audi S5*) and an S sports suspension with electronic damper control are available. Both optional variants lower the ride height by 20 millimeters. In the case of the optional suspension with adaptive damper control, the even more pronounced spread between comfort and sport mode compared to previously is emphasized.

The Audi A5 achieves the goal of neutral to slightly oversteering handling with several detail improvements – the perfect combination of agility and safety. This includes optimized damper tuning, which ensures rapid build-up of lateral force on the rear axle and the modified roll distribution. Camber has been increased on the front axle, and the subframe bushings have been adjusted on the rear axle to increase yaw damping and minimize the delay in the build-up of lateral force between the front and rear axles. Stiffer control arms on the rear axle of the two sports suspensions further reduce phase distortion and thus increase precision.

The base setup of the optional, adaptive S sports suspension can be adapted to individual requirements via Audi drive select. There is a choice of comfort, dynamic, efficiency, and balanced modes. In the comfort setting, the dampers enable relaxed driving even on poor roads. The dynamic mode is recommended for dynamic cornering. Compared to the predecessor model, Audi drive select changes the characteristics between driving modes much more strongly; hence, the differences between comfort and dynamics are considerably more noticeable.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

This can be further emphasized if the driving dynamics control functions are adjusted by selecting "ESC Sport" or "ESC off". This gives the Audi A5 slightly oversteering handling. In the balanced mode of Audi drive select, the desired driving characteristics can be set individually – as a personal optimized setting between sportiness and comfort.

In addition to tires with optimized rolling resistance, the 19 and 20-inch tire range includes performance-oriented tires. The 19-inch performance tires are available to customers as an option. In the S model, the performance tires optimized for lateral dynamics are fitted as standard.

Dynamic driving experience in the S models

The quattro all-wheel drive system has always been the hallmark of dynamic and sporty Audi vehicles. The new Audi S5 models also rely on this technology – combined with the quattro sports differential with torque vectoring on the rear axle, which is now fitted as standard. A new feature of the Audi S5* is the 7-speed S tronic dual-clutch transmission, which allows a particularly sporty shift program and includes a launch control function. Gear changes are barely perceptible in comfort mode, while in sport mode, they offer motorsport-like qualities, i.e., very short shift times. If desired, drivers can activate the manual mode and change gears themselves using the shift paddles on the steering wheel – even at the rev limiter, the transmission does not shift up automatically. Alternatively, the S tronic offers an automatic sport mode, which holds the respective gear for as long as possible in sport mode.

At the heart of the drivetrain in Audi S5 models is the standard quattro all-wheel drive with sports differential on the rear axle. If one wheel loses traction, the differential sends most of the drive torque to the axle with the better grip. During sporty driving, the wheel-selective torque control, a software function of the Electronic Stability Control (ESC), perfects the handling: it brakes the wheels not under load on the inside of the corner minimally before they can lose traction. The difference in motive forces allows the car to turn easily into the bend – the handling becomes even more precise, agile, and stable.

The sport differential, which comes as standard on new Audi S5 models, further optimizes handling. When cornering dynamically, the system eliminates any hint of understeer. When turning in or accelerating in a corner, the torque is mainly distributed to the rear wheel on the outside of the bend. In sporty cornering, the sports differential ensures stable and precise implementation of steering commands and, thus, outstanding agility.

Greater agility thanks to a more direct steering response

The new Audi A5 family comes with enhanced progressive steering as standard. The aim of the steering set-up was to make the car precise and balanced. Audi defines controlled handling as precise and predictable steering behavior in bends. The progressive steering is not too direct but highly precise from the center position. Toward the limit stop, the steering ratio decreases significantly for greater maneuverability.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The steering is no longer connected via rubber elements and is instead rigid and, therefore, stiffer. The torsion bar installed at the steering gear input is significantly stiffer than its predecessor, which reduces the elasticity up to the wheel. This has a highly positive effect on the vehicle's response near the center position, conveys lightness, and ensures precise handling. Stiffer chassis mounts on the front axle enhance this effect. The steering movements are transmitted more directly to the wheels, the steering response is considerably more perceptible behind the wheel, and the feedback from the road is better. Reduced friction ensures a greater steering feel.

For the first time in the mid-size model series, the Audi A5 offers the option of electrically adjusting the steering column to find the most comfortable steering wheel position.

Brake Torque Vectoring for better steering behavior

The Brake Torque Vectoring function developed by Audi and used for the first time in the Audi Q8 e-tron*, brings a noticeable improvement in driving. The system becomes active when a defined grip utilization coefficient is achieved in the longitudinal and lateral directions while cornering. As a result of the targeted braking intervention, the vehicle can turn in even more quickly and nimbly and counteract understeer situations.

Brake Torque Vectoring continuously monitors and reacts. As a result of the targeted braking intervention, the effective range and intensity are greater than the previous system, and the Audi A5 reacts more directly to the steering. Initial steering movements are more precise thanks to the improved turn-in behavior, and the vehicle steers particularly cleanly through corners.

Interplay between front-wheel and all-wheel drive

The new Audi A5 is available in the entry-level engine version as a front-wheel drive model only, while quattro all-wheel drive is available in all other performance levels. The configuration of the quattro ultra all-wheel drive and, thus, the distribution of drive torque is handled very flexibly by the electronic control units. On the one hand, this allows the vehicle to be driven as efficiently as possible, while on the other, the A5 models can utilize all the advantages of all-wheel drive for maximum safety and driving dynamics.

In principle, all-wheel drive is always active upon starting the vehicle. However, based on the driving parameters, the system switches 100 percent of the traction to the front axle when all-wheel drive offers no advantages – for example, when gliding along at a constant speed, driving slowly through the city, or when cornering with little dynamism. When accelerating hard, cornering dynamically, or when the friction coefficient of the road surface varies greatly, the electronically controlled multi-plate clutch of the quattro system closes the connection between the front and rear axles and distributes power flexibly to where it is needed. During heavy acceleration, driving tests on dry roads showed an average traction distribution of 30:70 between the front and rear axles.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The new Audi A5 is the first combustion-engine vehicle to feature traction control based on engine speed. Audi previously only used this control technology in battery-powered electric models. The advantage is faster, more effective, and less noticeable intervention, which results in more propulsion at the point of slip. This applies to both front-wheel drive and all-wheel drive vehicles.

Integrated braking system (iBRS)

The new Audi A5 features the integrated, blending-capable brake control system (iBRS), which was introduced worldwide for the first time with the Audi Q8 e-tron*. With this technology, the brake pedal and brake hydraulics are completely decoupled. When the driver presses the brake pedal, the system calculates whether the recuperation power of the electric motor – in the case of the Audi A5, primarily the powertrain generator – is sufficient for the desired braking or if the disc brakes on the front and rear axles also need to be applied. In fractions of a second, the control unit then regulates how much braking force needs to be generated via the friction brake. A piston in the brake hydraulics builds up the required pressure. Therefore, the braking sensation when the driver presses the pedal remains the same; the transition between recuperation and mechanical braking is imperceptibly smooth and homogeneous, and the braking force remains constant. Thanks to the electro-hydraulic actuation, the system builds up pressure for the wheel brakes extremely precisely and around twice as quickly as a conventional brake system. During automated emergency braking, the maximum brake pressure is applied after just 150 milliseconds.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Driver assistance systems

Relieving the human behind the wheel of routine tasks and intervening to help in critical traffic situations: In the new A5, Audi provides a wide range of driver assistance systems with functions that significantly improve everyday life and road safety for all road users.

Standard features on Audi A5 models from market launch include a rear parking aid with distance display, cruise control and speed limiter, lane departure warning, efficiency assistant, and an attention and drowsiness warning.

The scope of standard equipment in Audi S5 models is significantly expanded. For example, in addition to the functions described above, the S model comes as standard with adaptive cruise assist, park assist plus with distance display, traffic sign-based speed limiter, park assist plus, and, if a trailer hitch has been specified, trailer assist.

A wide range of optional assistance systems can be configured for the Audi A5 and S5 models. A particular highlight is the adaptive driving assistant plus, which uses high-resolution map data and swarm data from other vehicles aggregated in the cloud. The system thus optimizes traffic sign recognition and provides support when accelerating, maintaining speed and distance, and with lane guidance. This can increase ride quality, especially on long journeys.

The system uses various sensors to continually monitor the vehicle's surroundings. These include the radar sensor installed in the front of the vehicle, the front camera, and the ultrasonic sensors. Depending on the region, high-resolution map data and swarm data from other vehicles aggregated in the cloud are also used to improve driving behavior. From a fusion of this information, the system calculates the route ahead and guides the car comfortably and in the center of the lane through traffic using supportive steering interventions.

At the same time, the system reacts to vehicles in front and approaching vehicles with distance control and anticipates and adapts the vehicle speed to speed limits and situations such as bends, junctions, roundabouts, and highway ramps and exits. In stop-and-go traffic, the system brakes to a standstill and can set off again automatically, depending on how long the vehicle has been stationary. The speed is reduced at stop signs to allow the driver to take over the situation comfortably. Thanks to the large number of parameters included, the Adaptive Driving Assistant delivers a comfortable driving experience across the entire speed range and in traffic jam situations. Functional content may vary depending on country availability and vehicle configuration.

The standard Active Front Assist combines four assistance functions: Front Emergency Brake Assist, Evasion Assist, Cornering Assist, and Front Cross Traffic Assist.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The front emergency brake assist provides support in critical situations in front of the vehicle. If a child suddenly runs into the road or the vehicle in front brakes abruptly, the A5 brakes automatically. Pedestrians are detected in a speed range up to around 85 km/h, and vehicles up to the maximum speed. If an imminent head-on collision is detected, the system issues a visual, acoustic, and haptic warning in a multi-stage concept and ultimately initiates emergency braking to reduce speed or avoid the collision if possible.

The swerve assist helps to avoid an obstacle in critical situations. After a warning, the swerve assist initiates the correction of the steering angle through targeted braking and by triggering a small amount of torque on the steering wheel. The swerve assist is available in the speed range between 30 and 150 km/h and requires the driver to actively steer during the entire maneuver.

Front turn assist can prevent a collision with an oncoming vehicle at speeds of up to 25 km/h by applying the brakes. This driver aid is activated when the driver activates the turn signal. Front turn assist then monitors the oncoming lane and applies the brakes if necessary. The driver is informed about the maneuver in the instrument cluster.

The front cross-traffic assist detects critical cross-traffic and issues a visual and audible warning. If necessary, it triggers a short braking jolt – up to a speed of 10 km/h. Junction Assist is active up to a speed of 30 km/h. If drivers want to inch their way into a junction or have limited visibility to exit at low speed, the parking button can be activated. This brings the images from the surrounding cameras to the MMI touch display. They significantly extend the field of vision with a choice of different camera perspectives.

The emergency assistant recognizes within the system limits when the driver is inactive. If no action is taken by the driver, the system takes over control of the Audi A5 and brings the vehicle to a standstill in its lane. The assistant gives a visual, audible, and haptic warning with brake jolts and switches on the hazard warning lights. The occupant protection measures, such as tightening the seat belts to optimize the seating position, are then gradually activated. Once the Audi A5 has come to a standstill, it is prepared for the rescue of its occupants and the emergency assistant makes an automatic emergency call, depending on the country.

The parking assistant plus helps drivers park and unpark effortlessly. The A5 takes care of steering, accelerating, braking, and turning off the engine. Park Assist plus is activated via the MMI. The system can park forwards and backward in parallel and perpendicular parking spaces between vehicles. Park Assist plus is standard equipment in the Audi S5*.

The reversing camera shows the detection area behind the vehicle on the MMI display. Dynamic display elements, such as a calculated path, assist with parking or maneuvering. Four wide-angle surrounding cameras cover the entire area close to and around the vehicle, enabling various views for even more convenient maneuvering. The driver can control the views via the MMI display.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The trailer assistant provides support when using the vehicle as a towing vehicle. It is compatible with all trailers with a fixed drawbar. When reversing, the trailer can be steered automatically with the trailer assist. The direction is conveniently controlled via touch control on the MMI display. When reversing, the camera image shows the system status, the reaction of the combination, and the current or desired articulation angle. While the system is active, a collision between the vehicle and trailer is avoided when reversing.

Adaptive Cruise Control automatically adjusts the vehicle's speed to the traffic flow. Alternatively, drivers can choose the traffic sign-based speed limiter. Here, they can control the speed with the accelerator pedal as usual, but it is limited to the automatically set speed. The set speed values are based on speed limits from the stored and monthly updated map data and the camera-based traffic sign recognition. The currently set speed and – as soon as available – the speed limit ahead are displayed. Adaptive Cruise Control comes as standard on the Audi S5*.

When turning with the blinker activated, the rear turning assistant aids drivers by informing them of bicycles or other vehicles approaching from behind. If a situation is classified as critical, the indicator on the respective mirror lights up dimly. If a collision is imminent during an ongoing turning maneuver, the assistant warns via various escalation levels, such as a brightly flashing indicator, a warning tone, and haptically with a brake jolt.

The exit warning system assists when exiting a parallel parking space by informing drivers or cyclists approaching from behind. If a vehicle is classified as critical in parking mode, the display on the respective mirror and the ambiance lighting in the door light up. The system issues a visual warning If the driver pulls the door handle. The system also prevents the door from opening in hazardous situations. However, if the door is already open and a vehicle is approaching the critical area, an acoustic warning sounds in addition to the visual warning.

The rear cross-traffic assist provides support when pulling out of parking spaces by warning of bicycles or other vehicles crossing behind. If a vehicle is classified as critical, a visual display appears in the MMI. If the vehicle reverses into crossing traffic, the assistant warns acoustically via various escalation levels until it brakes to a standstill to avoid a collision.

While driving on multi-lane roads, the lane change assistant provides support when changing lanes by scanning the traffic in the adjacent lane and informing the driver accordingly. If a vehicle is classified as critical, the indicator on the respective mirror lights up. If a lane change is then initiated, the indicator flashes very brightly. At higher speeds, for example, outside built-up areas on freeways, a possible lane change is detected by approaching the lane line. In critical situations, the system warns visually in the MMI and acoustically with a warning tone.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

The new Audi A5 models help drivers keep an overview of stressful situations. When the vehicle is parked, the MMI display shows the rear seat warning, which warns the driver not to forget anyone, especially children, in the rear seats. If a rear door was opened before starting the journey, an additional message appears in the Audi virtual cockpit on exiting. An extended range of functions is available as an option: sensor-supported occupant detection in the rear. A radar sensor in the headliner scans whether there are people in the rear seats. The system warns the driver not to forget any passengers, especially children, in the rear seat before they leave the vehicle. After the driver has left the vehicle and locked it, the system checks the rear seats and the footwell again. If a person is detected, it reinforces the warning with repeated visual and acoustic signals: Flashing warning lights and horn.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Production and sustainability

The new Audi A5 rolls off the production line at the Audi plant in Neckarsulm. In the future, the new Audi A6 based on the Premium Platform Combustion will also be built at the same location.

With the 360factory, Audi has a clear vision for the production of the future. The company is pursuing a holistic, sustainable approach and is modernizing, digitalizing, and transforming its existing plants. In the production of models based on the PPC at the Neckarsulm site, Audi is focusing heavily on sustainability, with the aim of producing vehicles in a net carbon-neutral[2] way from 2025. To this end, the site relies on efficient production lines, among other things, which will further reduce energy consumption within the plant and thus also reduce CO_2 emissions per vehicle produced. In the body shop, Audi is further increasing the level of automation and using innovative technologies for quality monitoring.

Audi has made a conscious decision to use recycled materials for certain components. These materials, prepared using a recycling process, reduce the use of resources and ensure a closed and, therefore, efficient and sustainable cycle. Some of the materials in the interior are produced sustainably. For example, the Cascade cloth used in the S Line interior is made partly from recycled polyester and laminated to form a single-constituent material so that it can be recycled in the future. Furthermore, the waist rails, inserts, and armrests of the door panels are also based on recycled plastics. Secondary raw materials are also used to a large extent for the carpet, load floor, and trunk side panels.

Audi also relies on numerous recycled plastic components for the exterior. Examples of this are various covers at the front or underbody parts. In the new Audi A5, recycled material is even used in several sophisticated structural components for the bumpers and crash-relevant front-end components.

---

[2] Audi understands net-zero CO_2 emissions to mean a situation in which, after other possible reduction measures have been exhausted, the company offsets the carbon emitted by Audi's products or activities and/or the carbon emissions that currently cannot be avoided in the supply chain, manufacturing, and recycling of Audi vehicles through voluntary offsetting projects carried out worldwide. In this context, carbon emissions generated during a vehicle's utilization stage, i.e. from the moment it is delivered to the customer, are not taken into account.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

State-of-the-art corrosion protection and integrated painting process

The historic predecessor of the new Audi A5 model series, the Audi 80, was one of the pioneers of corrosion protection in 1986 with its fully galvanized body. Today, 38 years later, Audi Neckarsulm relies on the most modern and effective corrosion prevention methods. This includes a process called cathodic dip coating, an electrochemical coating method for metal surfaces that offers a high level of corrosion protection. At the Neckarsulm site, the bodywork is immersed upside down in a tank and rotated forward in a new rotation process. This has several advantages: Firstly, it saves space, and secondly, the components are coated more thoroughly in the rotating process by avoiding the formation of tiny air bubbles and dirt deposits, for example, on the roof. After drying, the protective layer forms the basis for further steps in the paint shop.

Sustainable water-based paints have long been standard at Audi. The painting process has been revised for new models, including the Audi A5, to make it even more environmentally friendly. The A5 uses a method that significantly reduces energy consumption. In the regular painting process, the filler is dried separately. Fillers are generally used to even out minor unevenness on the surface, protect the sheet metal from stone chips, and ensure that the subsequent layers of paint adhere perfectly. Fillers also prevent corrosion. In the new process, these important functions are performed by a pre-zone paint that is applied wet-on-wet. This eliminates the need for intermediate drying and saves up to 140 kWh of energy per vehicle.

The applied paint layers must be dried at the end of the complex painting process. Previously, Audi dried the dip coating using a process of exclusively blowing hot air on the outside. A new process, known as cross-drying, is used to dry the cathodic dip coating. This relies on drying by blowing air into the interior of the body. This means that hot air is blown into the interior through the body openings, for example, through the opening for the windshield, thus drying the paint more energy-efficiently. The transverse dryer also has the advantage that it is better suited to future electric and hybrid vehicles – and their stronger floor assembly, than external drying.

Efficient dry separation saves energy

The paint separation process is also new. Until now, the paint mist – the paint particles not deposited on the body – was collected in water and then disposed of. As part of the expansion of production of the A5 family, Audi in Neckarsulm now relies on dry separation. The paint mist is collected by ultra-modern filters; this form of separation saves a considerable amount of fresh water. In addition, dry separation enables the air to be reused in a recirculated air operation. The proportion of recirculated air in the process is around 90 percent, while the proportion of fresh air is around 10 percent. This means that fresh air conditioning, i.e., preheating and filtering, can be significantly reduced. The energy saving is around 50 kWh per vehicle.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

High degree of automation and state-of-the-art quality monitoring in body construction

Neckarsulm is the only site in the Group that produces all body parts, including mudguards and associated small parts, fully automatically in the body shop. The aim here was to further improve the fitting accuracy of the components and minimize external influences. In the highly complex fender attachment alone, seven robots simultaneously screw the fenders to the body at 18 screw points. The delivery and unloading of the containers with the parts are also fully automated.

The measurements required for quality control in the body shop are largely carried out inline, i.e., without requiring removing a vehicle from the production line. New technology is used at two stations. Four robots are each equipped with a measuring sensor to determine the dimensional accuracy of the component to be tested.

The measurement requires complete coverage of the robot movements, which is achieved with the help of 16 tracking cameras and reference marks. The measurement result obtained from this combination is evaluated and visualized using software and made available to the user. With this new technology, every vehicle produced can be measured directly on the production line. This allows Audi to significantly increase the number of measurements, enabling faster reactions to possible deviations and continuous and uninterrupted quality control.

Augmented reality (AR) software as an app on commercially available tablet PCs with an integrated camera supports employees when inspecting car bodies. These AR applications show the connection points to be checked in real time. This allows the experts to conduct targeted inspections and document directly whether, for example, joining techniques such as weld seams or points are present and executed according to their target specifications. The virtual overlay of the recorded car body is carried out without prior markings using a software-supported tracking system. The application is mobile and can be carried out from any location.

Reduced-fume fusing is a world-first

Another innovation in bodywork construction is virtually fumeless joining. Bonded components such as flaps and doors are fixed with small soldering points to prevent the inner and outer parts from slipping before the adhesive is activated in the oven. The innovation relates to the soldered fixing points, which can be set almost fumelessly in contrast to conventional processes. For example, in traditional processes, the funnel clamp with a gas nozzle directs pressured gas onto the soldering or fixing point during joining. This pressure throws fume particles onto the surface around the fixing point. Previously, the numerous fixing points had to be cleaned afterward, as fume is corrosive and promotes rust formation. On the other hand, the new, virtually fumeless process relies on a rotating gas flow that spreads over the component surface like a protective film and, thus, almost completely prevents fume adhesion. Furthermore, the new process is more than twice as fast as previously used techniques.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Water-saving production in Neckarsulm gathering pace

In the cross-site Mission:Zero environmental program, water supply is one of the issues on the agenda in concerning the responsible use of resources. The aim is to halve ecologically weighted water consumption in production by 2035. In Neckarsulm, Audi relies on a closed water cycle with the wastewater treatment plant of the Unteres Sulmtal wastewater association adjacent to the plant. The water purified by the sewage treatment plant is further treated by Audi for production with the help of filter systems and membranes. After use, the process water flows back into the treatment plant. From 2025, the process water for the entire plant will be fed into a closed circuit, thus saving up to 70 percent of fresh water.

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Market launch and price

With the new A5 family, Audi is opening the next chapter in its successful history in the mid-size segment. The new Audi A5 and Audi S5* will be launched in Germany and numerous other European countries in November. The Audi A5 family will be available to order in Germany from July 2024. The Audi A5 sedan TFSI 110 kW (combined fuel consumption in l/100 km: 7.5-6.6; combined CO_2 emissions in g/km: 171-150; CO_2 class: F-E) will be available in Germany at an entry price starting at EUR 45,200 with standard features including navigation, electrically opening and closing tailgate, and a phone tray with inductive charging function. The Audi A5 Avant* starts at 46,850 euros in this version.

The Audi S5 Sedan* starts at 78,500 euros, and the S5 Avant* at 80,150 euros. The S5 models have a significantly extended range of standard equipment and sportier styling. Standard features include LED headlights plus, LED rear lights pro, 19-inch wheels in double V-spoke design, electrically adjustable sports seats, and a sports leather steering wheel in a 3-spoke design.

Product and Technology Communications
Name Stefanie Melander
Spokesperson model series Audi A4, Audi A5, Lighting
Phone: +49 841 89-38053
Mobile: +49 160 93980732
Email: stefanie.melander@audi.de
www.audi-mediacenter.com

**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Fuel consumption and emissions values of the models mentioned

Audi A5 Sedan TFSI 110 kW
Fuel consumption combined in l/100 km (62.1 mi): 7.5-6.6 (31.4-35.6 US mpg);
CO_2 emissions combined in g/mi: 171-150 (275.2-241.4 g/mi); CO_2 class: F-E

Audi A5 Sedan TFSI 150 kW
Fuel consumption combined in l/100 km (62.1 mi): 7.5-6.6 (31.4-35.6 US mpg);
CO_2 emissions combined in g/mi: 171-151 (275.2-243.0 g/mi); CO_2 class: F-E

Audi A5 Sedan TFSI quattro 150 kW
Fuel consumption combined in l/100 km (62.1 mi): 7.7-6.9 (30.5-34.1 US mpg);
CO_2 emissions combined in g/mi: 176-158 (283.2-254.3 g/mi); CO_2 class: G-F

Audi A5 Sedan TDI 150 kW
Fuel consumption combined in l/100 km (62.1 mi): 5.5-4.8 (42.8-49.0 US mpg);
CO_2 emissions combined in g/mi: 143-125 (230.1-201.2 g/mi); CO_2 class: E-D

Audi A5 Sedan TDI quattro 150 kW
Fuel consumption combined in l/100 km (62.1 mi): 5.6-5.1 (42.0-46.1 US mpg);
CO_2 emissions combined in g/mi: 147-133 (236.6-214.0g/mi); CO_2 class: E-D

Audi A5 Avant TFSI 110 kW
Fuel consumption combined in l/100 km (62.1 mi): 7.6-6.7 (30.9-35.1 US mpg);
CO_2 emissions combined in g/mi: 173-153 (278.4-246.2 g/mi); CO_2 class: F-E

Audi A5 Avant TFSI 150 kW
Fuel consumption combined in l/100 km (62.1 mi): 7.6-6.8 (30.9-34.6 US mpg);
CO_2 emissions combined in g/mi: 173-154 (278.4-247.8 g/mi); CO_2 class: F-E

Audi A5 Avant TFSI quattro 150 kW
Fuel consumption combined in l/100 km: 7.9-7.1 (29.8-33.1 US mpg);
CO_2 emissions combined in g/mi: 179-161 (288.1-259.1 g/mi); CO_2 class: G-F

Audi A5 Avant TDI 150 kW
Fuel consumption combined in l/100 km (62.1 mi): 5.6-4.9 (42.0-48.0 US mpg);
CO_2 emissions combined in g/mi: 146-128 (235.0-206.0 g/mi); CO_2 class: E-D

Audi A5 Avant TDI quattro 150 kW
Fuel consumption combined in l/100 km (62.1 mi): 5.7-5.1 (41.3-46.1 US mpg);
CO_2 emissions combined in g/mi: 149-135 (239.8-217.3 g/mi); CO_2 class: E-D

Audi S5 Sedan TFSI
Fuel consumption combined in l/100 km (62.1 mi): 7.8-7.4 (30.2-31.8 US mpg);
CO_2 emissions combined in g/mi: 178-169 (286.5-272.0 g/mi); CO_2 class: G–F

Audi S5 Avant TFSI
Fuel consumption combined in l/100 km (62.1 mi): 8.0-7.6 (29.4-30.9 US mpg);
CO_2 emissions combined in g/mi: 182-171 (292.9-275.2 g/mi); CO_2 class: G-F

Audi Q8 e-tron
Combined electric power consumption in kWh/100 km (62.1 mi): 25.3–19.5;
combined CO_2 emissions in g/km (g/mi): 0 (0); CO_2 class: A

Audi Q6 SUV e-tron
Combined electric power consumption in kWh/100 km (62.1 mi): 19.7–16.0;
combined CO_2 emissions in g/km (g/mi): 0 (0); CO_2 class: A