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The pinnacle of sportiness – the Audi S8 plus

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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.

Summary:

The pinnacle of sportiness – the Audi S8 plus

- **New top model is breaking the 600-hp barrier**
- **4.0 TFSI- engine outputs up to 750 Nm (553.2 lb-ft) of torque**
- **Zero to 100 km/h (62.1 mph) in 3.8 seconds; top speed of up to 305 km/h (189.5 mph).**

Audi is making a strong statement with the new S8 plus*. With a power output of 445 kW (605 hp) and a top speed of up to 305 km/h (189.5 mph), the new Audi S8 plus* delivers even more enhanced driving performance. The new top model is reinforcing the brand's position in the segment of premium class sedans.

One strength of the A8 model line is its lightweight design. Its body is made almost entirely of aluminum. Its design is based on the Audi Space Frame (ASF) and weighs just 231 kg (509.27 lb) – which is the lightest among the competition.

Audi engineers have further advanced the development of the 4.0 TFSI engine for the new S8 plus. The sonorous V8 biturbo engine now has a power output of 445 kW (605 hp) and a maximum torque of 700 Nm (516.3 lb-ft); in overboost mode, it can even produce 750 Nm (553.2 lb-ft). The large sport sedan – whose power was boosted 63 kW (85 hp) compared to the S8* – accelerates from 0 to 100 km/h (62.1 mph) in 3.8 seconds, and its governed top speed of 250 km/h (155.3 mph) can optionally be increased to 305 km/h (189.5 mph).

Audi and quattro GmbH bundled their expertise in engine development to attain these top figures. Modifications made to the 4.0 TFSI range from its special engine control with speed and charge pressure boosting to its modified exhaust valves and the inner geometry of the turbocharger that was optimized for efficiency.

An eight-speed tiptronic distributes the forces that are generated by the power-boosted V8 engine to a quattro drivetrain with a sport differential. Chassis highlights include the adaptive air suspension sport and dynamic steering, both of which chassis experts tuned specifically for the S8 plus. In Germany, the car comes with 21-inch wheels that were specially designed for the S8 plus and size 275/35 tires.

The increase in top speed to 305 km/h (*189.5 mph*) is part of the dynamic package, which is a standard feature in Germany. In addition to carbon-fiber reinforced ceramic brakes with anthracite-gray brake calipers and the Audi ceramic logo, the package also includes a sport exhaust system modified by quattro GmbH. It gives the S8 plus an unmistakably sporty V8 sound characteristic.

The new S8 plus reveals its position as the sportiest top model of the model series in its design detailing. The standard spoiler lip on the rear lid catches the eye. It is painted in the exterior body color, and it is also available in carbon fiber as an option. The flaps in the side air inlets and the blade on the front apron are made of carbon fiber. The mirror housings in body color are optionally available in gloss black or carbon. The Singleframe grille and double bars are in gloss black, while the honeycomb structure of the side air inlets and radiator screen are in matt black. The trim strips on the side windows and at the rear are gleam in black. Distinctive design characteristics of the S8 plus also include darkened tail lights and a gloss black diffuser insert, which has an additional carbon surround. The dual-branch sport exhaust system branches into two oval gloss black tailpipes on the left and right. As an alternative, customers can choose the S8 styling package.

It features S8 logos at the front and rear and V8 T badges on the front fenders. The matt-effect paint finish floret silver is exclusively available on the S8 plus. All of the colors offered on the S8 are also available on the S8 plus.

The headlights feature Matrix LED technology as standard equipment in Germany; they come with dynamic turn signals. The extremely precise high-beam units each have 25 small, individual LEDs that can be individually switched on or off or dimmed as needed. They illuminate the road superbly without causing glare to oncoming traffic.

The interior of the S8 plus appeals with numerous sporty details, the authenticity of its materials and generous interior space. Contrasting stitching in Arras red is used throughout the black full-leather interior. Piping, also in Arras red, trims the comfort sport seats as well and emphasizes the stylish side of the sport sedan. The headlining and rear parcel shelf are designed in black Alcantara. A contrasting red thread is woven into the upper inlay. The lower inlay is designed in brushed aluminum. Black piano paint trims the gear selector lever of the tiptronic and the center console.

Characteristic of the interior of the S models are the round instruments with gray dials, white pointers, dynamic startup and an S8 logo on the tachometer. The pedals and footrest shine in stainless steel. There is a decorative red ring on the start-stop button, and an S8 logo adorns the three-spoke sport leather steering wheel.

Audi delivers the new S8 plus with the normal wheelbase and offers extensive standard features that include ambient lighting, a convenience key with sensor-driven luggage compartment locking, full-leather interior package, Alcantara package, power-assisted door closing and a DVD/CD changer. In Germany, standard features – in addition to the dynamic package – also include the assistance package with Audi pre sense plus, four-zone deluxe automatic air conditioning system, Bose surround sound system and MMI navigation plus with MMI touch. The new Audi S8 plus will be available at the end of November for a base price of 145,200 euros.

At a glance

The new Audi S8 plus

Drive system

- 4.0 TFSI engine with 445 kW (605 hp) and up to 750 Nm (553.2 lb-ft) of torque in overboost
- Power increased 63 kW (85 hp) compared with S8
- Zero to 100 km/h (62.1 mph) in 3.8 s, top speed of up to 305 km/h (189.5 mph)
- Specially tuned engine controller with speed and charge pressure boosting, modified exhaust valves, optimized efficiency of inner turbocharger geometry
- Eight-speed tiptronic, quattro drive with sport differential and adaptive air suspension sport are standard
- Modified sport exhaust system for unmistakably sporty V8 sound

Chassis

- Track width: 1,632 mm (64.3 in) at front axle, 1,623 mm (63.9 in) at rear axle
- Custom-designed cast aluminum wheels in 5 twin-arm design, size 9J x 21, 2765/35 R 21 tires, available in three versions
- Dynamics package with carbon-fiber reinforced ceramic brakes and dual-branch sport exhaust system, top speed boosted to 305 km/h (189.5 mph)
- Special tuning of sport exhaust system, dynamic steering and adaptive air suspension sport
- Assistance package includes adaptive cruise control with Stop&Go function, Audi active lane assist, Audi side assist, park assist plus and Audi pre sense plus

Body and design

- Audi Space Frame (ASF) aluminum body weighs just 231 kg (509.3 lb)
- Length 5,147 mm (202.6 in), Width: 1,949 mm (76.7 in), Height: 1,458 mm (57.4 in), wheelbase: 2,994 mm (117.9 in)
- Some of the standard design elements of the sporty top model are features in carbon, the black gloss package and darkened LED rear lights as well as a spoiler lip on the trunk lid
- Matt effect floret silver paint offered exclusively for the S8 plus

Interior and controls

- Sporty accents: Full leather package in black with contrasting stitching in Arras red and inlays in carbon twill, red
- Round instruments have gray dials and white pointers with dynamic sweep and S8 logo on tachometer
- Extensive standard features including MMI Navigation plus with MMI touch, Bose surround sound system and four-zone deluxe automatic air conditioning

Production

- Manufactured at the Audi production site in Neckarsulm

Full version

The pinnacle of sportiness – the Audi S8 plus

Audi is breaking the 600-hp barrier in the full-size sedan segment. The new Audi S8 plus* produces 445 kW (605 hp) and delivers 700 Nm (516.3 lb-ft) to the crankshaft. Overboost temporarily increases the latter to 750 Nm (553.2 lb-ft). The large sports sedan sprints from 0 to 100 km/h (62.1 mph) in 3.8 seconds. The electronically governed top speed of 250 km/h (155.3 mph) can be optionally increased to 305 km/h (189.5 mph).

Engine

The 4.0 TFSI in the new Audi S8 plus represents the top version stage of the V8 biturbo engine. Its high-tech character is manifested in numerous details, such as the twin-scroll turbo chargers that provide for the early and rapid development of torque, in the innovative thermal management and in the layout of the cylinder heads. Their intake side is on the outside and the exhaust side on the inside. The turbos and their intercooler are located in the inner V. This layout results in short gas flow paths with minimal flow losses and spontaneous response.

The sonorous engine displaces 3,993 cc, producing 445 kW (605 hp) and delivering peak torque of 700 Nm (516.3 lb-ft). With overboost, this temporarily increases this as much as 750 Nm (553.2 lb-ft). The large sports sedan accelerates from 0 to 100 km/h (62.1 mph) in 3.8 seconds. The electronically governed top speed of 250 km/h (155.3 mph) can be optionally increased to 305 km/h (189.5 mph). Output has been increased 63 kW (85 hp) compared with the S8* and fuel consumption is 10.0 liters per 100 kilometers (231 grams CO₂ per kilometer) [23.5 US mpg/371.8 grams CO₂ per mile].

The Audi S8 plus achieves these values thanks to the technological expertise of Audi and quattro GmbH. Their many years of experience with high-performance models has flowed into the further development of the 4.0 TFSI. Measures range from the specific engine management with increases to both engine speed and boost pressure to modified exhaust valves to the internal geometry of the turbochargers, which has been optimized for efficiency. The cylinder on demand (COD) system activates just four of the eight cylinders when operating at part load. Active Noise Cancellation (ANC) transmits precise antiphase sound to the cabin via the loudspeakers of the sound system to compensate for any intrusive noise while the engine is operating on four cylinders.

Drivetrain

An eight-speed tiptronic distributes the power of the enhanced-output V8 engine to the quattro drivetrain with a sport differential. The lower gears of the classic torque converter transmission are tightly spaced for sporty performance, while their high overall gear ratio of 7.0:1 reduces fuel consumption. All gear changes are fast and very flexible. The highly efficient oil pump and the heating of the transmission by the engine coolant during the warmup phase contribute to the high efficiency of the eight-speed tiptronic. A hydraulic accumulator enables the start-stop function.

The Dynamic Shift Program (DSP) is responsible for transmission management. It offers two automatic modes, D and S, and is linked to the route data provided by the MMI navigation plus. The driver operates the eight-speed tiptronic purely electronically, either with the standard shift paddles behind the steering wheel or via the elegant selector lever on the center tunnel console. In both cases, a brief tap initiates gear changes.

With its asymmetric and dynamic configuration, quattro permanent all-wheel drive provides for handling that is both sporty and stable. During normal driving, 60 percent of the power is sent to the rear axle and 40 percent to the front. If one axle slips, the majority of the power goes to the other axle. The standard sport differential provides for even greater dynamics. It uses two superposition gears to steplessly vary the distribution of the power between the rear wheels. In fast curves, the sport differential literally pushes the big sports sedan into the radius.

Chassis

With a track of 1,632 millimeters (*5.4 ft*) the front axle comprises five links – two transverse links, the support link and the control arm plus the track rod. All wheel control arms and many other parts, such as the bearing mount and the pivot bearing, are made of aluminum. The five-link design can handle longitudinal and lateral forces separately.

The S8 plus-specific adaptive air suspension is a chassis highlight. The five modes the driver can select for the adaptive air suspension via the Audi drive select dynamic handling system influence the body's ride height. In auto mode, the superstructure is lowered 20 millimeters (*0.8 in*) when the S8 plus drives for longer than 30 seconds at more than 120 km/h (*74.6 mph*). The body is not lowered in comfort mode.

In dynamic mode, on the other hand, the body is lowered ten millimeters (*0.4 in*) from the outset, and is lowered another ten millimeters when the 120 km/h (*74.6 mph*) threshold is reached. In efficiency mode, numerous systems work particularly efficiently, and the fifth mode, individual, gives the driver the opportunity to adapt the system within certain limits to his or her preferences.

The Audi engineers have tailored the standard dynamic steering specifically to the S8 plus. At the heart is a superposition gear that varies the steering ratio by nearly 100 percent as a function of driving speed and the setting in Audi drive select. When maneuvering and in city traffic, the system is very direct. On the highway, an indirect steering ratio and less boost promote straight-line stability. At the vehicle's cornering limits, dynamic steering minimizes oversteer and understeer by making subtle, lightning fast adjustments, if necessary. It also counteracts the car's pulling to one side when braking on surfaces with different coefficients of friction.

The rear axle has a track width of 1,623 millimeters (*5.3 ft*) and is a track-controlled trapezoidal link construction that ensures supreme handling and comfort. The electromechanical parking brake, which acts on the rear wheels, also serves as the emergency brake. Audi hold assist makes it easier to start out on uphill and downhill slopes.

In Germany, the new Audi S8 plus comes standard with 21-inch, cast aluminum wheels with size 275/35 tires. The wheels feature a design that is exclusive to this model.

The carbon fiber-reinforced ceramic brakes are part of the dynamic package, which is standard in Germany. Specially developed cooling channels in the ventilated and perforated brake discs ensure that the 19-inch, high-performance brake system is kept at the optimal temperature. The brake calipers are finished in high-gloss anthracite and sport the "Audi ceramic" logo.

The dynamic package includes increasing the top speed to 305 km/h (*189.5 mph*). It is standard in Germany. Besides the carbon fiber-reinforced ceramic brakes, it also includes a sport exhaust system modified by quattro GmbH. The modified internal structure of the center muffler and the two rear mufflers give the S8 plus an unmistakable and sporty V8 sound signature.

The Electronic Stabilization Control (ESC) system includes a sport mode, which the driver can select in the MMI operating system. Engine intervention is largely deactivated in this case, and braking interventions are weakened somewhat, enabling skilled drivers to move the big sports sedan particularly dynamically.

Body and exterior design

The new Audi S8 plus is 5,147 millimeters (*16.9 ft*) long and 1,949 millimeters (*6.4 ft*) wide. At 1,458 millimeters (*4.8 ft*) in height, it is lower than its core competitors. The wheelbase measures 2,994 millimeters (*9.8 ft*).

Another strength of the big sports sedan is its lightweight construction. The body is made almost entirely of aluminum. In Audi Space Frame (ASF) design, it weighs just 231 kg (*509.3 lb*) – the best figure in its class. The unladen weight (without driver) is just 1,990 kilograms (*4,387.2 lb*).

The ASF design, which Audi debuted over 20 years ago, is roughly 40 percent lighter than a corresponding steel body. The layout of the Audi Space Frame follows bionic principles: Like the bones in a skeleton, all of the parts combine optimal function with low weight. Aluminum extruded sections and die-castings form a frame to which the aluminum sheets are joined by friction connections. Audi uses the material in a tailored configuration. The ASF of the S8 plus combines 13 different grades of aluminum.

The sporty harmony is evident in the dynamic exterior design of the Audi S8 plus. Elegance characterizes the interplay between every surface, line and volume. The proportions are balanced, the outer skin appears homogeneous and the coupe-like roofline lets the silhouette flow. The surfaces exude composure and prestige, and contrast with the sharp lines. Viewed from the side, the S8 plus is taut and athletic. Typical of the Audi line, the body accounts for two-thirds of the vehicle's overall height, the greenhouse for the remaining third. The tornado line below the windows runs tightly above the wheel arches to give the big sports sedan a powerful road stance.

Headlights with Matrix LED technology and dynamic turn signals are standard in Germany. The high-precision high beam is broken up into 25 small, individual light-emitting diodes per unit. Groups of five shine through a common reflector. When the light switch is set to "Automatic" and the high beams are on, the system is switched on outside of urban areas at speeds of 30 km/h (*18.6 mph*) and above.

As soon as the camera in the S8 plus detects another road user, the headlights switch off or dim individual LEDs in the blink of an eye. They thus light the road superbly without blinding oncoming traffic.

The LEDs in the Audi Matrix LED headlights also assume the function of cornering lights, selectively brightening or dimming to shift the focal point of the light along the curve. They do this shortly before the wheel is turned based on predictive route data provided by the MMI navigation plus. Another function is the front and rear dynamic turn signals. The LEDs in the turn signal light illuminate as a block at a pace of 150 milliseconds to indicate the direction the driver wants to turn.

Numerous design details underscore the position of the S8 plus as the sportiest top model of the model series. The hexagonal Singleframe grille and the double bars are finished in gloss black, while the honeycomb grilles of the side air inlets and the radiator grille are black matt. The flaps in the side air inlets and the blade of the front apron are made of carbon. The door handles and mirror housings are painted in body color; the latter are optionally available in gloss black or carbon. The trim strips at the side windows and rear are in gloss black. The standard spoiler lip on the trunk lid is painted in body color, with carbon available as an option. Other distinctive design features of the S8 plus include the darkened rear lights and the gloss black diffuser insert framed with an additional carbon clasp. The dual sport exhaust system terminates in two oval, gloss black tailpipes each left and right. The S8 styling package can also be ordered. It features S8 logos front and rear, and V8 T badges on the front fenders.

All of the colors in the S8 program are available for the S8 plus: two solid finishes and ten metallic or pearl effect finishes. These are Argus brown, brilliant black, cuvée silver, Daytona gray, floret silver, glacier white, Havana black, ibis white, moonlight blue, monsoon gray, mythos black and Oolong gray. The matt effect finish floret silver is celebrating its premier in the Audi product portfolio. It is reserved exclusively for the new S top model.

Interior and equipment

The interior of the S8 plus stands out with numerous sporty details, the authenticity of the materials and a generous amount of space. The exterior design carries over into the clean lines of the cabin. Its salient element is the “wrap-around” – an arc spanning the cabin. It encircles a slim, low instrument panel, reinforcing the impression of expanse and freedom. The front of the instrument panel is a gentle wave, and horizontal lines underscore the width.

The front section of the console is visually separated from the instrument panel. Wide and slightly inclined, it serves as the control panel for the four-zone deluxe automatic air conditioning. It enables quiet, indirect ventilation according to multiple air distribution profiles. The automatic air conditioning has a separate rear air conditioner and controls 25 servo motors.

Below the keypad for the air conditioning system is the terminal for the MMI operating and multimedia system. At its center is the large rotary pushbutton with the soft and hard keys for navigation within the menus. The control panel to the right is for audio, the left panel is the touchpad of the MMI navigation plus. The eight-inch monitor of the MMI system is retracted into the instrument panel when not in use. It extends upward electrically when the system is started. It renders all images in elegant, three-dimensional graphics.

The standard ambient lighting – LEDs, light guides, light strips and the indirect lighting of the center console – takes center stage in the dark. The driver can choose between the color schemes ivory, polar, or ruby/polar, and adjust the brightness in four zones via the MMI.

Arras red contrasting stitching is found throughout the black full-leather interior. Piping, again in Arras red, frames the comfort sport seats and emphasizes the stylish side of the sports sedan. The headlining and rear shelf are in black Alcantara. In the S8 plus, a red contrasting thread has been woven into the upper inlay. The lower inlay is in brushed aluminum. Black piano finish adorns the tiptronic selector lever and the center console. Characteristic for the interior of the S models are the dial instruments with gray faces, white needles with dynamic sweep and the S8 logo in the tachometer. The pedals and footrest shine in stainless steel. A red ring adorns the start-stop button; an S8 badge the three-spoke sport leather steering wheel.

The comfort sport seats offer 22-way adjustment, which also includes pneumatic functions for the lumbar support and the side bolsters. Their slightly raised side bolsters provide support during dynamic driving; their perforated, diamond-patterned seat upholstery emphasize the stylish side of the sports sedan.

Three-stage ventilation is offered in addition to heating. Four small fans draw air off through the perforated seat covers. The ventilation option is coupled with a massage function, with which ten pneumatic pillows run through five programs (pulse, wave, stretch, lumbar, shoulders) in a choice of five intensities.

Audi delivers the new S8 plus with the normal wheelbase and offers a comprehensive list of standard equipment, including ambient lighting, convenience key with sensor-controlled luggage compartment locking, full-leather package, Alcantara package, power-assisted door closing and a DVD/CD changer. Besides the dynamic package, standard equipment in Germany also includes the assistance package including Audi pre sense plus, four-zone deluxe automatic air conditioning, Bose surround sound system and MMI navigation plus with MMI touch. The new Audi S8 plus will be available in late November for a base price of 145,200 euros.

Fuel consumption of the models named above:

Audi S8

Combined fuel consumption in l/100 km: 9.6 – 9.4** (24.5 – 25.0 US mpg);

Combined CO₂ emissions in g/km: 220 – 216** (354.1 – 347.6 g/mi)

Audi S8 plus:

Combined fuel consumption in l/100 km: 10.0 (23.5 US mpg);

Combined CO₂ emissions in g/km: 231 (371.8 g/mi)

** Fuel consumption and CO₂ emissions data as well as the efficiency classes are dependent on the choice of wheels and tyres.