

Audi Q8 Sportback e-tron - Prediction of electric range

## Range display and route planner: well-informed at all times

During journeys, drivers need reliable information regarding remaining range for peace of mind and to allow them to reliably plan charging stops on long-distance trips. The e-tron route planner in the Audi Q8 e-tron\* gives drivers the support they need by taking numerous factors into account when calculating the remaining range, including the individual driving style and the use of comfort features such as air conditioning as well as external factors including congestion, topography along the route, and outside temperatures. All of this information ensures the route planner can ideally integrate charging stops into the planned route.

The driver can control the charging schedule from within the vehicle via the Audi Multi Media Interface (Audi MMI) or before leaving via the myAudi app. Without the technical support of the navigation system and the route planner, the calculation of the remaining range relies on recent consumption values. The system also reflects driver-specific properties, such as an especially sporty or economical driving style. Briefly higher loads, e.g., due to energy-intensive passing maneuvers, are reliably averaged out, making calculations even more realistic.

For route-based range calculation, the recent consumption data is supplemented with additional data from the Audi Q8 e-tron\* route planner – the system considers the topography along the planned route.

In order to calculate the range as precisely as possible, the system divides the planned route into sections and assigns each stage an expected driving speed. Additional factors include congestion, but urban traffic, traffic jams, blocked traffic, speed limits, and main through roads also have a live influence on the calculation. Examples of vehicle-related factors include changes in usage behavior related to comfort features or sudden changes in driving behavior.

If the occupants switch the heating or air conditioning on or off, the system adjusts the range display accordingly. The route planner makes looking for charging stations along the route intelligent and reliable to ensure the shortest possible travel time, only as many charging stops are suggested as are necessary to reliably reach the destination. If the route or consumption changes, the system adjusts the charging stops. Two short stops to charge at a station with high-power charging points can save time, compared to one long stop at a charging station with lower-power charging points.



The route planner also takes alternative routes with better charging infrastructure into account when calculating the ideal total travel time. The system gives preference to high-power charging (HPC) stations and reflects daily updated data, such as detailed information on payment and authentication options, precise operator data, and any access restrictions.

\***Audi Q8 50 e-tron** Combined electric power consumption in kWh/100 km (*62.1 mi*): - (NEDC); 24.0-20.1 (WLTP); combined CO2 emissions in g/km (*g/mi*): 0 (0)

**Audi Q8 55 e-tron** Combined electric power consumption in kWh/100 km (*62.1 mi*): - (NEDC); 24.4–20.6 (WLTP); combined CO2 emissions in g/km (*g/mi*): 0 (0)

**Audi SQ8 e-tron** Combined electric power consumption in kWh/100 km (*62.1 mi*): - (NEDC); 28.0-24.6 (WLTP); combined CO2 emissions in g/km (*g/mi*): 0 (0)

**Audi Q8 50 Sportback e-tron** Combined electric power consumption in kWh/100 km (*62.1 mi*): - (NEDC); 23.7–19.5 (WLTP); combined CO2 emissions in g/km (*g/mi*): 0 (0)

**Audi Q8 55 Sportback e-tron** Combined electric power consumption in kWh/100 km (*62.1 mi*): - (NEDC); 24.1–19.9 (WLTP); combined CO2 emissions in g/km (*g/mi*): 0 (0)

**Audi SQ8 Sportback e-tron** Combined electric power consumption in kWh/100 km (*62.1 mi*): - (NEDC); 27.0–23.5 (WLTP); combined CO2 emissions in g/km (*g/mi*): 0 (0)

Only consumption and emissions values are only available according to WLTP and not according to NEFZ for this vehicle. Information on fuel consumption and CO2 emissions in ranges are dependent on the chosen vehicle specification.

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