



Audi reveals updated R8 LMS ultra

By Autoweek - Published: Nov 16, 2011

Audi will replace its current R8 LMS GT3 sports car with an updated version known as the R8 LMS ultra for 2012, the automaker said on Thursday.

The R8 LMS GT3 won 115 races and 12 national and international titles at the hands of Audi customers during its three seasons of competition. The company decided to improve the GT3 for 2012 with the help of its customers.

"Our customer teams provided us with valuable suggestions and stated their wishes for the various fields in which the car is used," quattro managing director Werner Frowein said in a company statement. "We have close ties to our customers and analyzed their suggestions and wishes worldwide and subjected the R8 LMS to further development in many details. In the R8 LMS ultra, we consistently implemented all the performance measures which ensure that we'll be able to continue to offer an intercontinentally competitive and attractive race car in the future."

The R8 LMS ultra has new doors made of carbon-fiber-reinforced plastic in combination with high-energy-absorbing crash foams that help reduce the race car's weight and increase safety. The new PS1 safety seat developed by Audi, which is now part of the standard equipment, provides protection and surpasses the mandatory minimum requirements under extreme loads.

Audi updated the transmission to better handle long-distance runs. The Audi R8 LMS already proved it was an excellent long-distance racer by achieving overall victories at the Bathurst (Australia) 12 Hours, the Spa 24 Hours and the Zolder 24 Hours. It also claimed a GT3-class victory and a third-place overall at the Nürburgring 24 Hours.

A new exhaust system equipped with a race catalytic converters helps improve the engine's characteristics. The V10 mid-engine can draw on even higher torque at lower engine speeds. The 5.2-liter engine delivers a power output of up to 570 hp, depending on restrictor regulations.

Audi added a larger engine oil cooler and transmission-fluid cooler. The oil cooler for the steering hydraulics was moved from the front of the car to the vehicle's mid-section. Larger side air vents provide better airflow to the cooling systems. Audi also improved air supply to the front radiator as well as the interior ventilation.

The R8 LMS ultra's chassis got numerous updates, including optimized brake cooling for the front wheels, uniball joints for the transverse control arms and Bilstein gas dampers.

Aerodynamic improvements complement the changes for 2012. The wider front hood has optional louvers, subject to permission by the homologation rules for the various racing series. The new rear wing was widened and now has larger end plates. Work in the Audi wind tunnel has led to a yet more efficient position of the wing for maximum downforce and minimized aerodynamic drag. A new front plate with optimized diffusion under the front end improves aerodynamic balance.

All 2012 vehicles will be equipped with the upgrades described above. Audi will also offer conversion kits for previous models.

Audi is pursuing a subsequent homologation for individual aerodynamic improvements to include the 2011-generation vehicles to ensure that the current model continues to be competitive with slight modifications.

"We're convinced that the Audi R8 LMS ultra will continue the successes of its predecessor," said Romolo Liebchen, head of customer sport at quattro. "With over 40 customer sport vehicles delivered, the first generation of the R8 LMS was already a sporting and commercial success."