

Next level of automated driving in elegance: Webasto presents roof sensor integration at CES 2024

At this year's Consumer Electronics Show (CES) in Las Vegas, automotive supplier Webasto exhibited an elegant solution for sensor integration into a roof system together with Luminar.

Stockdorf/ Las Vegas – January 11, 2024 – Webasto elegantly integrates a long-range lidar from Luminar with new packaging size into its Roof Sensor Module (RSM). With integrated sensors and functions for sensor availability, the module enables driver assistance functions and automated driving. Webasto, a top 100 supplier, showcased this innovative roof technology at the Luminar booth (West Hall, Booth 5917) during CES in Las Vegas (Jan. 9-12, 2024).

Collaboration with Luminar

Luminar, a global automotive technology company developing lidar-powered safety systems for passenger vehicles, is the first to enable next-generation safety and autonomous capabilities for production vehicles. At CES, Luminar will exhibit a long-range lidar seamlessly integrated into the roofline by Webasto. The elevated position of the lidar is optimized for performance and ensures reliable monitoring of the vehicle's surroundings. The compact roofline module can be integrated into the car at automakers' production lines in combination with panoramic roofs, thereby simplifying the production-steps. In terms of sensor availability, Webasto and Luminar are also integrating cleaning and cooling functions into the roof module.

"Due to extensive virtual and physical tests, Luminar and Webasto offer a very sophisticated solution. This coordinated interplay of technologies saves our customers a great deal of development work," explained Jan Henning Mehlfeldt, responsible for the global roof business at Webasto.

The concept of the Roof Sensor Module

The RSM from Webasto offers automakers the option of integrating lidar, camera and radar sensors into a vehicle's roof seamlessly. Depending on customer requirements, the roof specialist can combine the desired type and number of sensors into its RSM – with elegant solutions for the entire spectrum from enhanced partial automation (level 2+) to complex modules for conditional automation (level 3) and high-automation (level 4). By incorporating additional features such as panoramic roofs, an opening function, integrated solar technology, ambient light and switchable glazing into the RSM, Webasto also demonstrates its expertise as a module integrator. For trucks and light commercial vehicles, Webasto can also be the module integrator to close gaps between sensors, the AV-system and the vehicle. The individual and modular off-the-shelf solutions for sensor vehicle integration ensure high sensor availability. The Roof Sensor Module can be an attractive solution to integrate the required sensor set and sensor availability function in a cost-efficient way for this logistic segment due to design for assembly and lean serial production of complex modules.

Reliable sensor availability

In addition to sensor technologies, functions to ensure sensor availability, such as cleaning, cooling, de-icing and anti-fogging systems, can also be integrated into the RSM. These ensure that the sensors function reliably even in harsh weather conditions and provide visibility by day and night. As a mechatronic module integrator, Webasto relies on a network of development partners and collaborates closely with market-leading suppliers for the RSM's sensor and technology portfolio.

"Reliably monitoring surroundings, recognizing obstacles and hazards in all weather conditions, and ensuring the safety of all road users and pedestrians are some of the major challenges facing automakers during the transition from classic to autonomous vehicles. Camera, radar and lidar technologies facilitate this technically, but only the ideal positioning and availability of such sensor technologies will deliver a perfect result. For Webasto, as a roof system specialist,

integrating sensor technology into the car roof at the highest point of the vehicle is therefore a logical step and perfect solution for the future of autonomous mobility,” said Mehlfeldt.

About Webasto

As a global innovative systems partner to the mobility industry, Webasto is one of the 100 largest suppliers to the automotive sector worldwide. In development, manufacturing and sales, the company focuses on roof systems on the one hand and on vehicle electrification on the other hand. The product range includes, openable and fixed panoramic roofs, electric high voltage heaters and batteries, as well as thermo management solutions. Among the customers of Webasto are manufacturers of passenger cars, commercial vehicles, and boats, as well as dealers and end customers. In 2022, the Group generated sales of over 4 billion euros and employed about 16,800 people at more than 50 locations. The headquarters of the company, which was founded in 1901, is located in Stockdorf near Munich (Germany). For more information, please visit www.webasto-group.com

Media Contact

Webasto Group
Birgit Felske
Spokeswoman Roof
Phone: +49 89 8 57 94-51181
E-Mail: birgit.felske@webasto.com

Alexandra Iordache
Communications Manager, Webasto Americas
Phone: 586 202 5875
E-Mail: alexandra.iordache@webasto.com