

Get to market faster with comprehensive automotive testing services

Demonstrate compliance to current and evolving standards in the automotive and mobility industries. As a global safety science leader, UL Solutions can help you accelerate product development by providing testing services that increase consumer confidence in the reliability and safety of new mobility electric vehicles, autonomous systems and consumer electronics.

We aim to help our customers improve product quality and reliability for their interconnected safety-critical systems and accelerate time to market. Responsive and customer-focused, UL Solutions can provide validation testing, as well as qualification testing for the reliability, safety and function of products to original equipment manufacturers' (OEMs) standards, while providing the quick turnaround time critical to our customers.

As safety and security are highly interrelated, OEMs and automotive component and system suppliers are increasingly searching for an end-to-end partner for testing solutions to address evolving safety and security standards and regulations. Our current mobility services help you navigate complexity and develop a framework for automotive standards and best practices. Our validation testing helps you improve product quality and reliability, which is vital for interconnected safety-critical vehicle systems and enhancing mobility safety.

To learn more about our testing services, visit <u>UL.com/industries/</u> <u>automotive-and-mobility/automotive-</u> <u>and-commercial-vehicles</u>



Safety. Science. Transformation.™



What we offer

As an ISO/IEC 17025 compliant laboratory, we are entirely focused on electrical, environmental and mechanical testing for automakers and their suppliers. We provide services such as:

Environmental simulation

Testing in thermal, humidity, and other environmental conditions is essential to assessing whether products are fit for purpose and will not be adversely affected by ranges in temperature, moisture, or other conditions. We perform many of the industry-standard temperature and humidity tests, thermal shock, moisture and dewing, and can simulate almost any thermal condition from -70 ° C to +200 ° C, low pressure/high altitude, or accelerated conditions.

Vibration testing

Vibration and shock testing can test whether components and products are able to endure the stresses caused by movement, transportation, resonances, and repeated bumps or shocks, as well as whether systems generate nuisance noise. We offer a wide variety of vibration and mechanical shock testing and can simulate almost any vibration stress, including random vibration, sine vibration, shaker shock, drop shock, squeak and rattle, real-time simulation, and many specialty combinations such as sine-on-random, Kurtosis, and random-on-random.

Electrical testing

When voltages, signals, pulses, and switching conditions are allied accurately it can mean the difference between life and death. From radios to battery systems, from electrical braking modules inverters or airbag sensors, we have the expertise to make your electrical testing a success.

Vehicle thermal management systems testing

Thermal regulation is essential to increasing the efficiency of many systems and preventing chemical reactions from reaching thermal runaway, such as those that occur when charging or using power stored in a battery system. We have extensive experience testing radiator systems, oil chillers, AC refrigerant or other fluid cooling systems, coolant hoses, battery cooling systems, HVAC lines, plumbing connectors, and almost every other aspect of fluids testing.



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