



ADAS/AD SENSOR PERFORMANCE TESTING IN ADVERSE WEATHER CONDITIONS

Center for Mobility and Sensor Testing Roding

THE CHALLENGE

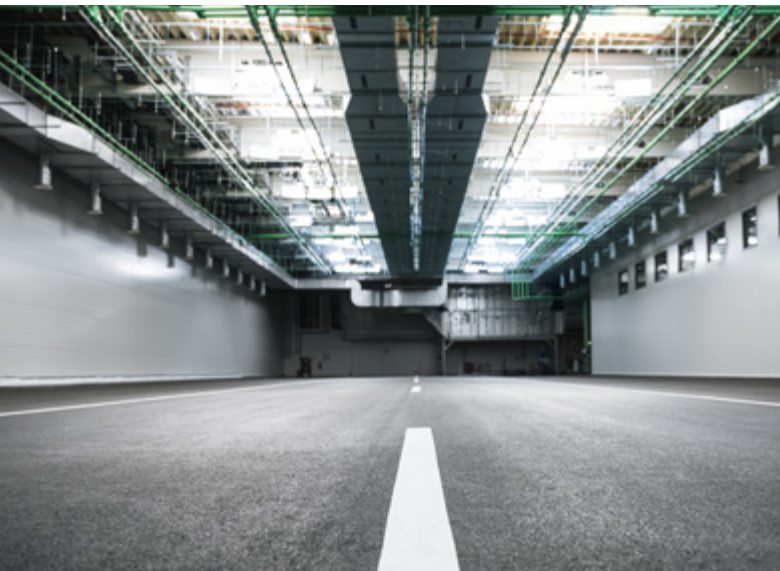
The sensor technology of future automated driving functions and advanced driver assistance systems must function safely in all weather conditions. Despite their proven relevance, challenging scenarios such as rain, fog and glistening light are currently not considered in certification testing, as their accurate reproducibility and realistic replication outdoors and indoors is challenging.

THE SOLUTION

At our Center for Mobility and Sensor Testing in Roding, we can recreate specific weather scenarios to validate and verify your ADAS/AD sensor systems. The unique indoor laboratory offers 1,600 m² for sensor testing in adverse weather conditions, including 1,000 m² of rain and fog facility to create the exact weather condition that is needed for your certification or performance test cycle. A sophisticated water recycling system ensures environmental protection and a significant reduction in wastewater. By continuous variation of illuminance and colour of background lighting, critical light conditions such as dusk and dawn can be simulated.



Get in touch and find out more
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BENEFITS



Reproducible ADAS/AD sensor validation in adverse weather conditions



Realistic rain intensity and drop size distribution



Realistic illuminance "From Dusk till Dawn"



Virtual sensor model validation with "Digital Twin" of the sensor hall

MAIN FEATURES

- Indoor asphalt street (84 m x 19.25 m)
- Variable design of road boundary lines and road layout
- Holistic automation of the complete testbench
- Control center for end-to-end monitoring and documentation of all calibration parameters

RAIN FACILITY

- Rain intensity: from 5 mm/h up to 98 mm/h
- Realistic drop size distribution and falling velocity
- Water recycling for environmental protection
- Air-ventilation and heating system
- Sophisticated control system to modulate rain

ILLUMINANCE

- Maximum day illuminance derived from NCAP: 2,000 lux (10 cm above asphalt/street)
- Diffuse indirect background light
- Possibility to modulate color temperature and light intensity to recreate dusk and dawn
- No unrealistic reflection on wet street

FIND OUT MORE

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