



AIT ROADLAB

FLEXIBLE MONITORING OF ROAD SURFACES AND ROAD CORRIDOR FOR SUSTAINABLE ASSET MANAGEMENT

The high-performance measuring vehicle RoadLab is equipped with state-of-the-art sensors, satellite navigation and camera technology. It records the most important properties of the road surface and road environment with the highest quality and accuracy and can even be used on cycle paths and side roads thanks to its compact design.

Thanks to its variable design concept, it is easy to integrate a wide range of sensor technologies, which subsequently enable AI-supported data evaluation and assessment.

MODULAR EQUIPMENT

- Highest precision in the detection of road geometry and localization of road objects thanks to the Applanix positioning system

- Dead reckoning for uninterrupted positioning even in the event of satellite shadowing
- 4K video systems
- 360° panoramic camera
- Laser scanner for capturing the road corridor
- Laser scanner for capturing the road surface
- Flexible platform for sensor integration

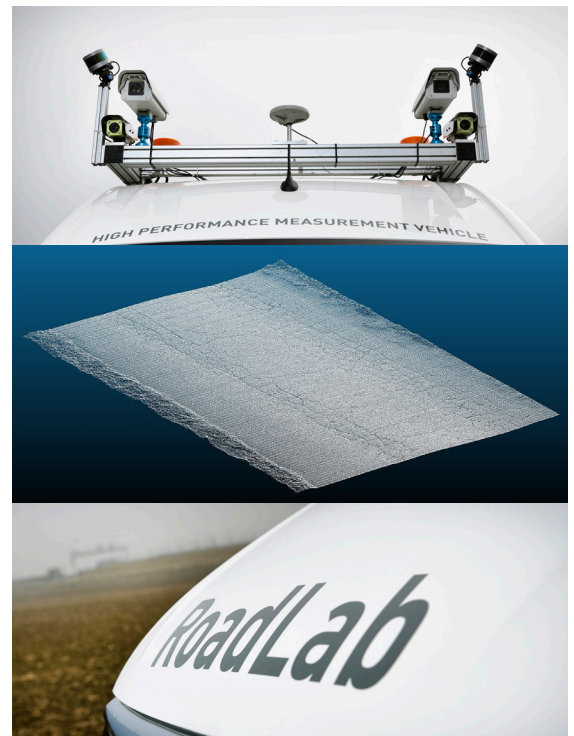




POTENTIAL APPLICATIONS

- Recording and evaluation of cycle paths
- Condition assessment of municipal road networks (surface distress, rutting, longitudinal evenness)
- AI-supported evaluation of surface distress
- Video documentation with 360° camera and 4K camera systems
- Determination of alignment parameters (gradient and crossfall, curve radius)
- Inventory of traffic signs, road markings, etc.
- Checking the clearance profile
- Determination of lane widths
- Detailed 3D roadway models in OpenCRG and FBX

The high-precision recording of the road condition and, if necessary, the road environment provides infrastructure operators with an important decision-making basis for sustainable and cost-efficient maintenance planning and an increase in road safety. The measurements are carried out without interfering with moving traffic.



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