

SURVAI Roughness Device

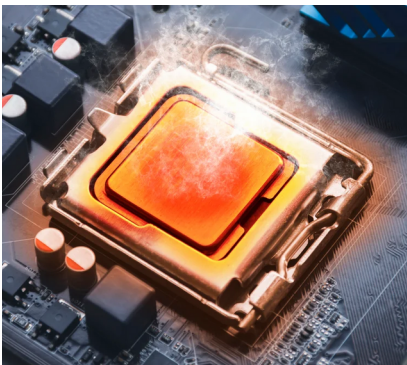
Fact Sheet

03.07.2025

High Accuracy

The Survai Roughness Device was developed over 12 years of rigorous testing and field work.

At its core is an accelerometer array. With special heated circuitry, temperature induced drift has been negated - ensuring highly accurate and repeatable results all day - every day.



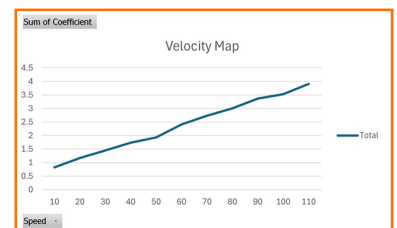
Integration

The Survai Roughness Device is intrinsic to the Mobile Survai system. It is wired via robust industrial USB connections into the vehicle laptop. This direct cable connection has advantages over wireless type systems in terms of rugged reliability and has no vulnerability to external electrical interference.



Full Speed

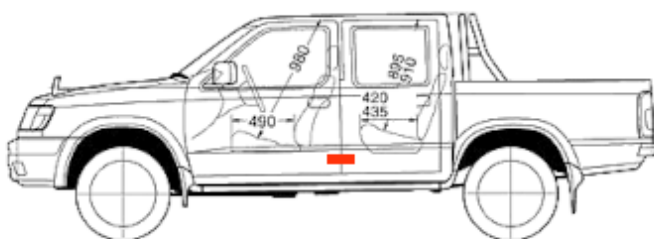
The SURVAI system fully compensates for variations in vehicle speed through the use of an integrated Velocity Map and real-time speed detection. This ensures accurate roughness measurements regardless of driver speed, allowing operators to travel at the natural flow of traffic. The result is improved safety and the ability to complete surveys efficiently without compromising data quality.



Location - better, easier.

By locating the device inside and in the centre of the vehicle on the floor pan, a more accurate picture of the road's roughness is recorded.

Rather than mounting on one axle (and often one side), a centrally mounted location does not favour one particular wheel path. And by using the Velocity Map, the vehicle's suspension characteristics are fully accounted for.



Specification:

The SURVAI Roughness Device is a vehicle-mounted Class 3 road roughness profiler, incorporating a high-resolution GNSS and tri-axial accelerometer array. It provides a derived roughness index in alignment with Austroads principles, with outputs calibrated to correlate with IRI and NAASRA roughness values through vehicle response modelling.