CRACK DETECTION

A module of Digital Road Plus



Advanced Crack Detection & Analysis

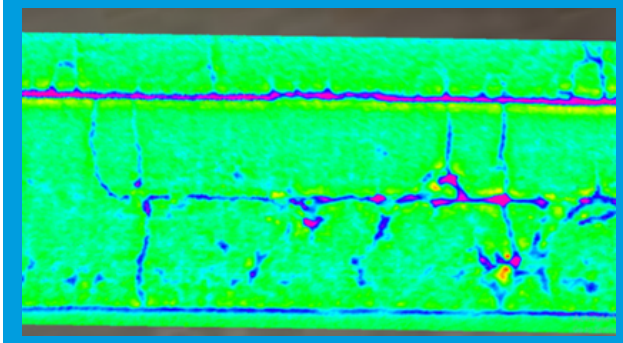
The Crack Detection Module (SW-DRP-1016) in XenoTrack' *Digital Road Plus* (DRP) software offers high-precision **crack detection, sizing, and analysis**.

How does it work?
By fusing high-resolution imagery from *XenoCam* with 3D point cloud data from XenoTrack LiDAR, it delivers detailed surface models with exceptional accuracy.

Fully compliant with **ASTM D6433**, this module quantifies crack severity and density using high-resolution geometrical data—empowering customers with reliable, data-driven pavement condition assessments.



Shadows and other visual noise are filtered out, allowing only precise cracks detection and analysis.



XenomatiX
True solid state lidar

Exact
your exact solution

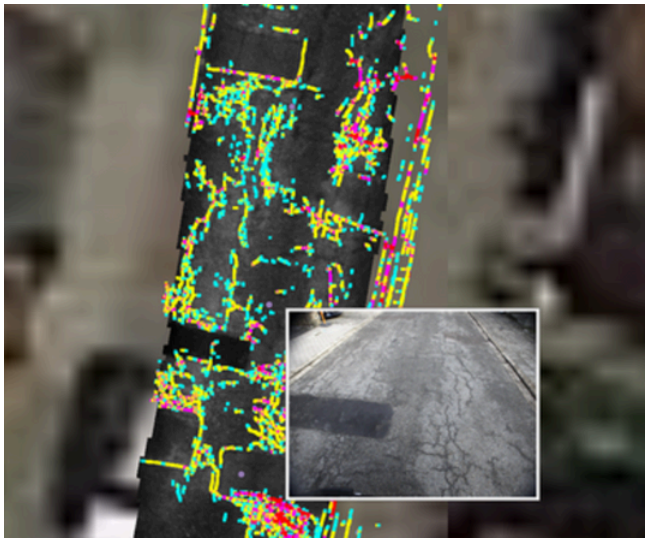
Output

- Shape-files to visualize crack patterns in GIS
- XML-file with detailed crack shape and properties
- JPG-images with visualisation of crack detection results

Visualisation

Results stored in a shape file enable easy transfer to a wide range of GIS and PMS systems.
For comprehensive analysis, the detected cracks can be colorized in different ways:

- Crack type
- Road segment (with a user specified longitudinal length)
- Width (with user defined thresholds)
- Severity (L, M, H according to ASTM E3303)



Key Benefits

- **Much cheaper, faster and better than any other solution**
- **Edge-AI runs locally, no cloud needed—giving users full control**
- **Combination of high-resolution 2D camera data and accurate 3D lidar data**
- **Quantification of crack type, width, length, orientation, …**
- **Fully integrated in the Digital Road Plus software**

Cracks detected:

Longitudinal cracks
Transversal crack
Diagonal cracks
Block cracks
Alligator cracks



Interested?

If you're a XenoTrack and XenoCam user, simply send us a short measurement session to test the Crack Detection Module—we'll return the processed results for your review. Additionally, XenomatiX offers a *Re-Train* program that tailors the AI to your specific road conditions and defect definitions. Your sales account manager will be happy to provide more details on this.

Exact
PT. EXACT GLOBAL TEKNOLOGI
Indonesia **Authorized Agent**

Contact Us
Menara Asia Afrika 9th Floor, Jl. Asia Afrika 133 - 137, Bandung 40112
Phone : 022 8732 1192
Mobile : +62 812 9252 3900
Email : info@exactglobal.co.id