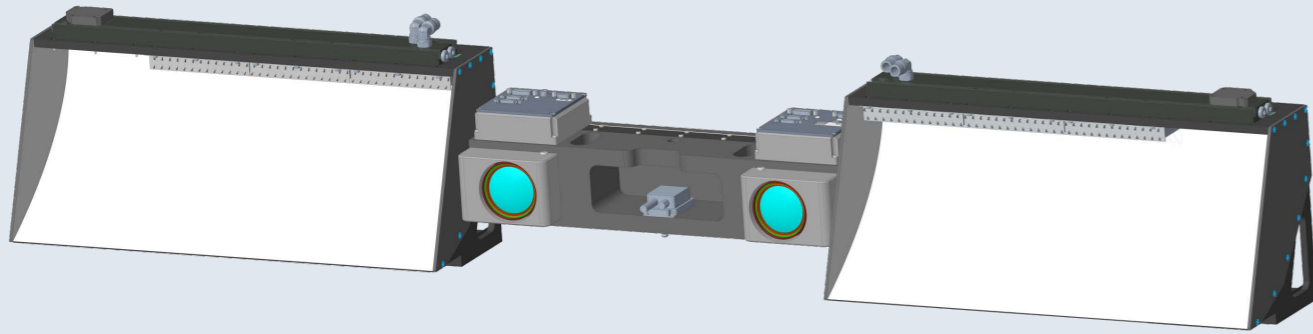


3DPIXA Road Inspector

High precision in 3D and 2D - all in one solution



System Specifications

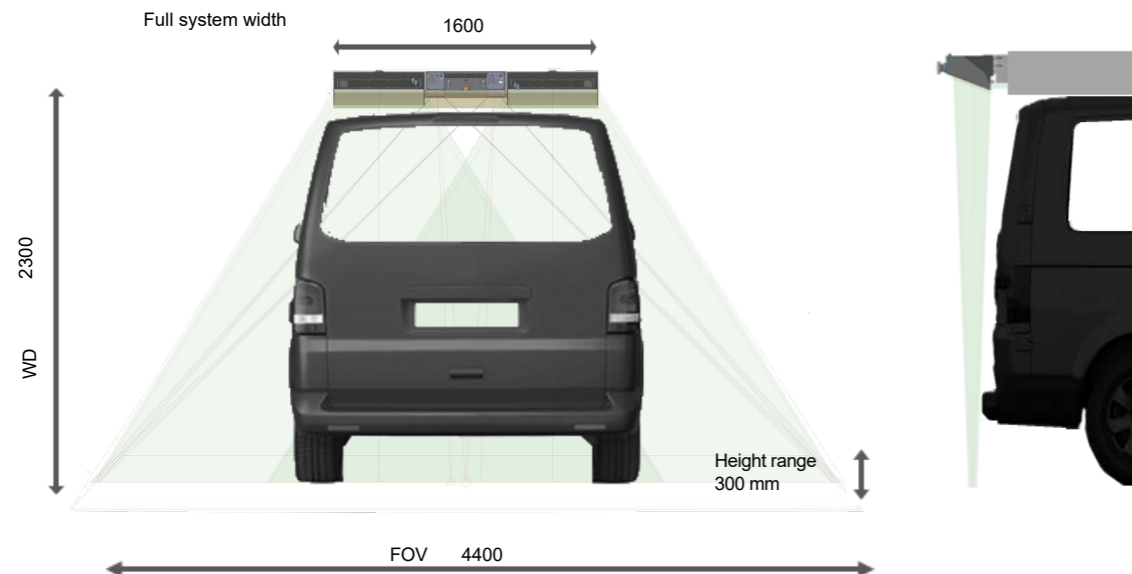
Road Inspection Camera 3DPIXA pro dual RI	CP000520-E02-615-4400		
Camera	Stereo line scan camera with lenses (factory calibrated)	Camera Link configuration	Mono output 1x3 (3Tx8bit)
Sensor	CCD line sensor	Power supply camera & illumination	24 V DC +/- 10% 1000 W
Pixel size	10 µm x 10 µm	Software output	Rectified mono images (8bit) Height map (16 bit) 3D point cloud
Line frequency (kHz)	29.7	Supported software libraries	Halcon (MVTec) MIL (Matrox), C++, C#
Height resolution (µm)**	0.2	Road Inspection Illumination	CP000200-C22-550-2300-03_01 CP000200-C23-550-2300-03_01
Height range (mm)***	300	Reflector	Patented Refelctor technology
Optical resolution (µm/pixel)	615	LED color	Blue (445 nm)
Field of view (mm)	4400	Cooling	Water with additives
Measurement points	7154	External LED Control Unit	2x CP000411 Temperature monitoring in controller and illumination modules etc.
Max. speed (km/h) with spatial transport resolution 1.0 mm	100 km/h	Cable CORONA II - 5m	2x CC02138 Cable Road Illumination to XLC4
Working distance (mm)	2300		

* Height range and height resolution depend on object surface ** For well-structured surfaces the height range can exceed the specified values *** on request

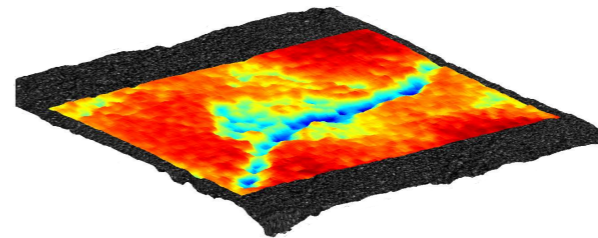
Chromasens Road Inspector system based on 3DPIXA stereo line scan camera and highly efficient illumination technology is a unique combination of line scan technology with fast stereo algorithms running on GPU. The System enables new 2D and 3D road inspection and measuring which requiring high-resolution and high-speed.

Unique features of Chromasens Road Inspection Technology

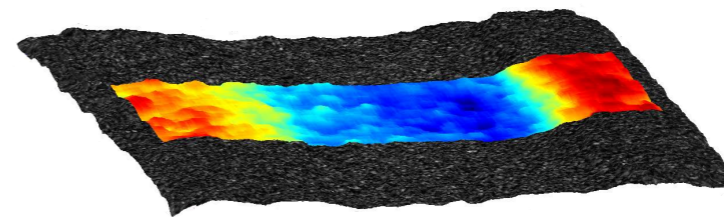
- ▶ High speed road inspection up to 100 km/h (62 mph)
- ▶ Large field of view 4.4 m @ high resolution
- ▶ High quality 2D and 3D - Acquire 2D images and 3D data
- ▶ Height resolution up to 0.2 mm
- ▶ Easy to use application programming interface (API)
- ▶ Patented highly efficient illumination technology a greatly wider road than the overall compact width of the illumination itself



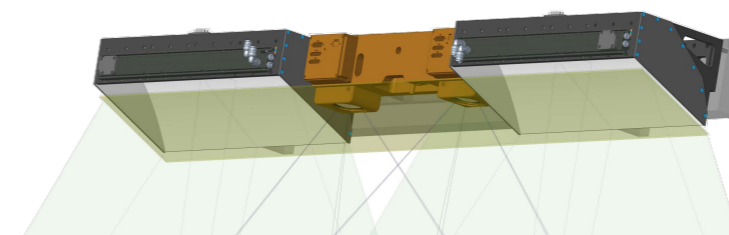
3D Result pavement defect



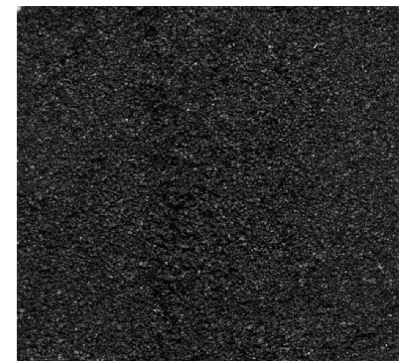
3D Result pavement unevenness



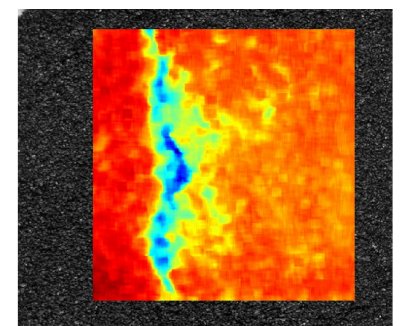
Components Road Inspection System



■ Camera module ■ Illumination modules



2D image of pavement
Size 300 x 300 mm



Calculated 3D information of pavement surface