

Hardware details at a glance

Image sensors	Sony Pregius IMX296
Sensor format	1/2.9
Chroma	Color and monochrome
Field of View	62.2° × 48.8° (74.0° diagonally)
Focal length	4.18 mm
Aperture	3.0
Pattern projector	Random dot laser (laser class 1M)
Projector wavelength	830 nm
Inertial sensor (IMU)	BNO085
Max. IMU measurement rate	400 Hz
Power supply	11.2 - 30 V DC
Power consumption	9 W
Dimensions	130 × 92.5 × 34 mm
Weight (total)	ca. 450 g
I/O	Gigabit Ethernet, GPIO
Conformity	CE, FCC, RoHS

Stereo matching

Stereo algorithm	Variation of Semi-Global Matching
Max. resolution	1456 x 1088 pixels
Supported pixel formats	Mono8, Mono12, RGB8
Disparity range	Up to 256 pixels
Frame rate	Up to 60 fps
Sub-pixel resolution	4 bits (1/16 pixel)
Post-processing	Consistency check, uniqueness check, gap interpolation, noise reduction, speckle filtering
Latency (incl. image capture)	The latency time depends on the chosen configuration. Typical: <i>time between two frames + exposure time + approx. 9 ms</i>

Achievable frame rates and image resolutions (recommendations)

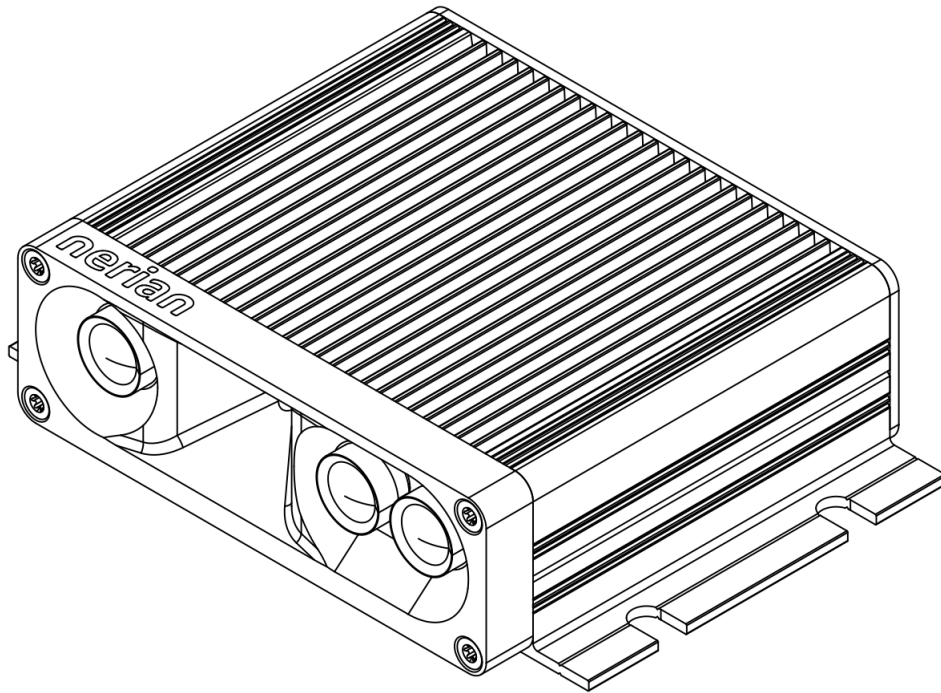
Image resolution	Disparity range	Frame rate
1456 x 1088 pixels	256 Pixels	8 fps
720 x 544 pixels	128 pixels	40 fps

Operation, software, etc.

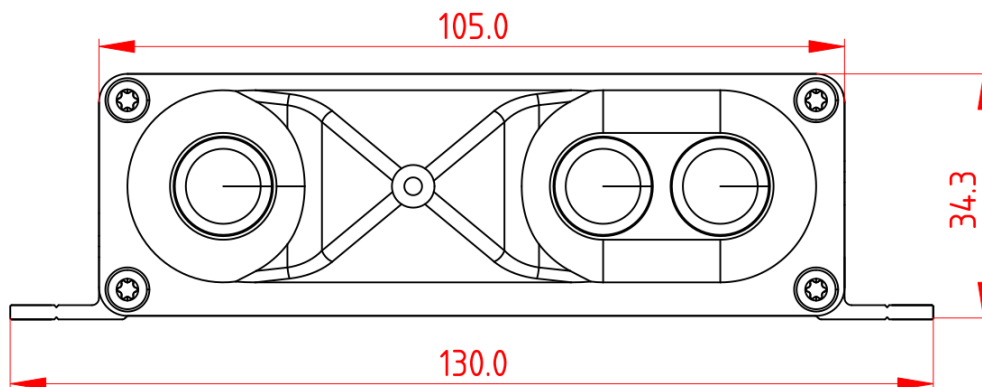
Compatibility	Windows, Linux x86 and ARM OpenCV, Open3D, PCL, Matrox MIL, Halcon, EVT, GenICam
API and software	<ul style="list-style-type: none">• C++ and Python API• Client software: NVCom• GenICam GenTL Producer• ROS Node
Package includes	<ul style="list-style-type: none">• 3D depth camera• 12 V DC power supply with interchangeable mains connectors for Europe, North America, UK and Australia• User manual• Calibration board
Services	<ul style="list-style-type: none">• 2 year warranty• 1 year product support• Support forum

Technical Drawings and Dimensions in mm

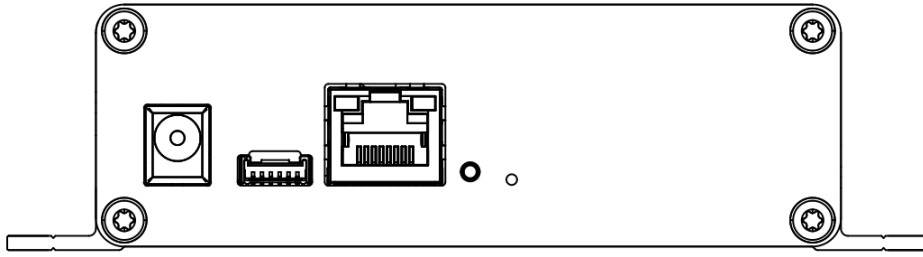
3D View



Front



Back



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