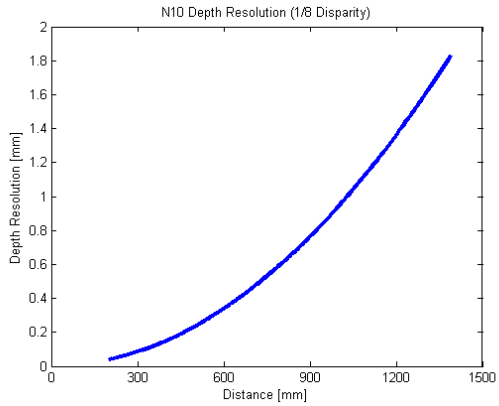
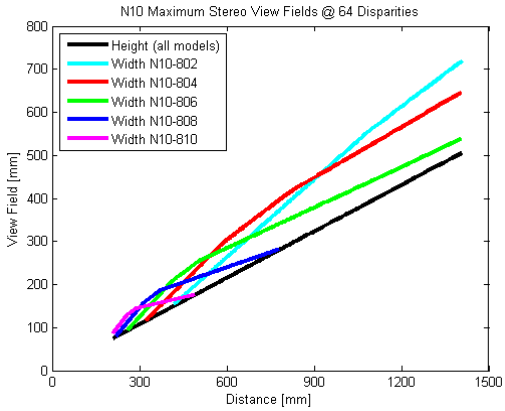
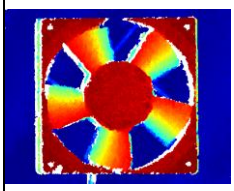
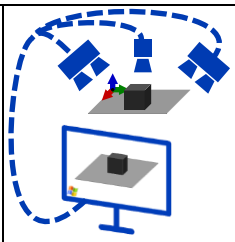
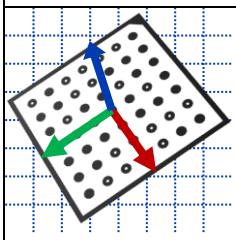
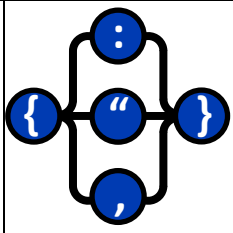
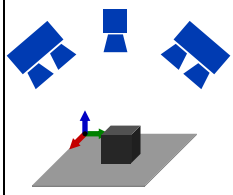
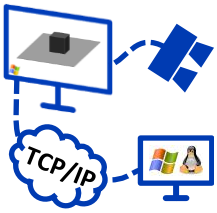
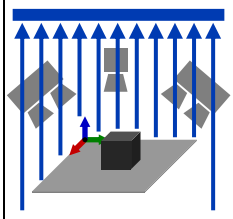
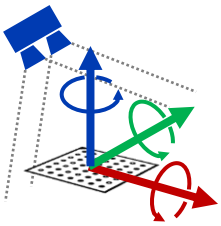
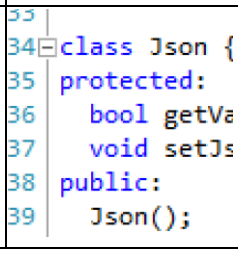
Ensenso N10 – Stereo 3D Camera

Hardware Features

Dimensions	150 (159[1]) mm x 45mm x 45mm [1]including IO Connector
Weight	400g
Operating Distance	280 - 1400 mm (depending on model)
Hardware Features	/ Robust alloy housing, lockable cables (USB and GPIO) / 12 - 24V GPIO on 3-Pin M8 Sensor/Actuator Connector, opto-coupled / Hardware-Trigger Input and Output via GPIO / Acquisition of unicolored surfaces using the integrated model projector / Capturing of moving objects / Power supply via USB Bus (5V, 500mA, 2.5W)
Image Resolution	752 x 480 Pixels (WVGA)
Depth Image Frame Rate	Up to 30 Hz (on Intel Core i7 CPU @ 64 Disparities)
Depth Resolution	0.1 mm – 1.6 mm, varying with Object distance  The actual accuracy depends on the model's focus and the viewed surface's geometry and material properties.
Fields of View	 Actual view fields might be slightly smaller due to mounting tolerances.

NxLib - Stereo Processing Library

	Full 3D Information: Depth images provide dense, per-pixel x, y, z coordinates		Scene Rendering: Rendered 3D views of the combined surface model and the calibration pattern pose
	Workspace Calibration: Specify your workspace coordinate system via the calibration pattern		JSON API: Powerful and extensible API based on JSON with object-oriented interface for C++
	Multi-View: Integrated data fusion from multiple stereo and color cameras		Remote Connectivity: Remote API access via TCP for easy exchange of process or configuration data
	Telecentric View: Generate fully rectified depth maps with fixed pixel size and orientation for easier processing		HALCON Interface: Image acquisition interface for the MVTec HALCON with complete API access
	Pattern Gauging: Real-time, µm accurate 6DoF measurement of calibration pattern pose		Examples: Get started by trying simple HDevelop scripts and example programs with source code