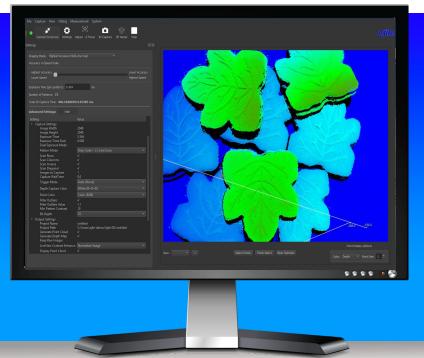


3D Imaging System



Fast, Flexible, Precise 3D Imaging

The Ajile DepthScan 3D imaging system is the ideal solution for machine vision and metrology applications. Fast and accurate across a wide working range, the system's flexibility meets the needs of a wide variety of industrial, and scientific applications.

Key Features

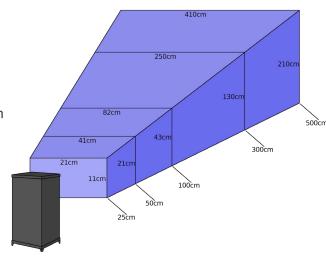
- Area scan snapshot 3D imaging system
- Designed for machine vision applications such as:
 - Robotic guidance for pick and place
 - Industrial inspection and metrology
- Depth accuracy better than 100 microns
- GPU and FPGA processing for real-time output
- Maintains spatial resolution over entire working range
- Captures 4 million color points in 250 ms with full accuracy
- Factory calibrated to a wide working range (from 25 cm to 500 cm)
- Flexibility in speed and accuracy for up to 30 color 3D images per second
- High brightness LEDs provide improved depth of field and tolerance to ambient light



System Details

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Scanning Method	Structured Light Area Scan	
	Configurable pattern options available	
Scan Rate	2.5 Hz at maximum accuracy and resolution	
	Up to 30 Hz at lower resolution	
Working Range	25 cm - 500 cm	
Field of View	11 x 21 cm to 210 x 410 cm	
Depth (Z) Resolution	50 µm or better at 25 cm working distance	
Spatial (XY) Resolution	60 x 120 µm at 25 cm working distance	
Scan Output	1824 x 2280 (~4 MP) color point cloud	



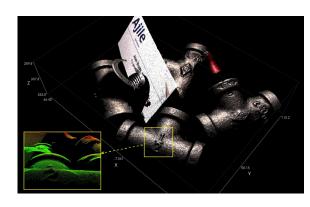


Specifications

Pattern Generator	DMD Projector with Ajile Controller	
Camera	4 MP CMOS Sensor with Ajile Controller	
Interface	USB 3.0	
External Triggers	Configurable 5 V Input and Output Triggers	
Power Requirement	15 V, 9.6 A	
Operating Conditions	Up to 40°C ambient	
Weight	2.5 kg	
Dimensions	23.3 cm x 11.1 cm x 10.8 cm (H x D x W)	
Clearance	5 cm top and bottom	
Light Source	High-powered RGB LED lighting	
	Over 700 lumens optical output	
Cooling	Active fan cooling for 100% duty cycle	

Tools

	10013
Calibration	Factory calibrated for entire working range
Software	GUI for 3D capture and measurement
	Point cloud capture and processing SDK with Python and C++ support, for Windows and Linux
Documentation	Comprehensive documentation and SDK examples
Measurement	Ajile measurement toolkit available
	Compatible with 3 rd party software tools
Support	Commercial support provided
	Software customization available



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