



FARO® Cobalt Array Imager

Automated 3D Measurement Smart Scanner

Product Description

The FARO Cobalt Array Imager is a non-contact scanner which utilizes blue light technology to capture millions of high resolution 3D coordinate measurements in seconds. The Cobalt delivers fast and consistent measurements for dimensional inspection and reverse engineering applications on parts, assemblies, and tools. The Cobalt Imager is equipped with dedicated on-board processors for ultra-fast data analysis – an industry first. Cobalt can easily be set in multi-imager array configurations which expand the 3D scan area to deliver rapid, automated and comprehensive inspection of larger or more complex parts. The Cobalt delivers actionable data that can be displayed as a simple go/no-go result or an easy-to-read dimensional deviation color map. An unlimited number of 3D imagers can be placed in array configurations virtually anywhere in a manufacturing process – all scanning simultaneously and controlled by a single computer. Cobalt is versatile – supporting a wide variety of deployment options including multi-imager array, tripod, rotary table, robot and industrial inspection cells.



Benefits

- ▶ Increase productivity by automating measurement workflows
- ▶ Easy to configure and integrate within the production environment
- ▶ Measurement accuracy ensured by self-monitoring
- ▶ Dramatically reduce inspection cycle times using multiple imager arrays
- ▶ Easy set-up and transport
- ▶ Real-time 3D data for statistical process control (SPC) without slowing production
- ▶ High-end performance at an affordable price
- ▶ Worldwide service and support from regional FARO locations

Features

- ▶ **On-Board Data Processing:** Delivers fast, reliable data performance, ease of integration, and multi-imager configurations
- ▶ **High Resolution Stereo Cameras:** Enable high accuracy, stability and self-monitoring with 5MP and 9MP options. The 9MP version has improved resolution which enhances the ability to capture features on edges and surfaces
- ▶ **High Dynamic Range:** Easily handles complex parts with both dark and light surfaces, different colors, textures, and reflectivity
- ▶ **Multiple Imager Arrays:** Enable simultaneous operation of multiple Cobalt units for increased productivity
- ▶ **Automatic Exposure:** Applies optimal exposure settings to ensure the best possible data in all situations
- ▶ **Advanced Edge Identification:** Clearview point cloud data through enhanced 2-D Image processing
- ▶ **Enhanced Stereo Mode:** Maximizes coverage area in each scan and shortens inspection time
- ▶ **Interchangeable Lenses:** Provide flexibility for multiple fields of view
- ▶ **Blue Light Technology:** Enhances the ability to measure dark and reflective surfaces in variable lighting conditions

Performance Specifications

Model	Field of View (mm)	Point Spacing (mm/inch)	Measurement Volume (mm/inch)			Standoff Distance	Accuracy*
			Width	Height	Depth		
5MP	250	0.155 / 0.006	260 / 10.2	200 / 7.9	90 / 3.5	505 / 19.9	0.027mm
	500	0.255 / 0.010	500 / 19.7	350 / 13.8	300 / 11.8	320 / 12.6	0.050mm
9MP	250	0.082 / 0.003	260 / 10.2	200 / 7.9	90 / 3.5	505 / 19.9	0.027mm
	500	0.175 / 0.007	500 / 19.7	350 / 13.8	300 / 11.8	320 / 12.6	0.050mm

*Calibration per VDI/VDE 2634 part 2

General Specifications

Connectivity	
Ethernet	PC or Network
USB	Rotary Stage
Cameras	
Resolution	5 Megapixel & 9 Megapixel Models
Projector	
Technology	Digital Projection
Light Source	Blue LED
Hardware Specifications	
Power Supply Voltage	100 - 240 VAC
Power Consumption	75 W
Ambient Temperature Range	10° - 40°C / 50° - 104°F
Humidity	0 - 95% (non-condensing)
Dimensions	
Size	440 x 210 x 80mm / 17.3 x 8.3 x 3.2 inches
Weight	5kg / 11lb

Accessories

- ▶ Tripod
- ▶ Rotary Table
- ▶ Array Tree Options
- ▶ Robot Mounts
- ▶ Calibration Ball Bars
- ▶ Photogrammetry

Industries and Applications

▶ Automotive:

- Automated quality control and assembly verification
- Sheet metal inspection
- Tool & die inspection and reverse engineering

▶ Machining, Metalworking and Assembly:

- Casting and machined part inspection
- Automated quality control
- Mold and die inspection and reverse engineering

▶ Aerospace:

- Automated quality control and assembly verification
- Composite tooling
- Wing skin and fuselage panel inspection and reverse engineering

Software

- ▶ **BuildIT** is a modern and intuitive software solution that creates automated Cobalt measurement workflows which can run seamlessly to deliver quick pass/fail quality checks for any part.
- ▶ **FARO CAM2 2018** is the most tightly aligned software to support the Cobalt. CAM2 2018 delivers the latest Cobalt features and ensures an integrated metrology solution for automated and manual inspections.
- ▶ **Third-Party Software Plug-ins**
- ▶ **Software Development Kit (SDK)**

Certifications

- ▶ NRTL listed, MET-C listed
- ▶ Complies with EC directive: 2004/108/EC Electrical Equipment CE Marking; 2011/65/EU - RoHS2
- ▶ Conforms to the following standards: EN 61010-1:2010; EN 61326-1:2013; EN 55011:2009/A1:2010; FCC Part 15 Subpart C

For more information, call 800.736.0234 or visit www.faro.com
 FARO Technologies, Inc. | 250 Technology Park | Lake Mary, FL 32746



Contract Holder