

# FARO Cobalt Array Imager

## Metrology-grade, Smart Sensor



### Portfolio of 3D Imagers with Customizable Deployment

The FARO Cobalt Array Imager is a metrology-grade, non-contact scanner which utilizes blue light technology to capture millions of high resolution 3D coordinate measurements in seconds. It is versatile - supporting a wide variety of deployment options including multi-imager array, tripod, rotary table, robot and industrial inspection cells. 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 – an industry first. The smart sensor allows unique multi-imager array configurations which expand the 3D scan area to deliver rapid, automated and comprehensive inspection. The actionable data is then 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.



Choose between the 5MP Cobalt or the 9MP Cobalt. The 9MP version improves the resolution and the ability to capture features on edges and surfaces.

### Features

#### Multiple Imager Arrays

Enables simultaneous operation of multiple Cobalt units for increased productivity

#### On-Board Processing

Delivers fast, reliable performance, ease of integration, and multi-imager configurations

#### High Resolution

Choose between the 5MP Cobalt or the 9MP Cobalt. 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

#### Automatic Exposure

Applies optimal exposure settings to ensure the best possible data in all situations

#### Stereo Cameras

Enable high accuracy, stability and self-monitoring

#### 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

### Benefits

- Dramatically reduce inspection cycle times using multiple imager arrays
- Increase productivity by automating measurement workflows
- Easy to configure and integrate within the production environment
- Measurement accuracy ensured by self-monitoring
- 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

### Industries and Applications

#### Automotive

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

#### Machining, Metalworking & 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

# FARO Cobalt Array Imager

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## Performance Specifications

Model	Field of View (mm)	Point Spacing (mm/inch)	Measurement Volume (mm/inch)			Standoff Distance (mm/inch)	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	515 / 20.3	0.027mm
	500	0.175 / 0.007	500 / 19.7	350 / 13.8	300 / 11.8	315 / 12.4	0.050mm

\*Calibration per VDI/VDE 2634 part 2

## General Specifications

**Exposure time:** 2 seconds

**Mounting:** Any orientation / universal mount customizable to specific applications

### Data Handling and Control

**Output:** STL, ASCII

### Connectivity:

- Ethernet - PC or Network
- USB - Rotary Stage

### Cameras

**Resolution:** 5 megapixel and 9 megapixel models

### Projector

**Technology:** Digital projection

**Light source:** Blue LED

### Features

- On-Board Processing
- Small Form Factor
- Light Weight
- Automatic Exposure
- Fast Data Acquisition
- High Dynamic Range
- Stereo Cameras
- Enhanced Stereo Mode
- Interchangeable Lenses (optional)
- High Resolution
- Blue Light Technology
- Field Compensation
- Self Monitoring
- Stability Tracking

### Deployment Options

- Multiple Imager Array
- Manual Operation
- Robot Integration
- Custom Automation

### Accessories

- Tripod
- Rotary Table
- Photogrammetry

### Software Compatibility

- FARO CAM2 Measure 10
- Third-Party Software Plug-ins
- Software Development Kit (SDK)

## Hardware Specifications

**Power supply voltage:** 100 - 240 VAC

**Power consumption:** 75 W

**Ambient temperature:** 10° - 40°C / 50° - 104°F

**Humidity:** 0 - 95% (non-condensing)

**Weight:** 5kg / 11lb

**Size:** 440 x 210 x 80mm / 17.3 x 8.3 x 3.2 inches

### 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

# COBALT

Array Imager

For more information, call 800.736.0234  
or visit [www.faro.com/factoryarrayimager](http://www.faro.com/factoryarrayimager)

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Contract Holder

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