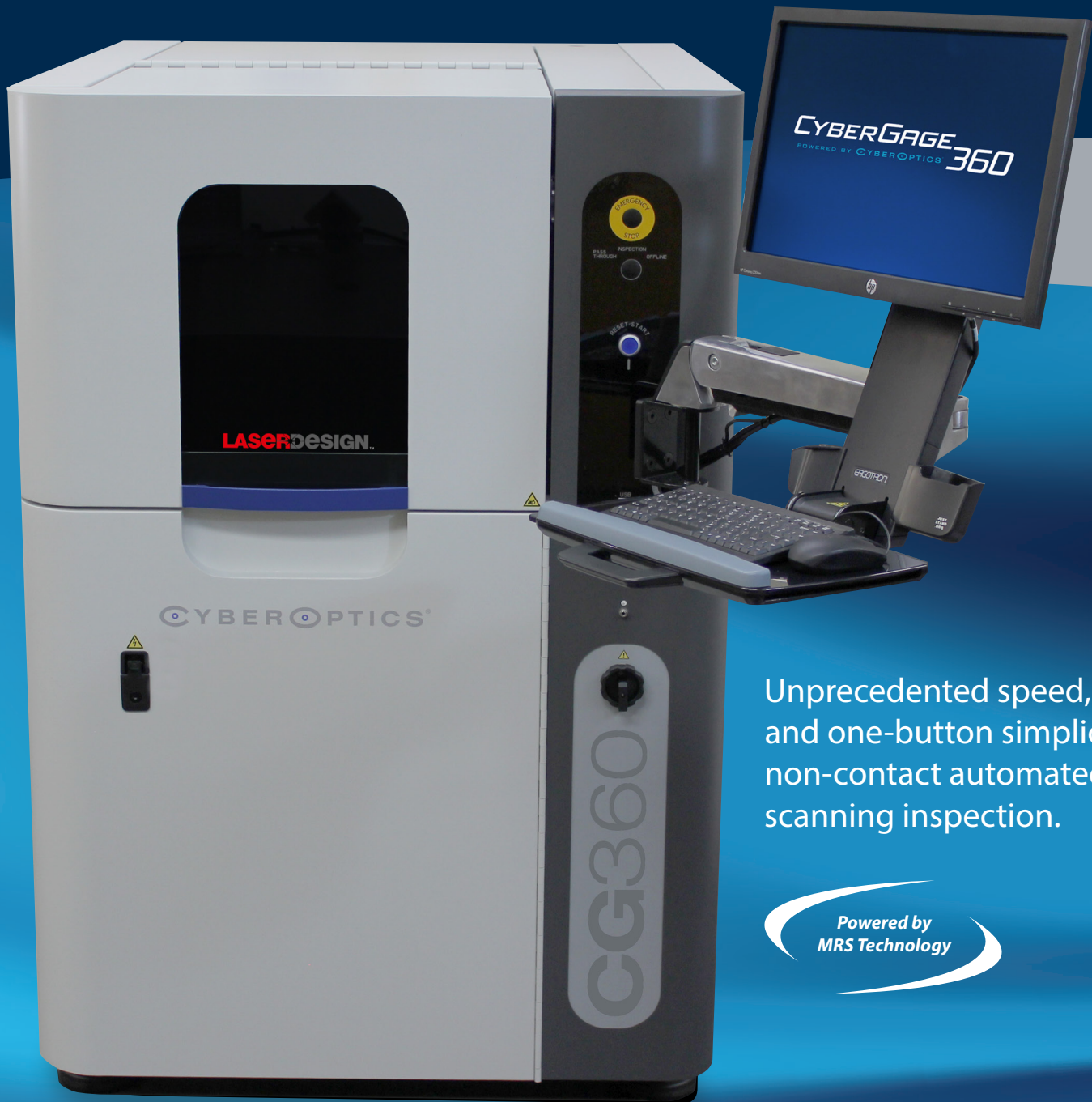


# CyberGage360™

One-Button Automation for 3D Inspection.

3D SCANNERS



Unprecedented speed, accuracy and one-button simplicity for non-contact automated 3D scanning inspection.

Powered by  
MRS Technology

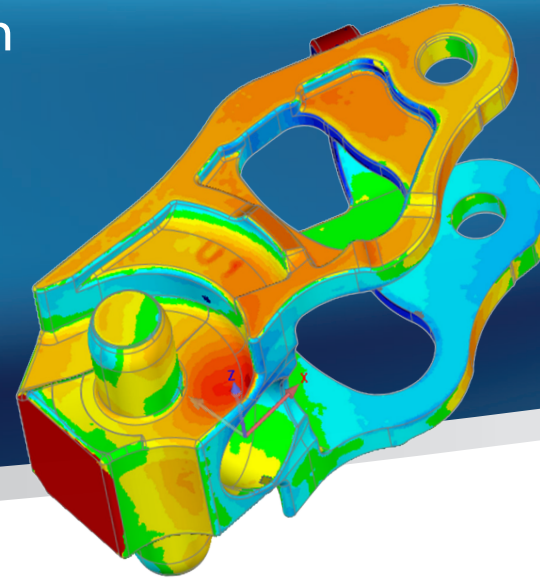
CYBEROPTICS®



# CyberGage360™

## High Precision Accuracy with Multi-Reflection Suppression (MRS) Sensor Technology

The CyberGage360 3D Scanning System is powered by CyberOptics' breakthrough 3D sensing technology that enables metrology-grade accuracy by inhibiting measurement distortions. CyberOptics' unique sensor architecture simultaneously captures and transmits multiple image data in parallel while proprietary fusing algorithms merge the data together. The result is a highly precise 3D scan and inspection report with accuracy NIST traceable to +/- 10µm.



Powered by MRS Technology



MRS Sensor Technology



MRS suppresses the effects of variations in surface characteristics of parts under inspection, resulting in a highly precise scan

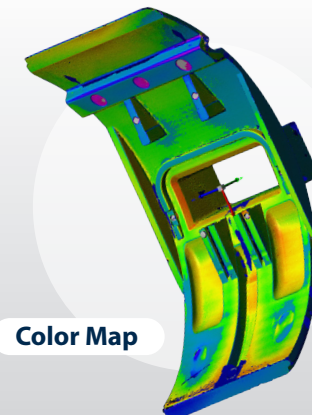
Fixtureless design eliminates the need for costly gages

### Complete 360° 3D scan and inspection report in less than 3 minutes.

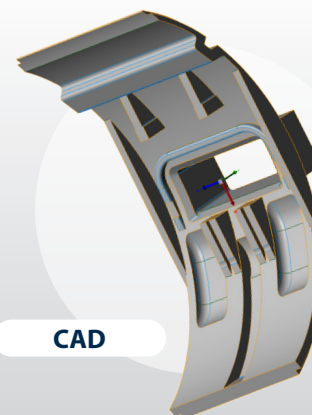
The CyberGage360 greatly speeds In-Process Inspection and Incoming/Outgoing Parts Inspections providing a full 360° surface scan in less than 3 minutes. With just one click, capture up to 16 million points/part pose for a quick and accurate complete scan. Ideal for near-production line high-volume scanning and high speed throughput.

### Easy-to-Use Software with One-Button Automation

The CyberGage360 provides the easiest user experience for 3D scanning inspection. It's as simple as 1, 2, 3. Open the door, place the part and press the button. Anyone can use the system with little to no training for factory-friendly operation, making it the easiest way to achieve metrology-grade accuracy with just one click.



Color Map

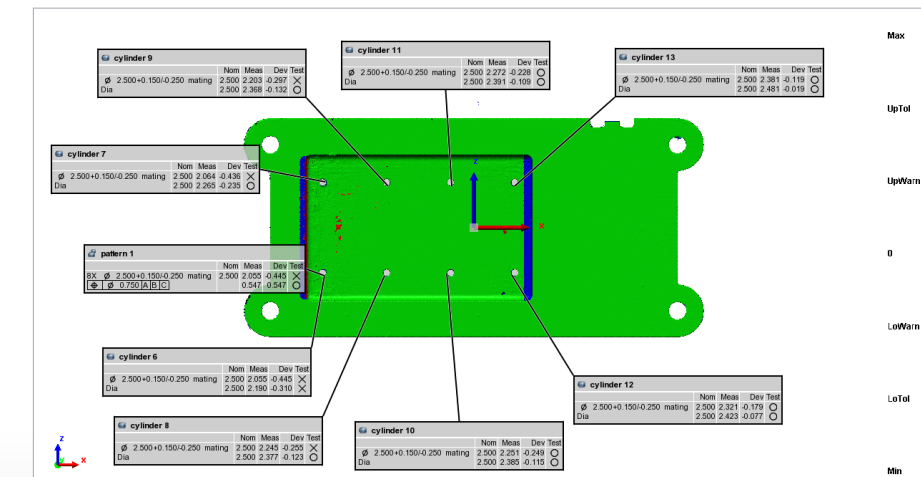


CAD

Scan generates high density point cloud data to compare to CAD models or 'golden examples.'

### Automatically Generated Report

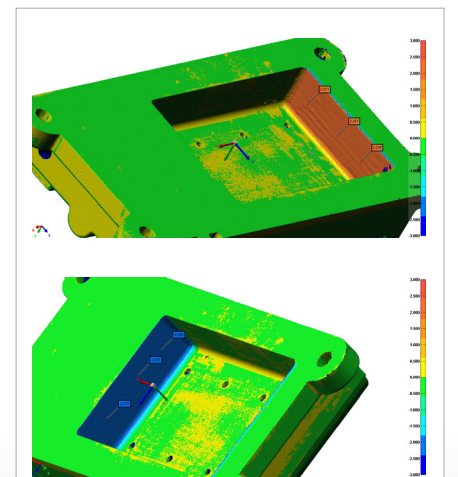
A full 360° surface scan and inspection report compares scan data to CAD models or 'golden examples.'



#### Feature Table

Units: Millimeters  
Coordinate System: world  
Data Alignments: drf - ABC

Name	Control	Nom	Meas	Tol	Dev	Test	Out Tol
cylinder 6	Ø 2.500+0.150/-0.250 mating	2.500	2.055	+0.150/-0.250	-0.445	Fail	-0.195
	Diameter	2.500	2.190	+0.150/-0.250	-0.310	Fail	-0.060
cylinder 7	Ø 2.500+0.150/-0.250 mating	2.500	2.064	+0.150/-0.250	-0.436	Fail	-0.186
	Diameter	2.500	2.265	+0.150/-0.250	-0.235	Pass	
cylinder 8	Ø 2.500+0.150/-0.250 mating	2.500	2.245	+0.150/-0.250	-0.255	Fail	-0.005
	Diameter	2.500	2.377	+0.150/-0.250	-0.123	Pass	
cylinder 9	Ø 2.500+0.150/-0.250 mating	2.500	2.203	+0.150/-0.250	-0.297	Fail	-0.047
	Diameter	2.500	2.368	+0.150/-0.250	-0.132	Pass	
cylinder 10	Ø 2.500+0.150/-0.250 mating	2.500	2.251	+0.150/-0.250	-0.249	Pass	
	Diameter	2.500	2.385	+0.150/-0.250	-0.115	Pass	
cylinder 11	Ø 2.500+0.150/-0.250 mating	2.500	2.272	+0.150/-0.250	-0.228	Pass	
	Diameter	2.500	2.391	+0.150/-0.250	-0.109	Pass	
cylinder 12	Ø 2.500+0.150/-0.250 mating	2.500	2.321	+0.150/-0.250	-0.179	Pass	
	Diameter	2.500	2.423	+0.150/-0.250	-0.077	Pass	
cylinder 13	Ø 2.500+0.150/-0.250 mating	2.500	2.381	+0.150/-0.250	-0.119	Pass	
	Diameter	2.500	2.481	+0.150/-0.250	-0.019	Pass	



#### Feature Table

Units: Millimeters  
Coordinate System: world  
Data Alignments: drf - ABC

Name	Control	Nom	Meas	Tol	Dev	Test	Out Tol
cylinder 2	Ø 10.000±0.250 mating	10.000	9.921	+0.250/-0.250	-0.079	Pass	
	Diameter	10.000	9.883	+0.250/-0.250	-0.117	Pass	
cylinder 4	Ø 10.000±0.250 mating	10.000	9.943	+0.250/-0.250	-0.057	Pass	
	Diameter	10.000	9.919	+0.250/-0.250	-0.081	Pass	
cylinder 5	Ø 10.000±0.250 mating	10.000	9.949	+0.250/-0.250	-0.051	Pass	
	Diameter	10.000	9.943	+0.250/-0.250	-0.057	Pass	
cylinder 16	Ø 10.000±0.250 mating	10.000	9.921	+0.250/-0.250	-0.079	Pass	
	Diameter	10.000	9.883	+0.250/-0.250	-0.117	Pass	
cylinder 17	Ø 10.000±0.250 mating	10.000	9.943	+0.250/-0.250	-0.057	Pass	
	Diameter	10.000	9.919	+0.250/-0.250	-0.081	Pass	
cylinder 18	Ø 10.000±0.250 mating	10.000	9.949	+0.250/-0.250	-0.051	Pass	
	Diameter	10.000	9.943	+0.250/-0.250	-0.057	Pass	
cylinder 19	Ø 10.000±0.250 mating	10.000	9.921	+0.250/-0.250	-0.079	Pass	
	Diameter	10.000	9.883	+0.250/-0.250	-0.117	Pass	



# 3D Scans – Simple as...

1

Open the door

2

Place the part

3

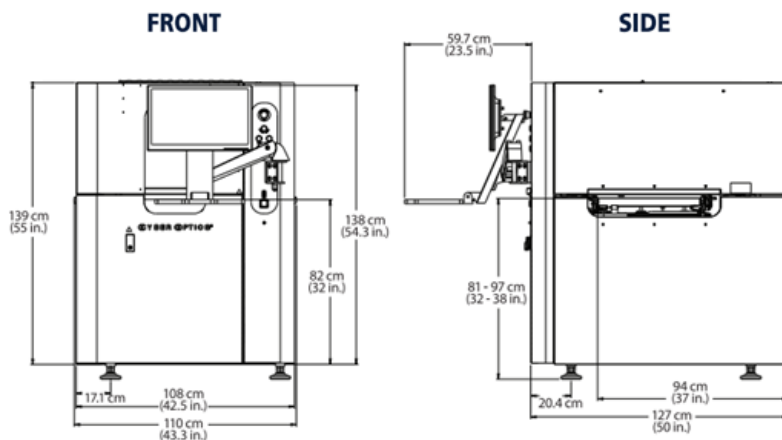
Press the button

Designed for use in general purpose metrology, the CyberGage360 has a range of potential industrial applications from automotive to aerospace where high accuracy and high speed throughput are important.

## Specifications

<b>Work Volume</b>	200mm diameter x 100mm high cylinder (8" diameter x 4" high)
<b>Sensor Technology</b>	Patented MRS technology with structured blue light
<b>System Volumetric Accuracy</b>	10 µm; 0.010mm +L/10000mm (ISO 10360) See Accuracy Statement for CyberGage360 report available at <a href="http://CyberOptics.com/CyberGage360">CyberOptics.com/CyberGage360</a>
<b>Repeatability</b>	5 µm; 0.005mm/0.00020" See Accuracy Statement for CyberGage360 report available at <a href="http://CyberOptics.com/CyberGage360">CyberOptics.com/CyberGage360</a>
<b>Speed</b>	Up to 16 million points/part/ pose. Typical cycle time < 3 minutes
<b>CDRH Safety</b>	Eye safe - no protection needed
<b>System Controllers Embedded</b>	High-performance PC included
<b>Environmental Temperature</b>	Temperature ambient = 20°C +/- 3°C (68.5°F +/- 5°F) to maintain calibrated performance
<b>Operating Environment</b>	Humidity 50% +/- 30%
<b>Weight of Part</b>	2.0 kg max (4.4 lbs.)
<b>Data Output Formats</b>	STL, PLY, OBJ, ASC
<b>Electrical Requirements</b>	110-120V +/- 10% 1 phase/ 50-60hz +/- 3.5%
<b>Included with System</b>	PC controller built in, Polyworks Inspector inspection reporting software with: 1 year maintenance/updates/support, operation manual, maintenance manual, and training at factory (Minneapolis or onsite option).
<b>Warranty</b>	1-year warranty (hardware, software, parts, labor, workmanship)

## Dimensions



**CYBEROPTICS®**

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