POLYGA CARBON 3D SCANNER

Built for Flexible Performance. Designed for Portability.

The Polyga Carbon is a crossover 3D scanning system that can easily adapt to different scanning requirements, while still being lightweight and portable to take on off-site projects. It uses structured-light LED technology and two industrial-grade machine vision cameras to deliver professional quality 3D scanning results.

CARBON FIBER MOUNTING SYSTEM

At the core of the Polyga Carbon is a custom molded carbon fiber frame. The mount makes the entire system super robust while being unbelievably lightweight at just 4.18 lbs (1.9 kg).

DELIVERING PROFESSIONAL RESULTS

The system generates over three million points per scan at an accuracy of up to 35 microns per scan (0.0014") for a 225mm diagonal field of view.

FLEXIBLE SCANNING IN ONE PACKAGE

The Polyga Carbon gives you the flexibility you need to scan objects of various sizes –all in one system. Adjust the scanner's diagonal field of view from 225mm to 600mm using two preset camera mounting positions on the carbon fiber frame.

▲ ADJUSTABLE FIELD OF VIEW
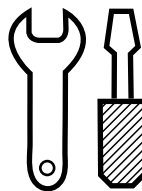
SCAN WHEREVER YOU GO

For maximum portability, the scanner comes with its own travel case. All the components fit nicely inside for added protection. It's crushproof, watertight, and dustproof.

LONG LASTING

The Polyga Carbon uses a LED light projector with a long service life. It emits minimal heat which reduces scan distortion for repeatable 3D scanning results.

POWERFUL BUILT IN POST-PROCESSING AND INSPECTION TOOLS

The Polyga Carbon comes with FlexScan3D software, a powerful scanning engine. It has aligning, merging, and hole filling capabilities to transform 3D scans into a complete digital 3D model. It also comes with basic inspection tools for deviation analysis.

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Motorbike Crankcase

TECHNICAL SPECIFICATIONS

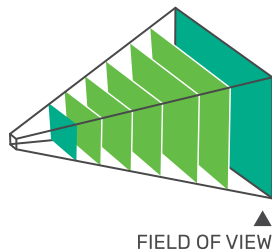|	
Cameras	2 x 3 megapixel monochrome USB 3.0 cameras
Dimension (cm)	13 x 41 x 12
Scanning Software	FlexScan3D
Scan Speed	1.2 seconds per scan
Field of View (FOV) Adjustable to scan objects of different shapes and sizes	Preset positions on the carbon fiber mount: 225mm, 600mm diagonal
Resolution	
Average Points	3+ million per scan
Average Polygons	6+ million per scan
Point to Point Distance	225mm FOV: 0.101mm 600mm FOV: 0.362mm
Accuracy	225mm FOV: 35µm (0.0014") 600mm FOV: 50um (0.0020")
Standoff	225mm FOV: 280mm 600mm FOV: 775mm
Geometry Formats	PLY, OBJ, STL, ASC, FBX, 3D3
Computer Requirements	Windows 7 (64-bit) Operating System, Quad-core Intel 2 GHz CPU or better, 4 GB Memory or greater, 512 MB Video Card, Free disk space 250 GB Hard Drive or more

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POLYGA CARBONXL 3D SCANNER

Get The Most Flexibility and Control In A 3D Scanning System

Polyga CarbonXL 3D scanner was developed out of a growing need for a professional system that delivers more flexibility and control. The new model has a wider adjustable field of view and a brighter projector compared to the original Carbon model. The CarbonXL is what you need if you are looking to scan a variety of objects of different sizes. Do it all with one system.

ADJUSTABLE FIELD OF VIEW

The Polyga CarbonXL has a flexible slider mount to create a diagonal field of view ranging from 70mm to 800mm. Place two cameras on the mount to create any field of view you want.
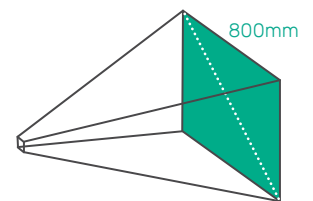
FIELD OF VIEW

DELIVERING PROFESSIONAL RESULTS

The system generates approximately 4.9 million points per scan at an accuracy of up to 25 microns for a 70mm field of view.
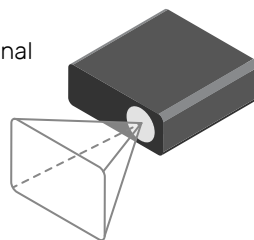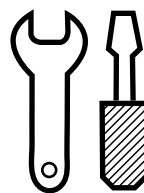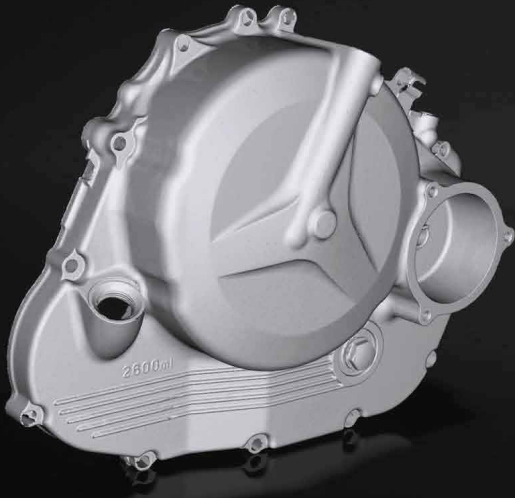
BRIGHTER PROJECTION

The Polyga CarbonXL uses a projector with more lumens compared to the original model to achieve higher quality results. The system can scan farther away and scan darker objects much easier.

PACK IT TO GO

The 3D scanner's detachable railing system makes it easy to disassemble for storage or traveling to an off-site location.

LARGE FIELD OF VIEW

800mm

The CarbonXL creates the largest diagonal field of view out of all the Polyga 3D scanners at 800mm.

POWERFUL BUILT IN POST-PROCESSING AND INSPECTION TOOLS

The Polyga CarbonXL comes with FlexScan3D, a powerful scanning software. It has aligning, merging, and hole filling capabilities to transform 3D scans into a complete digital 3D model. It also comes with basic inspection tools for deviation analysis.

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Motorcycle Engine Part

Car Door

Action Figure

TECHNICAL SPECIFICATIONS

Cameras	2 x 5 megapixel cameras (monochrome/color)
Dimension (cm)	30.4 x 40.6 x 20.3
Scanning Software	FlexScan3D
Scan Speed	1.2 seconds per scan
Field of View (FOV) Adjustable to scan objects of different shapes and sizes	Adjustable from 70 to 800 mm diagonal (dependent on camera position on mount)
Resolution	
Average Points	4.9 million per scan
Average Polygons	10.1 million per scan
Point to Point Distance	70mm FOV: 0.027mm 800mm FOV: 0.26mm
Accuracy	70mm FOV: 25μm (0.001") 800mm FOV: 70μm (0.0028")
Standoff	70mm FOV: 160mm from front of rail mount 800mm FOV: 1280mm from front of rail mount
Geometry Formats	PLY, OBJ, STL, ASC, FBX, 3D3
Computer Requirements	Windows 7 (64-bit) Operating System, Quad-core Intel 2 GHz CPU or better, 4 GB Memory or greater, 512 MB Video Card, Free disk space 250 GB Hard Drive or more

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