

CR-Scan Raptor

Hybrid Blue Laser & NIR, Metrology Grade Accuracy



Reliable Accuracy
up to 0.02mm



Objects between
5-2000mm



Sharper edges
and richer details



7 Laser Lines, Metrology Grade Accuracy

- Metrology-grade accuracy, the accuracy under laser scanning mode can achieve up to 0.02mm.
- 7 parallel blue laser lines for fine scanning details, single laser line is as fine as 0.1mm to obtain sharper and clear point cloud edges.
- 2.3 Million Pixel 3D Imaging Camera

High-speed Scanning Beyond Your Imagination

Blue Light Scanning Speed up to 60fps

NIR Scanning Speed up to 20fps

Infrared Structured Light Scanning

Markerless Scanning: The CR-Scan Raptor utilizes speckle matching 3D imaging, No markers needed for feature-rich workpieces. Objects can be scan quickly and directly.

Unique Face & Body Algorithm: Face & body mode is equipped with a unique face mapping algorithm that captures more details, a human body scan only needs as quick as 2 minutes.

Accurate and Detailed Scanning

Advanced temperature compensation algorithm: it can improve temperature stability and ensure accuracy.

High Performance Structure:

- ϕ 20mm large depth of field lens
- Low distortion lens < 5%
- 9-elements glass lens
- Metal lens barrel and holder

The CR-Scan Raptor covers near and far distance scanning, and is equipped with good stability in high and low temperatures, providing reliable measurement scanning results.



Versatile Scanning for All Sizes

Combining line lasers with infrared structured light, the CR-Scan Raptor can scan objects ranging in size from 5*5*5 mm³-2000*2000*2000 mm³. Effortlessly scanning small figurines, bolts, faces, human bodies, automobile components, and more.

Laser Line Scanning: Minimum scan size: 5*5*5 mm³, Maximum scan size: 2000*2000*2000 mm³.

Infrared Structured Light Scanning: Scanning objects ranging from 150*150*150mm³-2000*2000*2000mm³.

Anti-shaking for smooth scanning

Equipped with One-Shot 3D imaging technology, the CR-Scan Raptor is naturally stabilized and less likely to tracking loss. Fast backtracking speed ensures smoother handheld scanning.

Scan Black/Metal Objects without Sprays

Even without scanning spray, you can scan cars, car parts, tires, and other black/metal objects to get the desired model effect.

24-bit Full-Color Scanning

Equipped with 12 circular LED texture lights, it can enhance the brightness of color mapping in dark environments and truly present the color of objects.

Peaceful Scanning in Various Environments

Dual-color circular LED texture lights can help achieve more realistic scanning results.

Blue light provides supplementary light for laser line scanning.

White light is used to enhance the brightness of color textures.



Scanning Mode	Blue Light(Blue 7-line laser)	NIR(infrared binocular structured light)	Marker Recognition Enhancement	12 infrared LEDs
Accuracy	Up to 0.02mm @ 100mm	Up to 0.1mm	Laser Safety	Class I (eye safe)
3D Resolution	0.02-2mm	0.1-2mm	IMU	Yes
Scanning Speed	Up to 60fps	Up to 20fps	Output format	OBJ/STL/PLY
Min. scanvolume	5mm x 5mm x 5mm	150mm x 150mm x 150mm	Input Power	12V 2A
Single Capture Range	270mmx170mm@300mm	930mmx580mm@1000mm	Data interface	TypeC / USB3.0
Working distance"	150mm-400mm	170mm-1000mm	Device Dimensions	215mmx50mmx74mm
Color Mapping	Yes	Yes	Device Weight	372g
Alignment mode	Marker	Marker / geometry / texture	Wireless Scanning	Supported <small>in conjunction with future wireless scanning accessories</small>
3D imaging camera resolution	1920x1200		System Support	Windows 10/11 (64 bit) & macOS
Color Supplemental Light	12 white LEDs		Operating temperature	-10°C to 40°C

