

Creality Sermoon X1

Redefining Industrial Wireless Scanning



0.02 mm + 0.04 mm/m

Meeting the rigorous 3D measurement demands of the manufacturing industry. Built-in Photogrammetry, eliminates the need for coded markers and removes cumulative errors caused by large-size measurements, ensuring high volumetric accuracy.

CNC One-Piece Construction, Fortress-Like Stability

The X1 combines lightweight design with exceptional structural strength, delivering superior rigidity and thermal stability-so every scan is executed with absolute precision and confidence.

Single-Line Laser · Mastering Deep Holes

The X1 single laser deep-hole scanning mode easily captures 3D data from hard-to-reach areas such as deep holes, narrow gaps, and recesses.

7 Laser Lines for Partial HD Scanning

Each laser line is as fine as 0.1mm, capturing sharper edges and richer details.

34 Cross Laser Lines High Efficiency, Reliable, Accurate

Easily and Quickly Scan Medium to Large Objects with reliable accuracy. Scanning a whole car in One Go. The laser array arrangement enables rapid and effortless capture of complete and accurate 3D data from medium to large objects.

NIR Structured Light Scanning

Markerless Scanning

X1 utilizes speckle matching 3D imaging, No markers needed for feature-rich workpieces. Objects can be scan quickly and directly.

Objects between 0.2-157" / 5-4000mm

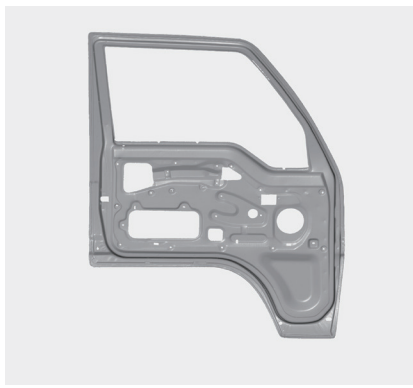
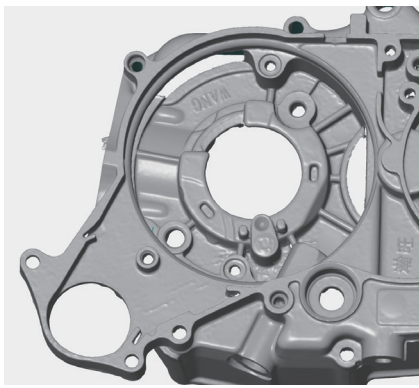
Combining blue laser lines with infrared structured light, X1 can scan objects ranging in size from 5*5*5 mm³-4000*4000*4000 mm³. Effortlessly scanning engineering parts, molds, human bodies, automobile components, and more.

Wireless Scanner, Free to Scan

Powered by advanced Wi-Fi 6 with boosted transfer speeds up to 4.7Gbps, the X1 delivers fast, cable-free scanning with uncompromised 3-hour battery life. Easily adapts to diverse measurement environments, giving you the freedom to scan anywhere with ease.

Full Color Texture Scanning

Equipped with a high-performance Qualcomm ISP chip and a 2MP full-color RGB camera, enhanced by auxiliary lighting, the X1 delivers richer, more realistic textures.



Scanning Mode	Deep hole scanning	Detailed Scanning	High Speed Scanning	No markers Scanning
	blue single laser line	7 blue parallel laser lines	34 blue crossed laser lines	NIR(infrared binocular structured light)
Accuracy	Up to 0.02mm ^[1]			Up to 0.05mm
Volumetric Accuracy	0.02mm+0.04mm/m			0.05mm+0.1mm/m
Scanning rate	84,000 measurements/s	756,000 measurements/s	1,428,000 measurements/s	5,000,000 measurements/s
3D Resolution	0.05-2mm			0.1-2mm
Scanning Speed	Up to 90fps		Up to 70fps	Up to 30fps
Photogrammetry	Included photogrammetry mode (No coded markers required)			
Min. scan volume	5mm x 5mm x 5mm			150mm x 150mm x 150mm
Single Capture Range	217mm x 167mm at 200mm 325mm x 323mm at 300mm 434mm x 394mm at 400mm 542mm x 463mm at 500mm 650mm x 531mm at 600mm			650mm x 531mm at 600mm 1300mm x 935mm at 1200mm
Working distance	200-600mm	150mm-400mm	200-600mm	170mm-1200mm
Color Mapping	Supported			
Alignment mode	Marker / Global Marker			Marker / Global Marker / Geometry / Texture
3D imaging camera resolution	3,000,000			
Color Supplemental Light	12 blue LEDs			
Outdoor Scanning	Below 100,000 lux	Below 50,000 lux	Below 100,000 lux	Below 30,000 lux
Marker Recognition Enhancement	12 blue LEDs			
Laser Safety	Class II (eye safe)			
Operating System	Windows			
Wireless Scanning	Supported			
Computer Configuration Requirements	Windows 10/11(64 bit):i7-Gen10 and above, Graphics card (8GB video memory and above), 32GB memory and above Minimum: i7-Gen7, Graphics card (6GB video memory), 16GB memory macOS: 11.7.7 and above, M1/M2/M3 series processors; RAM: 16GB and above			
Interface Mode	USB 3.0			
Input Power	12V, 3A			
Operating temperature	-10° C to 40°			
Certifications	CE, RoHS, REACH, WEEE, FDA, FCC, UL, IC, RCM, PSE			

[1] Accuracy is evaluated in laboratory conditions (measurement object is 100mm sphere pair) and actual results may be affected by operating environments such as temperature, vibration, and other factors.