SHINING 3D

FREESCAN

COMBO Series

Hybrid Light Source and Multifunctional
Handheld 3D Scanner

COMPACT AND POWERFUL METROLOGY

FREESCAN
COMBO Series

Scanners from the powerful FreeScan Combo Series pack dual light sources in an ultra-compact shell, measuring just 193 x 63 x 53mm. They're equipped with both blue laser and infrared VCSEL technology and weigh in at only 620g.

This lightweight, handheld 3D scanner offers four modes: multiple-line scanning, single-line scanning, fine scanning, and infrared scanning.

Its multiple-line mode projects up to 50 laser lines (FreeScan Combo + version) and scan at speeds of up to 3,600,000 points/sec.

The FreeScan Combo Series' efficiency, combined with its hybrid technology, wide FOV, and material adaptability, make it highly versatile.

From inspection, reverse engineering, and product design to additive manufacturing and other demanding applications, the FreeScan Combo and Combo + can easily handle a wide range of use cases.

VERSATILE
Laser + VCSEL

ACCURATE
Up to 0.02mm

LIGHTWEIGHT
Only 620g

COMPACT
193 × 63 × 53mm

BLUE LASER + INFRARED LIGHT

An innovative combination of blue laser and infrared light sources meets the needs of diverse industrial 3D scanning scenarios.

4 SCANNING MODES TO COVER ALL TYPES OF WORKPIECES

Multiple-line mode with 26 or 50 laser lines for overall scans
Fine scanning mode with 7 parallel laser lines to acquire intricate details
Deep hole scanning mode with 1 single laser line
Infrared light mode for quick scans **without markers**

Up to

3,600,000

points/s

FreeScan Combo+

50 LASER LINES

FreeScan Combo

26 LASER LINES

Smooth and efficient 3D data capture for a wide range of applications.
Tackle dark or reflective surfaces with confidence.

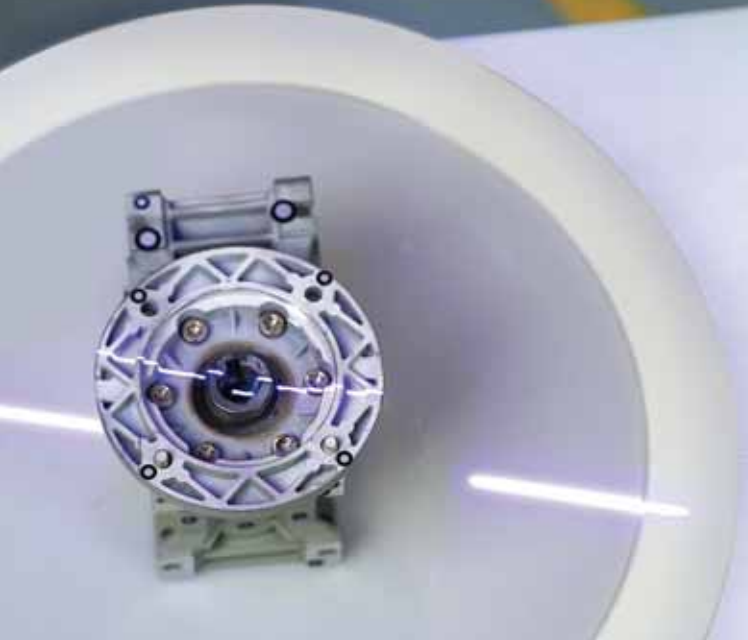
Up to 0.02mm

A WISE CHOICE FOR METROLOGY

The FreeScan Combo Series' laser scanning modes can achieve industrial-grade accuracy up to 0.02mm, ideal for metrology applications.

PRECISE AND FINE DETAIL SCANNING

With the fine scanning mode's 7 parallel laser lines, capture small, intricate areas with a higher level of detail.



DEEP HOLE SCANNING WITH COMPLETE DATA

The scanner's optimized lens angle and single-line mode offer comprehensive data acquisition for deep holes and pockets. Scan and inspect every single part of your workpiece.

INFRARED LIGHT SCANNING

For feature-rich workpieces, the infrared light scanning mode is ideal. It captures parts quickly and efficiently without the need for markers.

620g

POWERFUL AND ERGONOMIC

The FreeScan Combo Series boasts an ergonomic, compact, and lightweight design that make 3D scanning convenient and easy.

SPECIFICATIONS

Model	FreeScan Combo Series		
Scan modes	Laser		Infrared
Light source	FreeScan Combo+	FreeScan Combo	VCSEL
	50 laser lines	26 laser lines	
	7 parallel laser lines 1 single laser line		
Scan speed	3,600,000 points/s	1,860,000 points/s	2,250,000 points/s
Working distance	300 mm / 200 mm		300 mm
Scan accuracy	Up to 0.02 mm		Up to 0.05 mm
Volumetric accuracy (1)	0.02 + 0.033 mm/m		0.05 + 0.1 mm/m
Scan depth	360 mm		1240 mm (2)
Max. FOV	520 x 510 mm		600 x 600 mm
Point distance	0.05 ~ 10 mm		0.1 ~ 3 mm
Laser class	Class II (eye-safe)		
Connectivity	USB 3.0		
Dimensions	193 x 63 x 53 mm		
Weight	620 g		
Power input	12V, 5.0A		
Operating temperature range	-20 ~ 40° C		
Operating humidity range	10 ~ 90%		
Certifications	CE, FCC, ROHS, WEEE, KC, FDA, UKCA, IP50		
Recommended computer configuration	OS: Windows 10 Pro (64-bit) / Windows 11 Pro (64-bit); CPU: 13th Gen Intel (R) Core (TM) i7-13650HX 2.6 GHz or above; Video card: NVIDIA GeForce RTX 4060 or above Video memory: 8GB or above; RAM: 64GB or above, DDR5 dual-channel; USB port: USB 3.0		

Notice: SHINING 3D reserves the right to modify or adjust above specifications and pictures.

(1): Based on VDI/VDE 2634 part 3 standard. Sphere-spacing error is assessed with traceable length artefacts and markers by measuring these at different locations and orientations within the working volume.

(2): Scan depth can be manually adjusted in Infrared scan mode. Maximum is 1240mm.

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