

TRACKSCAN SHARP

TrackScan Sharp optical 3D scanning system, engineered with 25-megapixel industrial cameras and robust onboard processors for edge computing, is specially designed for measuring large-scale parts over a long distance with high speed. It brings optical measurements to new heights by offering a tracking distance of up to 8.5 meters, a high-precision measurement range of 135 m3, enabling powerful measurement experiences.

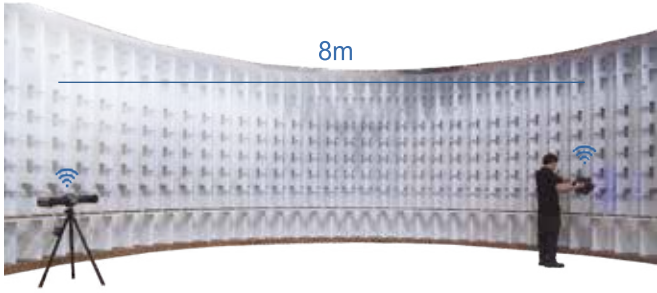
This measurement system is highlighted by its robust performance including 99 laser lines, and a measurement rate of up to 6 million measurements/s, offering highly precise and reliable measurement results.

Moreover, as the third generation of SCANOLOGY's technology featured by intelligent and wireless 3D scanning, TrackScan Sharp is fully battery-powered and supports wireless data transfer, which frees the user from cable constraints and allows for smooth scanning in any environment.



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Long-distance and Large-volume Tracking

TrackScan Sharp adopts a dynamic adaptive LED algorithm and long-distance depth of field, which supports a max tracking distance as long as 8.5 meters. It allows users to effortlessly tackle a wide variety of challenges including measuring large-scale parts in aerospace, energy, and heavy industry. Its 135-m³ industrial high-precision measurement range and 233-m³ scanning range are achieved thanks to its large tracking volume, robust edge calibration algorithm, and stable structure. It saves the hassle of moving trackers frequently and enables users to measure large components efficiently in just one position.

Technical Specifications

Type		TrackScan Sharp-S	TrackScan Sharp-E
Scan mode	Ultra-fast scanning	81 blue laser lines (Triple Cross Technology)	
	Hyperfine scanning	17 blue parallel laser lines	
	Deep-hole scanning	Extra 1 blue laser line	
Accuracy ⁽¹⁾		up to 0.025 mm	
Measurement rate up to		6,000,000 measurements/s	
Scanning area up to		800 mm × 700 mm	
Laser class		Class II (eye-safe)	
Resolution up to		0.020 mm	
Volumetric accuracy ⁽²⁾	10.4 m ³ (3.5 m)	0.048 mm	0.049 mm
	35 m ³ (5.2 m)	0.069 mm	0.070 mm
	90 m ³ (7.2 m)	0.128 mm	0.130 mm
	135 m ³ (8.5 m) ⁽³⁾	0.159 mm	-
Volumetric accuracy (with MSCAN photogrammetry system)		0.044 mm + 0.012 mm/m	
Stand-off distance		300 mm	
Depth of field		400 mm, 800 mm (Large depth of field)	
Hole position accuracy		0.050 mm	
Output format		.stl, .pj3, .igs, .asc and etc., customized	
Operating temperature range		-10~40 °C	
Operating humidity range (non-condensing)		10-90 % RH	
Interface mode		USB 3.0, Network Interface	
Certification		CE, Rohs, WEEE, FCC	
Patents		CN109000582B, CN110992393B, CN111678459B, CN111694665B, CN112802002B, CN112867136B, CN112964196B, CN113188476B, CN113340234B, CN113432561B, CN113473034B, CN113514008B, CN113766083B, CN114001696B, CN114205483B, CN114554025B, CN114627249B, CN115289974B, CN115325959B, CN115493512B, CN115511688B, CN115661369B, CN115690333B, CN115695763B, CN116136396B, CN116206069B, CN116244730B, CN209263911U, CN210567185U, CN211121096U, CN214149174U, CN218103220U, CN218103238U, CN218411072U, CN218584004U, CN218734448U, CN219829788U, CN219834226U, CN307756797S, EP3392831B1, EP3907702B1, KR102096806B1, US10309770B2, US11060853B2, US11493326B2	

(1) ISO 17025 accredited: Based on VDI/VDE 2634 Part 3 standard and JJF 1951 specification, probing error (size) (PS) performance is evaluated.

(2) ISO 17025 accredited: Based on VDI/VDE 2634 Part 3 standard and JJF 1951 specification, sphere spacing error (SD) performance is evaluated.

(3) The industrial-grade high-precision measurement range of TrackScan Sharp-S is up to 135 m³, and its scanning range is up to 233 m³.

*Our company reserves the right to interpret and modify the parameters and images in this manual within the scope of law.

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