Type		NimbleTrack-C Gen2	NimbleTrack-E Gen2
Scan mode	Ultra-fast scanning	54 blue laser lines	
	Hyperfine scanning	17 blue parallel laser lines	
	Deep hole scanning	1 extra blue laser line	
	Large area scanning	54 blue laser lines	
	Photogrammetry	Adaptive photogrammetry	
Accuracy for scanner-only mode [1]		Up to 0.020 mm	
Accuracy for system [1]		Up to 0.025 mm	
Tracking distance per i-Tracker		3500 mm	4200 mm
Volumetric accuracy [1]	Tracking distance 3.5 m	0.060 mm	0.059 mm
	Tracking distance 4.2 m	/	0.072 mm
	With photogrammetry system [2]	0.044 mm + 0.012 mm/m	
	Tracker-only scanning [2]	0.072 mm + 0.012 mm/m	
Hole position accuracy		0.050 mm	
Laser class		ClassII (eye-safe)	
Resolution up to		0.020 mm	
Stand-off distance		300 mm	
Depth of field		400 mm	
Scanning area up to		500 mm × 600 mm	
Scanning frame rate		120 fps	
Measurement rate up to		6,630,000 measurements/s	
Dimension of i-Scanner		252 mm × 195 mm × 260 mm	
Weight of i-Scanner		1.3kg (Net weight)	
		1.4 kg (Battery and wireless module included)	
Dimension of i-Tracker		570 mm × 87 mm × 94 mm	
Weight of i-Tracker		2.2 kg (Net weight)	
		2.6 kg (Battery and wireless module included)	
Size of protection case		1000 mm × 425 mm × 280 mm	
Output format		.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.	
Operating temperature range		-10°C–40°C	
Operating humidity (Non-condensation)		10-90% RH	
Wireless operating mode		i-Scanner, i-Tracker, i-Scanner + i-Tracker, i-Tracker + i-Probe, Wireless multi-tracker tacking, Edge Inspection	
Wireless standard		Wi-Fi 6，802.11a/b/g/n/ac	
Interface mode		USB3-B，Gigabit Ethernet port	
Patents		CN109000582B, CN211121096U, CN210567185U, CN111678459B, CN114001696B, CN114554025B, CN114205483B, CN113514008B, CN114627249B, CN112867136B, CN218103220U, CN218103238U, CN307756797S, CN113340234B, CN112964196B, CN115289974B, CN113188476B, CN218411072U, CN115325959B, CN218584004U, CN115661369B, CN218734448U, CN115493512B, CN110992393B, CN116136396B, CN113432561B, CN219834226U, CN219829788U, CN116244730B, CN116206069B, CN113766083B, CN222015590U, CN222027649U, CN308982243S, CN308982242S, CN222104664U, CN222279677U, CN222279678U, CN222321625U, CN222317979U, CN222317980U, CN222356423U, CN222353116U, CN222560923U, CN222865846U, US10309770B2, US10309770B2, US11060853B2, KR102096806B1, EP3392831B1, US11493326B2	

(1) ISO 17025 accredited: Performance is evaluated based on JJF1951 specification and VDI/VDE 2634 Part 3.
(2) Paired with high-precision scale bar.

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NimbleTrack GEN2 09042025-V2.0

SCANOLOGY

OPUS

Further, Faster, Mighter

NimbleTrack Gen2

NimbleTrack Gen2 is Scanology's all-new wireless optical 3D scanning system that brings wireless freedom, non-target scanning, precise measurements and portability together. It delivers high efficiency and adaptability for parts of all sizes—from intricate components to massive parts. NimbleTrack Gen2 sets a new standard for efficient and smart 3D measurement.

Track Further, Scan Bigger

With edge calibration algorithms and a stable CFFIM structure, NimbleTrack Gen2's tracker offers a 4.2-m tracking distance, ideal for small to mid-sized objects, making it easy to scan large and extra-large parts with accuracy.

Tracking distance up to

4.2m

Accuracy You Can Trust

Powered by our metrology-grade hardware and in-house developed algorithms, this mode delivers up to 0.025-mm system accuracy and 0.059-mm volumetric accuracy—marker-free and ideal for dynamic scanning of small to mid-sized parts.

System accuracy up to

0.025mm

Volumetric accuracy up to

0.059mm

Lightning-fast Scanning

Both the 3D scanner and tracker feature next-gen edge computing, which enables it to deliver fast and smooth scanning experiences at a high frame rate of 120 FPS. In high-speed scanning mode, it achieves a scan rate of up to 6.63 million measurements/s with 54 blue laser lines. Even complex surfaces and fine details are scanned rapidly and accurately, making NimbleTrack Gen2 a true productivity booster in industrial inspection.

Scanning rate up to

6,630,000 measurements/s

Blue laser lines

54

Frame up to

120FPS

Flexible Dual Modes

The NimbleTrack Gen2 features an innovative dual-mode system that combines optical 3D scanning with handheld wide-area scanning, offering the flexibility to meet diverse measurement needs. Thanks to its integrated laser projection, the tracker can be used as a handheld 3D scanner to capture point clouds. This mode boosts the range and flexibility of scanning—ideal for measuring large parts with high precision.

NimbleTrack Gen2 incorporates adaptive photogrammetry technology, ensuring exceptional accuracy for both long and short measurement distances. It eliminates cumulative errors and ensures consistent volumetric accuracy, delivering high-precision results for both large-scale and detailed measurements.

Fully Wireless and Mobile

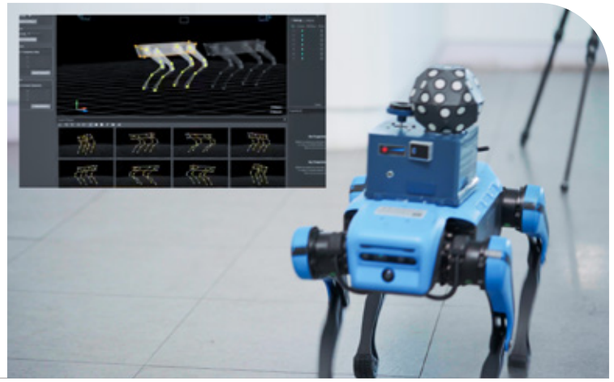
With no cables, the NimbleTrack Gen2 delivers true wireless freedom. Equipped with high-performance batteries and advanced edge computing, both the 3D scanner and tracker support wireless measurements and stable high-speed data transmission anytime, anywhere.

Whether scanning outdoors, in power-restricted areas, on oversized parts, or in confined spaces, it ensures seamless, precise and efficient 3D measurements.

Versatile Applications

Custom Adapter

It can be paired with custom adapters to capture 6D pose of target objects in real time. The system accurately tracks pose deviations even in vibrating or complex environments, which is ideal for crash testing, aerospace equipment assembly, robot calibration, and absolute-accuracy correction.



*01

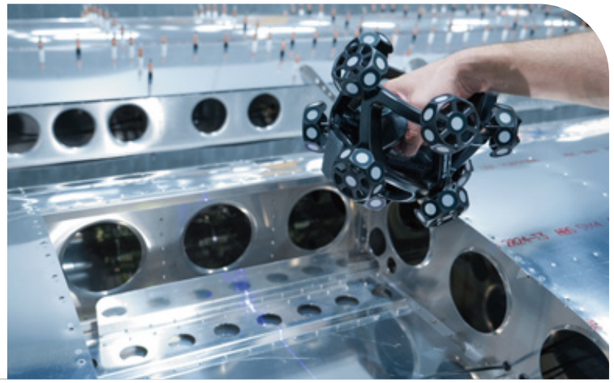
Optical Probe

It can be paired with a tracking i-Probe to probe inaccessible areas such as reference holes and hidden points. This contact measurement probe can ensure precise results with both wired and wireless options.

*02

Intelligent Edge Inspection

NimbleTrack boasts an optional module of precise edge inspection, which is enabled by gray-value measurement. Users can inspect closed features such as holes, slots, edges precisely and obtain information such as positions and diameters.



*03