



SHINING 3D

FreeScan Trio



FIRST MARKER-FREE
LASER 3D SCANNER

GEARED FOR ALL YOUR PROJECTS

FreeScan Trio

TRIPLE CAMERA HANDHELD 3D LASER SCANNER



SPEED AND EFFICIENCY REDEFINED

The FreeScan Trio redefines speed and efficiency with its 98 laser lines that enable marker-free scanning. It can deliver up to 3,010,000 points/s. Less preparation, more efficiency.



THE POWER OF THREE 5 MEGAPIXEL CAMERAS

With 3 industrial cameras, each wielding 5 mega pixels, FreeScan Trio brings out the most elaborate details and high-quality 3D data.



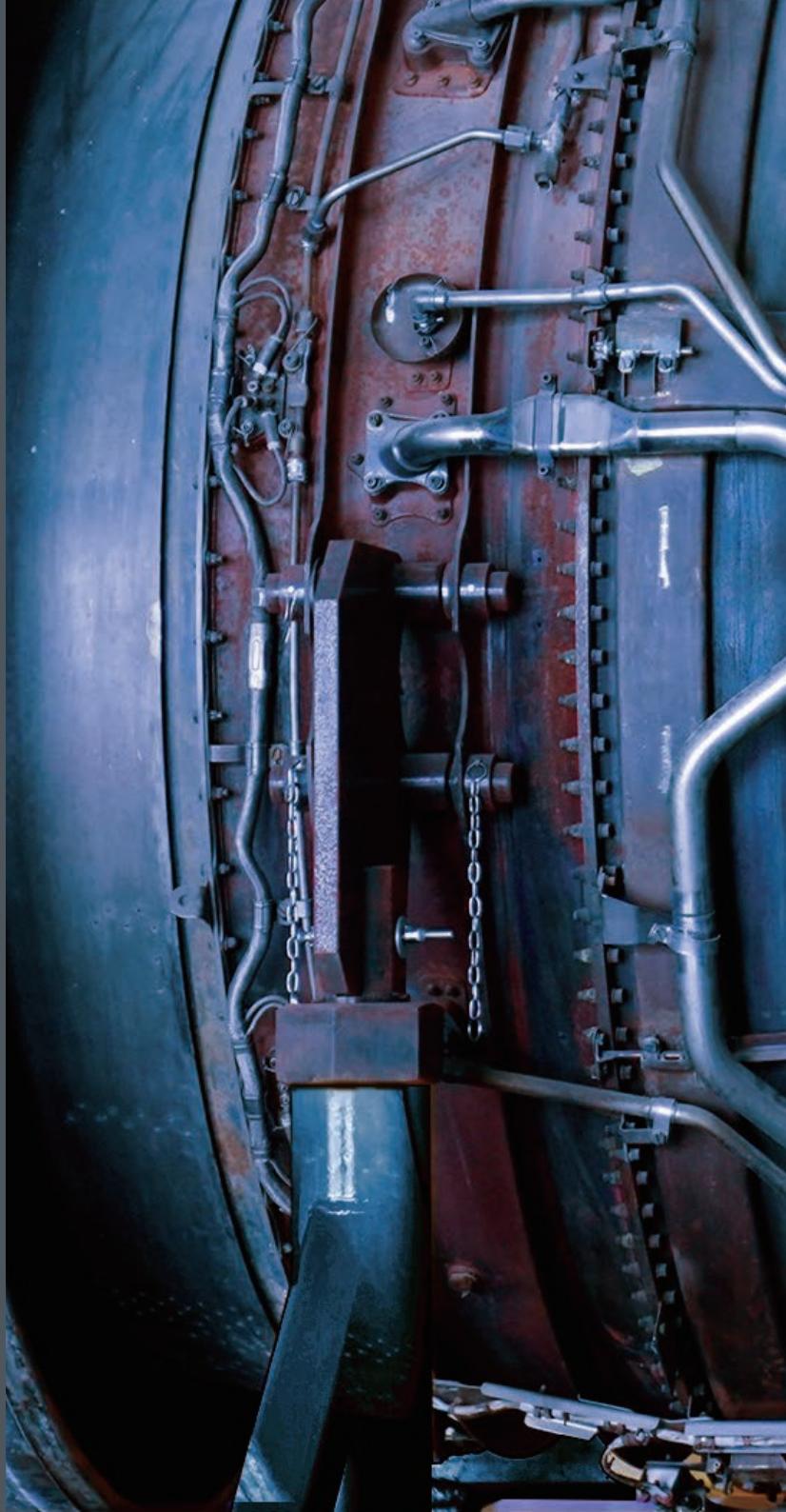
UNRELENTING ACCURACY AND PRECISION

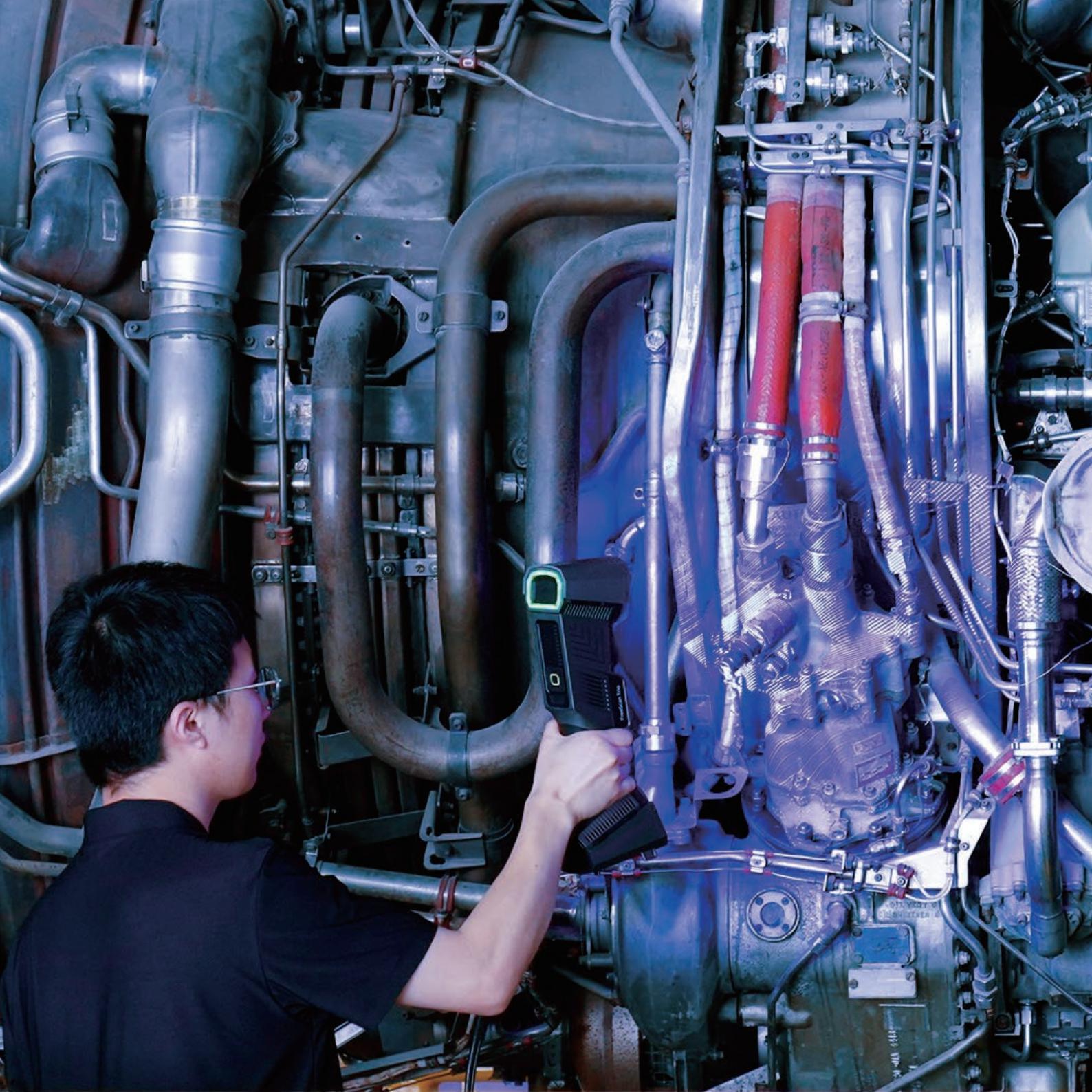
Under the scan modes with markers, the FreeScan Trio consistently provides high precision scanning results with an accuracy of up to 0.02mm.



ALL-IN-ONE 3D SCANNER

Versatility is at your fingertips with the FreeScan Trio's 4 scanning modes and built-in photogrammetry. It's the perfect partner for every scenario.





FIRST MARKER-FREE LASER 3D SCANNER

98 LASER LINES, ZERO MARKERS

The FreeScan Trio's thorough 98-laser-line mode eliminates the need for markers, efficiently capturing your workpieces with rich geometric details. Paired with an ultra-fast scan speed of up to 3,010,000 points/s, you'll truly feel the acceleration in your workflow.

 3,010,000
points/s





Accuracy up to
0.02mm



Volumetric accuracy with photogrammetry
0.02+0.015mm/m



FOV
650x580mm

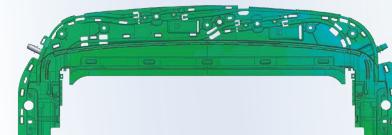
26 LASER LINES MODE

UNRELENTING ACCURACY AND PRECISION

Precision isn't just a term, it's a commitment. We've poured our 20 years of engineering expertise and our latest key patents into the FreeScan Trio. For quality control, inspection, and reverse engineering, its 0.02mm accuracy and high-precision performance deliver results you can count on, time and time again.

SWIFT, EFFORTLESS SCANNING

Under the 26 laser lines mode, its 650x580mm FOV gets your projects done fast, capturing more data in less sweeps. Our optimized software algorithms generate 3D data in real-time for you to see on your screen, all while guiding you through the scanning process.



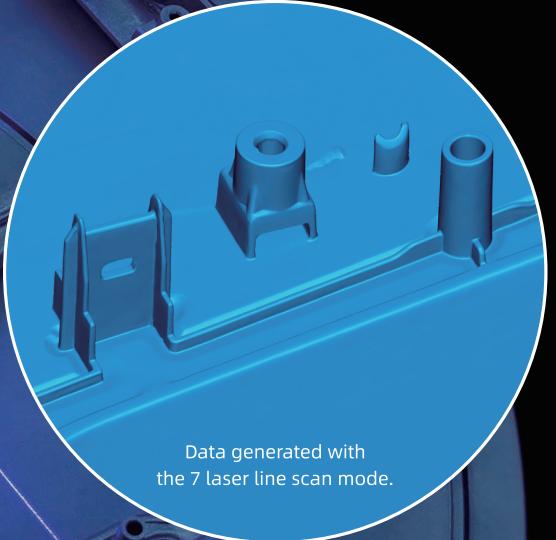
Data generated with the 26 laser line mode.
Compared to the CAD file.



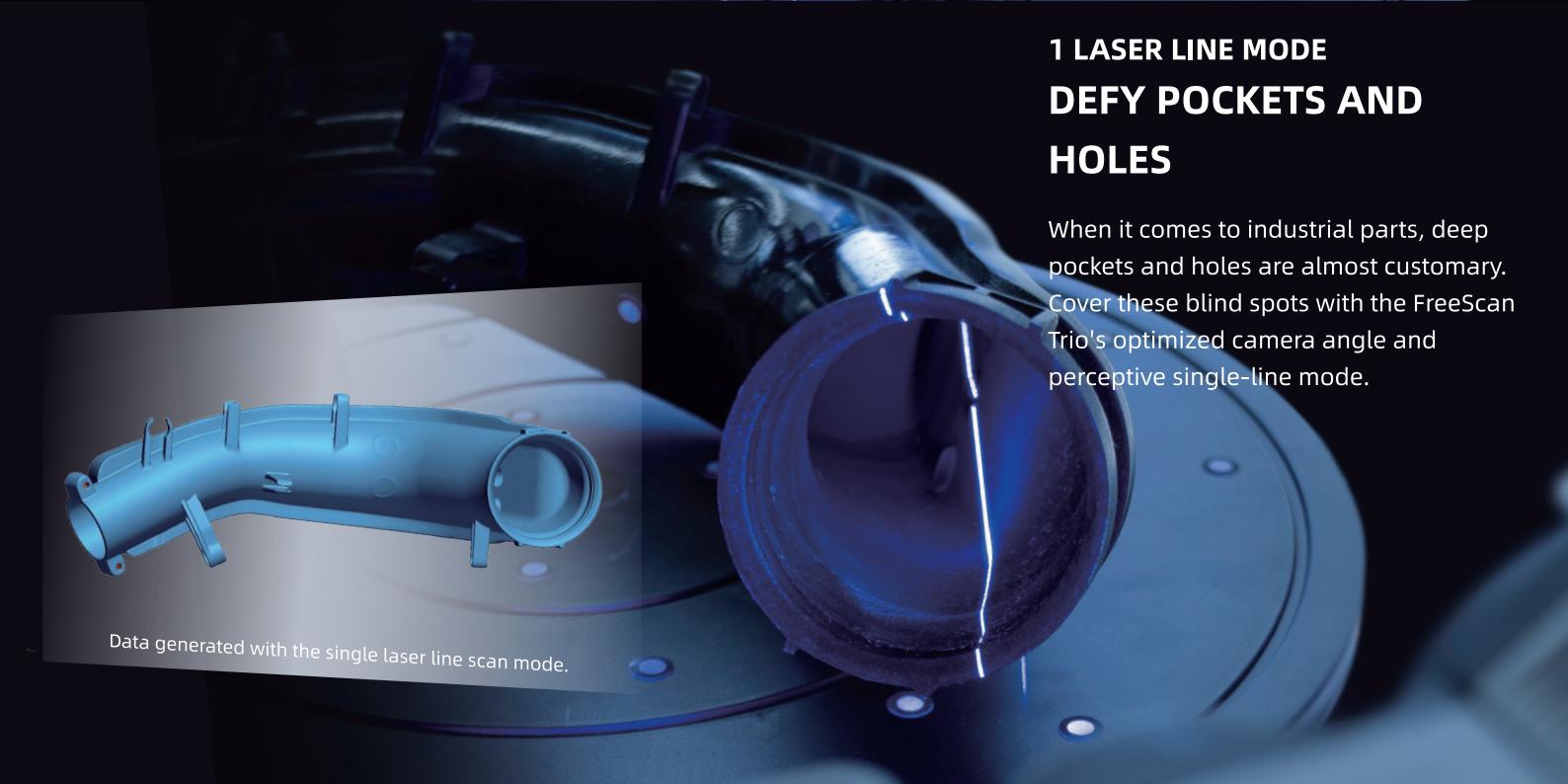


7 LASER LINES MODE EXCEPTIONAL DETAIL

The FreeScan Trio's three 5 megapixel industrial-grade cameras will let you zoom into the smallest, most intricate details of your projects with the minimum point distance to 0.01mm.

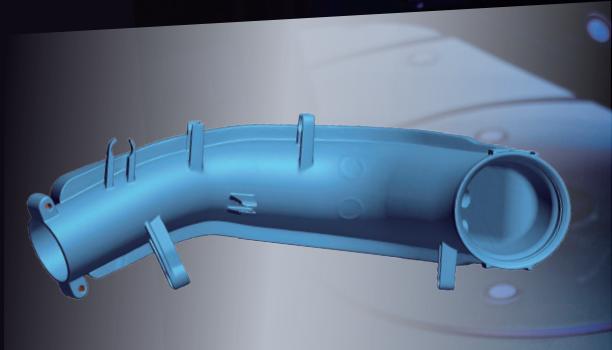


Data generated with
the 7 laser line scan mode.



1 LASER LINE MODE DEFY POCKETS AND HOLES

When it comes to industrial parts, deep pockets and holes are almost customary. Cover these blind spots with the FreeScan Trio's optimized camera angle and perceptive single-line mode.



Data generated with the single laser line scan mode.

BUILT-IN PHOTOGRAMMETRY

- The FreeScan Trio features a built-in photogrammetry mode that can achieve a remarkable volumetric accuracy of up to 0.02mm + 0.015mm/m. Place markers and just one magnetic scale bar and the FreeScan Trio will quickly lock in the spatial position of the target frame.



SPECIFICATIONS

Product Model	FreeScan Trio			
Scan mode	Multiple Lines Scan	Single Line Scan	Fine Detail Scan	98 Lines Scan
Light source	26 laser lines	Single laser line	7 parallel laser lines	98 laser lines
Working distance	300mm	300mm	200mm	300mm
Scan accuracy	Up to 0.02mm			/
Scan speed	Up to 3,010,000 points/s			
Scan depth	360mm			
FOV	650 x 580mm			
Volumetric accuracy*	0.02 + 0.03mm/m (0.02 + 0.015mm/m with photogrammetry)			
Point distance	0.01-3mm			
Laser class	Class II (eye-safe)			
Connection standard	USB 3.0			
Dimensions	331 x 120 x 76 mm			
Weight	985g			
Power input	12V, 5.0A			
Working temperature	0 ~ 40°C			
Working humidity	10 ~ 90%			
Certifications	CE, FCC, ROHS, WEEE, KC, FDA, UKCA, IP50			
Recommended computer configuration	OS: Win10, 64 bit; Graphics card: NVIDIA GTX/RTX series cards, higher or equal to GeForce RTX 3060; Video memory: ≥6G; Processor: I7-10700; Memory: ≥64GB			

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

* Based on VDI/VDE 2634 part3. Sphere-spacing error is assessed with traceable length artefacts and markers by measuring these at different locations and orientations within the working volume, in the accuracy lab with environment conditions: temperature $20 \pm 0.5^\circ\text{C}$; humidity 40 ~ 60% RH.