IT3D GROUP

3DeVOK

Industrial-grade Excellence
Next-generation Magic Tool

3DeVOK MT

PROFESSIONAL 3D SCANNER

The 3DeVOK MT is a professional and versatile 3D scanner that stands out for its exceptional performance. Based on industrial-grade 3D scanning technology, it incorporates both lasers and speckles to offer you a magic tool. With professional scanning software, flexible parameter settings, intuitive interaction, and reliable performance, it significantly enhances work efficiency. It is an excellent solution for scanning objects of almost any kind, making it ideal for artistic design, reverse engineering, 3D measurement, 3D visualization, 3D printing, research, education and more.

3 Types of Light Sources

34 blue laser lines, 22 infrared laser lines, and large-area infrared speckle

Technical Parameters (up to)

Accuracy 0.04 mm, Resolution 0.05 mm, Scanning Speed 4,500,000 points/s, Scanning Area 1100mm * 1000mm, Scanning Distance 1500mm

Key Features

Efficient scanning with 34 blue laser lines, Marker-free scanning with laser modes, Smart combination of large-area infrared speckle and partial fine scanning, Advanced hybrid alignment, Invisible light scanning, Easy scanning for black and reflective objects without spray, Outdoor scanning

Industrial & Automotive Parts Product Design

Marker Alignment with 34 blue laser lines & 22 infrared laser lines

High Data Quality
Accuracy reaching 0.04 mm, resolution up to 0.05 mm

Strong Material Adaptability
Capture black and reflective surfaces without scanning spray

Fast Scanning
Frame rates up to 70 FPS while a maximum single-frame scanning area of 490 mm × 490 mm

Efficient Operation
Marker distance of 10-12 cm, reducing marker usage

Real-time Scanning
New real-time mesh display algorithm for easy monitoring of scan results

Recommended Object Size
0.05-5m

3D Data Compatibility
Support export of formats like .asc and .stl, compatible with mainstream CAD and reverse engineering software

Applications
CAD design, reverse engineering, automotive customization, 3D printing, virtual simulation, and more

Art Sculptures/Movable Cultural Relics

Hybrid Alignment with 34 blue laser lines & 22 infrared laser lines

Marker-free Scanning

Direct scanning of objects with rich textures or geometric features

Strong Material Adaptability

Easily handle dark, black, and reflective surfaces

Stable Lighting Adaptability

Ensure smooth data acquisition in both low light and direct sunlight

Fine Details

Resolution up to 0.1 mm

Recommended Scanning Size

0.1- 4.0m

Applications

Suitable for 3D art design, cultural and creative product design, and digital archiving/restoration/monitoring/preservation of cultural relics

High-Definition Full-Color Mapping Solution

Comprehensive Workflow

Combine MT color 3D scanning with free texture mapping or optional advanced 3D texturing software to capture precise and vivid 3D color data

Ideal Objects

Suitable for items with intricate textures and vibrant colors

Applications

Perfect for 3D visualization, full-color 3D printing, cultural heritage data archiving, and more

*Enhanced 3D Data Display with Color Scanning and Texture Mapping

Medium to Large Objects Sculptures / Full-Body Scans

Large-area infrared speckle + partial fine scanning with 3 light sources

Powerful Alignment Capability

Large-area infrared speckle scanning covers up to 1,100 mm*1,000 mm per frame, efficiently accommodating medium to large objects

Partial Fine Scanning

Supports seamless mode switching and data integration, allowing smooth scanning of larger objects while preserving intricate details (resolution up to 0.1 mm)

Large Depth of Filed

Scanning distance from 150 to 1,500 mm enables versatile, multi-angle scanning for comprehensive data capture

Maximum Scanning Size

up to 5m

Full-Body / Body Parts Scanning

Infrared speckle + geometry / hybrid alignment

Human Body Mode

Supports no-light scanning, hair capture, and automatic correction of slight movements

Eye-Safety

Class I laser compliant with IEC 60825 standards, ensuring safe operation

Exceptional Detail

Resolution up to 0.1 mm for sharp and clear details

Easy Operation

Maximum scanning area of 1,100 mm × 1,000 mm for smooth scanning

Strong Adaptability

No need for exposure adjustments, making it easy to scan dark clothing

Applications

Ideal for medical rehabilitation, artistic design, personalized customization, and more

Research / Education

Versatile Coverage

Accommodates a wide range of object sizes, from 0.05 m to 5 m

Environmental Compatibility

Adapts seamlessly to both indoor and outdoor scanning conditions

Multidisciplinary Applications

Supports diverse fields, including industrial design, mechanical design, art, cultural heritage and archaeology, medical rehabilitation, and forensic science

Education-Friendly & Professional Support

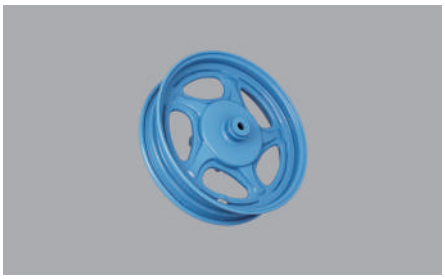
Scanning software with no node limitations, plus exclusive educational discounts, offering a cost-effective 3D solution tailored for research and teaching

3DeVOK MT Technical Specifications			
Light Sources	34 Blue Laser Lines	22 Infrared Laser Lines [invisible]	Infrared Vcsel Structured Light [invisible]
Safety of Lasers	Class II (Eye-safe)	Class I (Eye-safe)	
Scan Mode	Crossed Blue Lasers (Support markerless scanning)	Crossed Infrared Lasers (Support markerless scanning and light-free scanning)	Infrared Linear-array Structured Light (Speckle) (Support markerless scanning, light-free scanning partial fine scanning, and rapid scanning)
Basic Accuracy*	Up to 0.04 mm		
Volumetric Accuracy*	Up to 0.04 mm + 0.06 mm/m		
Point Distance	0.05-5mm	0.1-5mm	
Alignment Mode	Support hybrid, markers, texture, and geometric features alignment		Support hybrid, texture and geometric features alignment
Ability to Capture Texture	Yes		
Scanning Distance	150-1000mm		150-1500mm
Field of View	140mm x 140mm - 490mm x 490mm		50mm x 75mm - 1100mm x 1000mm
Scanning Frame	Up to 70 FPS (Marker Alignment)		Up to 30 FPS
Scanning Speed	Up to 3,300,000 Points/s	Up to 2,450,000 Points/s	Up to 4,500,000 Points/s
Output Formats	*.obj, *.stl, *ply, *.asc, *.mk2, *.txt, *.epj, *.apj, *.spj, *.map, *.sk		
Working Conditions	0–40°C, 10%–90% RH (non-condensing)		
Interface	USB 3.0		
Scanner Dimensions & Weight	Dimensions: 215 mm × 73 mm × 53 mm; Weight: 640 g		
Power Source	DC: 12 V, 5.0 A		
Certifications	CE-EMC, FCC, RoHS, IEC 60825, IEC 62471, IEC 60529-IP50, WEEE, KC		
Recommended Configurations for PC	OS: Win10/Win11, 64-bit; CPU: i7-13650HX and above; RAM: 32GB and above; Graphic Card: NVIDIA discrete graphics card, NVIDIA RTX3060 and above; Graphics memory: 6GB and above		

* The laboratory theoretical accuracy test results are subject to uncertainty errors.

MT Unlocks the Digitalization of Everything

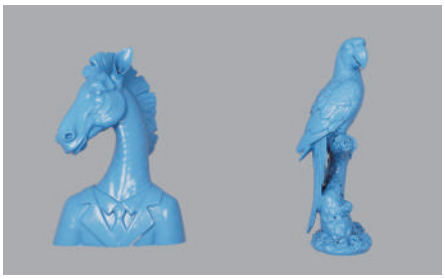
Automotive Customization



Reverse Engineering

Human Digitization

3D Visualization



Sculptural and Art

Cultural Heritage & Archaeology