Scanning Parameters

Scanning Mode	4 (High-Speed Scanning, Detailed Scanning, Deep-Hole Scanning, NIR Markerless Scanning)
3D Light Source	4 (Blue Crossed Laser, Blue Parallel Laser, Blue Single Laser, NIR Binocular Structured Light)
Scanning Rate	Up to 6,451,200 points/s
Scanning Speed	Up to 100 fps (wired) Up to 60 fps (wireless)
3D Resolution	0.05–2 mm
Accuracy	Up to 0.02 mm
Volumetric Accuracy	0.02 mm + 0.06 mm/m × L
Working Distance	160–1,200 mm
Minimum Scan Volume	5 × 5 × 5 mm
Maximum Scan Volume	4000 × 4000 × 4000 mm

Software & Compatibility

Supported OS	Windows, macOS
Output File Format	STL, OBJ, PLY, ASC

Tracking & Imaging

Tracking Method	(Blue Laser Line) Marker, Global Marker, Marker-Free; (NIR) Geometry, Texture
Full-Color Scanning	Supported
RGB Fill Light	8 White LEDs
Marker Recognition Enhancement	8 Blue/White LEDs + 4 IR LEDs
Outdoor Scanning	Up to 110,000 lux
NIR Filter	Yes

Hardware & Connectivity

Processor	8-Core CPU, 2.0 GHz
Display	3-inch HD Touchscreen
Battery Capacity	4,800 mAh
Wireless Scanning	Supported
Interface	USB Type-C / USB 3.1
Device Weight	511 g (Battery Included)
Dimensions (L × W × H)	191 × 50 × 76 mm

What's in the Box

- M1 Ultra 3D Scanner
- USB 3.0 Data & Power Cable (2m)
- High-Precision Glass Calibration Board
- ×10 Reflective Marker (D6mm × 10, D3mm × 10)
- ×2 NIR Filter
- Spare Battery
- Tripod
- Lanyard
- Cleaning Cloth

Contact Us

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ELEGOO

M1 Ultra

Scan Anywhere. Measure Precisely.



M1 Ultra is an all-in-one wireless 3D scanner. With multiple scanning modes, 0.02 mm metrology-grade accuracy, high-speed capture, and intelligent software, it handles everything from intricate parts to large-scale objects, indoors or outdoors.

Smart & Wireless Scanning

Go anywhere with a lightweight, wireless design and control key settings directly from the touchscreen.



Multiple Scanning Modes, One Device

From large surfaces, fine details, and deep holes to faces and bodies, M1 Ultra adapts to different objects with multiple scanning modes.



Fast Scanning, Stable Results

Capture scan data at high speed while global shutter cameras help reduce motion blur and keep tracking stable.



Precision & True-to-Life Color

Capture fine geometry with up to 0.02 mm accuracy and preserve colors, textures, and surface finishes.



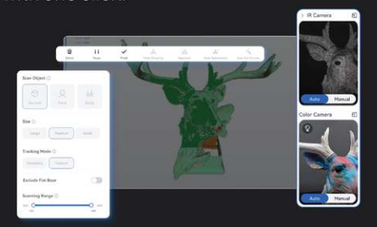
Built for Diverse Applications

From a tiny 5 mm part to 4-meter structures, M1 Ultra handles objects of all sizes and scans reliably indoors or outdoors.



From First Scan to Finished Model

Intuitive software guides you from setup to scanning, then turns your data into a 3D model with one click.



3" Touchscreen

Scan & control at a glance



8-Core Processor

Powerful onboard processing



160-1200 mm Working Distance

More scan flexibility



7 All-Glass Lens Elements

High-resolution imaging



Global Shutter Cameras

Reduced motion blur



8 Blue-White LEDs

Enhanced feature recognition



