

Creality

Sermoon P1 3D Scanner



Machine Specifications

Device Weight	830 g
Size	209 mm × 129 mm × 53 mm
Calibration Board	High-precision glass calibration board
Processor	Qualcomm CPU, 8-core 3.36 GHz, Adreno 740 GPU, FPGA
Built-in RAM	24GB LPDDR5X
Built-in Storage	256GB UFS 4.0
Display	6-inch HD touchscreen
Battery Capacity	3300 mAh × 2 (quick-swap, replaceable)
Charging	65W PD 3.0 fast charging
Wireless PC Scan	Supported
Operating Modes	Standalone Mode / Wireless PC Mode / Wired PC Mode
Wi-Fi	Wi-Fi 7
PC Software Support	Windows / macOS
Computer Configuration Requirements	Recommended Configuration: Windows 10/11 (64-bit), Intel i7 13th Gen or above, NVIDIA 4060 or higher (8GB VRAM), RAM ≥64GB / macOS 14 or above, Apple M3 / M4 / M5, RAM ≥32GB
Operating Temperature	-10°C to 40°C
Operating Humidity	10–90% RH

Blue Laser Modes

Scanning Modes	Single Blue Laser Line / 7 Parallel Blue Laser Lines / 22 Cross Blue Laser Lines
Accuracy	Up to 0.02 mm
Volumetric Accuracy	0.02 mm + 0.06 mm/m
3D Resolution	0.05–2 mm
Scanning Speed (Standalone)	Up to 60 FPS
Scanning Speed (PC Connected)	Up to 100 FPS
Minimum Scan Volume	5 mm × 5 mm × 5 mm
Alignment Mode	Marker / Global Marker
Laser Safety	Class II (eye safe)

Blue Laser Mode Scan Rates

Single Blue Laser Line	61,000 pts/s (Standalone), 102,000 pts/s (PC Connected)
7 Parallel Blue Laser Lines	430,000 pts/s (Standalone), 716,000 pts/s (PC Connected)
22 Cross Blue Laser Lines	1,044,000 pts/s (Standalone), 1,740,000 pts/s (PC Connected)

Blue Laser Mode Outdoor Scanning

Single Blue Laser Line	Below 100,000 lux
7 Parallel Blue Laser Lines	Below 50,000 lux
22 Cross Blue Laser Lines	Below 100,000 lux

Infrared Structured Light Modes

Scanning Modes	Close-Range Infrared Structured Light / Long-Range Infrared Structured Light
Accuracy	Up to 0.075 mm
Volumetric Accuracy	0.075 mm + 0.1 mm/m
Scan Rate (Standalone)	3,440,000 pts/s
Scan Rate (PC Connected)	6,881,000 pts/s
3D Resolution	0.1–2 mm
Scanning Speed (Standalone)	Up to 15 FPS
Scanning Speed (PC Connected)	Up to 30 FPS
Minimum Scan Volume	150 mm × 150 mm × 150 mm
Alignment Mode	Marker / Global Marker / Geometry / Texture
Outdoor Scanning	Below 30,000 lux
Laser Safety	Class I (eye safe)

Single Capture Range — Blue Laser Modes

Range 1	85 mm × 105 mm @ 160 mm
Range 2	135 mm × 130 mm @ 200 mm
Range 3	265 mm × 200 mm @ 300 mm
Range 4	310 mm × 265 mm @ 400 mm
Range 5	380 mm × 365 mm @ 500 mm

Single Capture Range — Close-Range Infrared Structured Light

Range 1	135 mm × 130 mm @ 200 mm
Range 2	265 mm × 200 mm @ 300 mm
Range 3	310 mm × 265 mm @ 400 mm

Single Capture Range — Long-Range Infrared Structured Light

Range 1	689 mm × 375 mm @ 500 mm
Range 2	1245 mm × 754 mm @ 900 mm
Range 3	1450 mm × 1020 mm @ 1200 mm



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Features

Swappable High-Capacity Battery

The swappable high-capacity battery supports longer runtime, continuous scanning, and more flexible on-site operation.

- ◀ Swappable battery design for uninterrupted workflow
- ◀ High-capacity power for longer scanning sessions
- ◀ Quick battery replacement with reduced downtime

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Features

Ultra-Fast Memory & Storage

Equipped with high-speed LPDDR5X memory and fast storage architecture, the system delivers quicker data access, lower latency, and smoother overall performance.

- ◀ Ultra-fast LPDDR5X memory for smoother data handling
- ◀ Faster storage access for improved file performance
- ◀ Accelerated data transfer for quicker workflow execution



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Features

High-Performance Qualcomm Processor

Powered by a high-performance Qualcomm processor with an 8-core CPU and Adreno 740 GPU, the system delivers faster computing, smoother graphics, and more stable overall performance.

- ◀ 8-core CPU architecture for smooth system operation
- ◀ Adreno 740 GPU for stronger graphics performance
- ◀ Enhanced processing power for demanding scanning tasks



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Features

Fast Scanning, Smooth Capture

With high frame rate performance in both blue laser and infrared modes, the scanner delivers faster capture, smoother operation, and more efficient scanning across different applications.

- ◀ High frame rate improves scanning efficiency
- ◀ Optimized scanning speed for dynamic applications
- ◀ Faster data capture supports smoother workflow

Fast Scanning, Smooth Capture

Blue Laser Mode: up to
60 FPS (Standalone)
/ 100 FPS (PC)

Infrared Mode: up to
15 FPS (Standalone)
/ 30 FPS (PC)



