FARO® Freestyle 2 Handheld Scanner

The Most Portable 3D Scanner for Fast, Photorealistic 3D Reality Capture

The FARO Freestyle 2 is a superior handheld 3D scanner designed for professionals who require quick and easy complete scene documentation. Delivering fast, photorealistic 3D reality capture with unparalleled real-time display results, Freestyle 2 offers total mobility to scan even the most confined spaces and difficult objects.

Features

Real-Time Visualization

- Display lets you view what you capture as you scan

Wide-Range of Scanning Distances

- Captured 3D Points starts at 0.4 m
- Can be set to a maximum of 10 m

Capture in Variety of Lighting Conditions

- Designed for normally illuminated interiors and outdoors, including in overcast conditions
- Even provides usable data in complete darkness

One-Hand Operation

- Lightweight with no bulky tablet or long cables

Guided Scanning

- Haptic feedback alerts operator when adjustmentsneed to be made to the users scanning technique
- Proprietary tracking engine enables users to make natural movements while scanning

On-Site Compensation

- White-balancing, post-processing can be done at the scene
- No annual calibration required

Integrated Training

- Live display of data quality with integrated training videos, and tutorials

Benefits

Ultimate Flexibility

- Freestyle 2 is portable, without the need for bulky computers
- Self-contained unit gives the freedom to scan around objects or inside spaces

Save Time

- Scan scenes and objects without data voids in minutes
- Captures data easily and in more detail in less time

Photorealistic Results

- Get high-quality, colored, 3D data with up to 0.5 mm accuracy

Confidence in What You Capture

- See a display of data as you capture to ensure you are getting what you need

Easy-to-Learn & Easy-to-Use

- Modern user interface, proprietary tracking algorithms, integrated video tutorials

Performance Specifications	
Range	0.4 - 5 m (up to 10 m with limited data quality)
Identifiable feature	Up to 0.2 mm
3D point accuracy[1]	≤0.5 mm
Long range accuracy[2]	0.5 mm at 1 m distance 5 mm at 5 m distance 15 mm at 10 m distance
Single image point density	Up to 45,000 points/m² in 0.5 m distance Up to 10,500 points/m² in 1 m distance
Acquisition Rate[3]	Up to 220,000 points/s, point cloud density increases with time
Typical Noise[4]	• 0.3 mm @ 0.4 m distance • 35 mm @ 5 m distance • 0.75 mm @ 1 m distance • 100 mm @ 10 m distance • 10 mm @ 3 m distance
Lighting conditions[5]	Full daylight, 10,000-45,000 lux (reduced performance in direct sunlight)
Light source	Integrated LED flash
Scan volume	39.5 m³ @ max range 5 m
Typical field of view (HxW)	• 420 mm x 550 mm @ 0.5 m • 2740 mm x 3160 mm @ 3 m • 930 mm x 1170 mm @ 1 m • 3600 mm x 4160 mm @ 4 m • 1800 mm x 2160 mm @ 2 m • 4470 mm x 5150 mm @ 5 m
Exposure time	0.1 ms - 7 ms (autoexposure)
Texture color	24 bit
Dimensions	285 mm x 256 mm x 130 mm
Connectivity	HDMI, USB 3.0, WiFi
Weight	1.48 kg
IP rating	IP 52
Compensation	Onsite - with supplied compensation plate
Op temperature range	0 - 40° C
Op humidity range	Non-condensing
Eye Safety	Class 1 Laser
Wavelength	798-816 nm

[1] 1 sigma standard deviation measured on reference scales of lengths between 0.3 m and 1 m, in 1 m distance, for a lateral scanner movement of 1 m, using targets for distance measurement | [2] Typical error at measured distances | [3] Point density depends on scanned surface and lighting conditions | [4] RMS | [5] Limited range and point density in sunlight

* Dust protection 5. Water protection 2: Protection against dripping water whilst device in standard idle position with sensor side facing downward.

Mobile PC Specifications
Microsoft Windows 10 pro, 64-Bit Intel® Core™ i7
256 GB hard disc with 16 GB RAM
HDMI; USB 3.0 ports; WiFi