



## FREESTYLE<sup>3D</sup>



# FARO Freestyle<sup>3D</sup> Scanner

## Efficiency in your hands

### One-stop handheld laser scanning

The FARO Freestyle<sup>3D</sup> is a top-quality, high-precision, handheld scanner for professionals. It quickly and reliably documents rooms, structures and objects in 3D and creates high-definition point clouds. With unbeatable precision and verifiable accuracy, it is suitable for all uses in which installations or properties must be quickly measured from various perspectives. Best-in-class, extensive scan volume boosts productivity by reducing scan time. The FARO Freestyle<sup>3D</sup> is a durable, industrial-grade device. Thanks to its lightweight carbon fiber body, the handheld scanner is highly mobile. A tablet PC is available from FARO (or may be purchased elsewhere) and supports intuitive data acquisition. The 3D scan data can easily be imported into all commonly-used software solutions for architecture.

### Features

#### Handheld color laser scanner

Effortlessly capture almost any surface type in a wide range of environments by simply pointing the FARO Freestyle<sup>3D</sup> to the surface of the object.

#### Intuitive plug and play system

The Freestyle<sup>3D</sup> provides high-productivity in the field with no warm-up time.

#### Real-time point cloud visualization

Point cloud viewing during scanning provides assurance of accurate data acquisition.

#### Automatic flash

Automatically activates and de-activates the built-in LED light depending on the existing light conditions.

#### Optional on-site calibration

The device can be easily calibrated on-site, ensuring consistent, high quality data. A PDF report with key data permits maximum and verifiable confidence in the acquired data.

#### Best point filter

Minimizes the noise and delivers optimum data quality.

#### 3D documentation solution

The user can seamlessly combine results from the Focus<sup>3D</sup> and the Freestyle<sup>3D</sup>, even in gray scale.

### Industries and applications

- Architecture, Engineering & Construction (AEC)
- Forensics & Law Enforcement
- Oil & Gas
- Virtual Reality
- Maritime
- 3D Scanning Service Providers

### Benefits

- Ability to measure and scan in tight and hard-to-reach areas
- Scan around corners where there is limited visibility
- Memory-scan technology allows users to pause and resume scanning at any time
- Flexibility to work with or without artificial targets
- Auto leveling
- Precision handheld scanning - accuracy to 1.5mm / 0.059 in
- Easy-to-use scanning software
- Worldwide service and support from local FARO facilities
- 3D scan data can easily be imported into commonly-used software solutions

## Specifications

Range	0.5 - 3m / 1.6 - 9.8 ft	Scan volume data	8.1m <sup>3</sup> / 286 ft <sup>3</sup>
Resolution at 0.5m / 1.6 ft	Lateral: 0.2 - 1mm / 0.008 - 0.039 in Depth: 0.2mm / 0.008 in	Typical field of view (HxW)	450mm x 530mm at 0.5m 930mm x 1,100mm at 1m 1,800mm x 2,000mm at 2m 2,600mm x 2,900mm at 3m
3D point accuracy/whole scan accuracy <sup>1</sup>	<1.5mm / 0.059 in	Typical angular field of view (HxW)	45°x56° at 0.5m / 0.020 in 45°x59° at 1m / 0.039 in 49°x54° at 2m / 0.079 in 49°x52° at 3m / 0.118 in
Typical lateral accuracy <sup>2</sup>	<1mm / 0.039 in	Exposure time	0.02ms - 10ms (auto exposure)
Single image point density	Up to 45,000 points/m <sup>2</sup> at 0.5m distance Up to 10,500 points/m <sup>2</sup> at 1m distance	Texture color	24-Bit
Recorded 3D points <sup>3</sup>	Up to 88,000 points/sec; point cloud density increases with time	Dimensions	260 x 310 x 105mm / 10.24 x 12.20 x 4.13 in
Typical Noise (rms)	0.7mm at 0.5m distance 0.75mm at 1m distance 2.5mm at 2m distance 5mm at 3m distance	Connectivity	USB 3.0
Best point filter	Noise reduction of typically 40% when scanning the same object from different distances	Weight	0.98Kg / 2.2 lb
Eye safety <sup>4</sup>	Class 1 laser	Power supply	5W, USB3.0-powered
Lighting conditions <sup>5</sup>	Up to 10,000 Lux	IP Rating	IP 5X
Light source	Built-in LED flash	Calibration	Optional in-field user calibration with supplied calibration plate
		Operating temperature range	0 - 40°C / 32 - 104°F
		Operating humidity range	Non-condensing

<sup>1</sup> Measured on a 1m reference scale, in 1m distance, for a lateral scanner movement of 1m, using targets for distance measurement

<sup>2</sup> Measured in 0.5m-3m / 1.6-9.8 ft distance

<sup>3</sup> Point density depends on scanned surface and lighting conditions

<sup>4</sup> Noise reduction for equal scan times at 0.5m, 1m, 2m and 3m distance from object

<sup>5</sup> Limited range and point density in sunlight

## Recommended system requirements for tablet

- Microsoft Windows 8.1 pro, 64-Bit
- 4th generation Intel® Core™ i5
- 256GB hard disc with 8GB RAM
- MicroSDXC
- Microsoft® Surface Pro 2 or 3 is a recommended device

