



Name: FARO Focus 3D Laser Scanner

Year of Purchase: 2022

Description:

FARO Focus Laser Scanner is a compact, lightweight, and intuitive 3D scanning solution designed for both indoor and outdoor applications. With features like on-site compensation, HDR imaging, IP54 protection, and extended operating temperatures (-20°C to 55°C), the Focus ensures reliable performance in challenging environments. It offers long-range scanning (up to 350 m, depending on model), real-time data transfer to FARO SCENE software and flexible connectivity via WLAN.

Specifications:

Ranging Unit						
Unambiguity Interval	614m for up to 0.5 mil pts/sec 307m at 1 mil pts/sec 153m at 2 mil pts/sec		614m for up to 0.5 mil pts/sec 307m at 1 mil pts/sec			614m for up to 0.5 mil pts/sec
Range ¹						
90% Reflectivity (white)	0.6-350m	0.6-150m	0.6-350m	0.6-150m	0.6-70m	0.6-70m
10% Reflectivity (dark-gray)	0.6-150m	0.6-150m	0.6-150m	0.6-150m	0.6-70m	0.6-70m
2% Reflectivity (black)	0.6-50m	0.6-50m	0.6-50m	0.6-50m	0.6-50m	0.6-50m
Range Noise ² (mm)						
@10m 90% (white)	0.1		0.3		0.7	
@10m 10% (dark-gray)	0.3		0.4		0.8	
@10m 2% (black)	0.9		1.3		1.5	
@25m 90% (white)	0.2		0.3		0.7	
@25m 10% (dark-gray)	0.5		0.5		0.8	
@25m 2% (black)	1.6		2.0		2.1	
Max. Measurement Speed (mil. pts/sec)	Up to 2		Up to 1		Up to 0.5	
Ranging Error ³ (mm)	±1					±3
Angular Accuracy ⁴	19 arcsec for vertical/horizontal angles					not specified
3D Point Accuracy ⁵	2 @10m 3.5 @25m		2 @10m 3.5 @25m			not specified

Additional Performance Specifications

Color Unit	
Color Resolution	Up to 165-megapixel color
HDR Camera	Exposure bracketing 2x, 3x, 5x
Parallax	Minimized due to co-axial design

Deflection Unit	
Field of View	300°vertical ⁶ / 360° horizontal
Step Size	0.009 (40,960 3D-pixel on 360°) vertical / 0.0009 (40,960 3D-pixel on 360°) horizontal
Max. Scan Speed	97Hz (vertical)

Laser (Optical Transmitter)	
Laser Class	Laser Class 1
Wavelength	1550nm
Beam Divergence	0.3mrad (1/e)
Beam Diameter at Exit	2.12mm (1/e)