

FARO® Focus^M 70 Laser Scanner

Short-range Professional Grade Laser Scanner

FARO

Laser Scanner for Short Range Applications



The FARO Focus^M 70 Laser Scanner is a powerful 3D laser scanner specifically designed for both indoor and outdoor applications that require scanning up to 70 meters.

The ultra-portable device enables fast, straight-forward and accurate measurements of construction sites, small-scale facades, complex structures, production and supply facilities and crime and crash scenes. Combining professional grade scanning technology with portability and ease-of-use, the new device offers reliability, flexibility and real-time views of recorded data. The 3D scan data can easily be imported into all commonly used software solutions for architecture and construction, forensics and accident reconstruction or industrial manufacturing.

FARO Focus^M 70 Laser Scanner is equipped with recognizable features from the industry's most trusted laser scanner product line.

Benefits

- Scan in challenging environments while providing protection from dust, debris and water splashes
- The Focus^M 70 delivers full scanning capability with the quickest return on invest in the market
- Be confident in performance using the Focus^M 70 from the award-winning Focus Laser Scanner portfolio
- Easily navigate the scanner controls using the large and luminous touch-screen



Short range scanning - up to 70m

The Focus^M 70 can record data up to 70 meters, making it ideal for short-range measurements and small area job applications.



Compact and Portable

The Focus^M 70 is compact and lightweight with dimensions of just 9.05" x 7.2" x 4.05" (230mm x 183mm x 103mm) and a weight of only 9.26 lbs (4.2kg). An included waterproof, ergonomic carrying case gives the device true portability.



HDR Photo Overlay

The HDR camera easily captures detailed imagery while providing a natural color overlay to the scan data captured under extreme brightness gradients.



Best Value For Money

The FARO Focus^M 70, coupled with FARO SCENE, is the first professional grade scanner solution to be offered for under \$25,000 that does not compromise on the industrial grade performance of the award winning FARO Focus Laser Scanner portfolio.



IP Rating - Class 54

With the sealed design and IP54 Ingress Protection Rating, the Focus^M 70 can be used in high particulate and wet weather conditions.



Temperature

Extended temperature range allows scanning in challenging environments. The Focus^M 70 can operate in temperatures as low as -4°F (-20°C) and up to 131°F (55°C).

Performance Specifications

Range Unit

| Reflectivity | 90% (white) | 10% (dark-gray) | 2% (black) |
|--------------------|---------------------|---------------------|---------------------|
| Range ¹ | 2' - 230' (0.6-70m) | 2' - 230' (0.6-70m) | 2' - 164' (0.6-50m) |

Measurement speed (pts/sec): 122,000 / 244,000 / 488,000

Ranging error²: ±3mm

Color Unit

- Resolution: Up to 165 megapixel color
- High Dynamic Range (HDR): Exposure Bracketing 2x, 3x, 5x
- Parallax: Minimized due to co-axial design

Deflection Unit

- Field of View (vertical/horizontal): 300° / 360°
- Step Size (vertical/horizontal): 0.009° (40,960 3D-Pixel on 360°) / 0.009° (40,960 3D-Pixel on 360°)
- Max. Vertical Scan Speed: 97Hz

Data Handling and Control

- Data Storage: SD, SDHC™, SDXC™; 32GB card
- Scanner Control: Via touchscreen display and WLAN connection. Access by mobile devices with HTML5

Laser (Optical Transmitter)

- Laser Class: Laser class 1
- Wavelength: 1550nm
- Beam divergence: 0.3mrad (1/e)
- Beam diameter at exit: 0.083" (2.12mm) (1/e)

Interface Connection

- WLAN: 802.11n (150Mbit/s), as Access Point or client in existing networks

Integrated Sensors

Dual Axis Compensator: Performs a leveling of each scan with an accuracy of 19 arcsec valid within ±2°

Height Sensor: The height relative to a fixed point can be detected and added to a scan via an electronic barometer.

Compass⁴: The electric compass provides each scan with orientation.

GNSS: Integrated GPS & GLONASS



General

- Power Supply Voltage: 19V (external supply) / 14.4V (internal battery)
- Power consumption: 15W idle, 25W scanning, 80W charging
- Battery Service Life: 4.5 hours
- Operating Temperature: 41° - 104°F (5° - 40°C)
- Extended Operating Temperature⁵: -4° - 131°F (-20° - 55°C)
- Storage Temperature: 14° - 140°F (10° - 60°C)
- Ingress Protection: IP54
- Humidity: Non-condensing
- Weight Including Battery: 9.26 lbs (4.2kg)
- Size: 9.05" x 7.2" x 4.05" (230mm x 183mm x 103mm)
- Maintenance / calibration: Annual



¹ For a Lambertian scatterer. ² Ranging error is defined as a systematic measurement error at around 10m and 25m ³ 2x150°, homogenous point spacing is not guaranteed. ⁴ Ferromagnetic objects can disturb the earth magnetic field and lead to inaccurate measurements. ⁵ Low temperature operation: scanner has to be powered on while internal temperature is at or above 15°C, high temperature operation: additional accessory required, further information on request | Subject to change without prior notice.

For more information, call 800.736.0234 or visit www.faro.com

