

FARO® Focus^M 70 Laser Scanner



Forensics Proven

Advanced Forensic Scene Capture with an Affordable Price



The FARO Focus^M 70 Laser Scanner is a powerful 3D laser scanner that can quickly and accurately capture all the measurement data you need to document a forensic scene. The Focus^M automatically records millions of data points with each scan, up to 229 feet (70 meters) away. It is the ideal tool to digitally preserve indoor and outdoor scenes for forensic investigations, pre-incident planning, and security planning.

With a FARO Laser Scanner, document all the evidence exactly as it appeared at the time of the scan so you can analyze it later. Gather more information than any photograph could provide. The laser scanner gathers information from the real world, capturing x, y, and z coordinates, and creates a digital point cloud of the physical scene.

Bring the captured data into a forensic software application to take measurements, analyze bullet trajectories, create accurate diagrams, animations, and “walk-throughs” of the scene. Many investigators have used FARO point cloud data in compelling courtroom presentations to digitally bring the jury to the original scene, long after the physical evidence was erased.

Why Choose Focus^M 70

- Get the accuracy and data capture of other laser scanners for less than \$25,000
- Drastically cut the time needed to document and measure crime, crash, and fire scenes
- Capture all the evidence at a scene the first time, so you may never need to go back
- Completely capture scenes in low light and complete darkness, such as night time crashes, and the charred interior of a fire scene
- Ensure all the evidence is captured by scanning officer-involved shooting scenes and potential city liability incidents
- Create more compelling courtroom presentations; Digitally walk the jury through the scene at the time of the scan



More Data and Critical Evidence Captured

The FARO Focus^M 70 can record data up to (70 meters) at a maximum rate of 488,000 points per second, making it ideal for evidence documentation and scene capture.



Professional Grade Solution at an Affordable Price

For less than \$25,000, the Focus^M 70 has the same quality as FARO's other, award-winning, Laser Scanners, with a much lower price.



Compact and Portable to Scan Anywhere

The FARO Focus^M 70 weighs just 9.26 lbs (4.2 kg), including the battery, so you can easily carry it to the evidence. The waterproof carrying case further expands the scanner's portability.



HDR Photo Overlay

The HDR camera easily captures detailed imagery while providing a natural color overlay to the point cloud data.



Wet Weather Capable

You can scan in rain or snow because the Focus^M 70 has an IP54 Ingress Protection Rating and a sealed design that protects it from wet weather.



Extended Operating Temperature Range

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	0.6-70m	0.6-70m	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 (vertical³/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: 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: 5° - 40°C
- Extended Operating Temperature⁵: -20° - 55°C
- Storage Temperature: -10° - 60°C
- Ingress Protection: IP54
- Humidity: Non-condensing
- Weight Including Battery: 4.2kg
- Size: 230 x 183 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

