

# FARO® Laser Scanner Focus<sup>M</sup> 70

## Short-range professional grade laser scanner

# FARO®



### SHORT-RANGE SCANNING - UP TO 70M

The Focus<sup>M</sup> 70 can record data up to 70 meters making it ideal for short-range measurements and small area applications.



### COMPACT AND PORTABLE

The Focus<sup>M</sup> 70 has the size of only 230 x 183 x 103mm and a weight of just 4.2kg. The device is provided with a waterproof transportation and ergonomic carrying case for true portability.



### HDR PHOTO OVERLAY

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



### BEST VALUE FOR MONEY

The Focus<sup>M</sup> 70 is a professional grade scanner with the highest return on investment in the market.



### IP RATING - CLASS 54

With the sealed design, the Focus<sup>M</sup> 70 is certified with the industry standard Ingress Protection (IP) Rating and classified in class 54 against environmental influences.



### TEMPERATURE

Extended temperature range allows scanning in challenging environments - take your Focus<sup>M</sup> to the desert or run a project in Antarctica.

## LASER SCANNER FOR SHORT-RANGE APPLICATIONS

The FARO Laser Scanner Focus<sup>M</sup> 70 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 small construction sites, small-scale facades, complex structures, production and supply facilities and manageable crime and accident scenes. Combining professional grade scanning technology with authentic mobility 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.

The FARO Laser Scanner Focus<sup>M</sup> 70 is equipped with recognizable features from FARO's most popular, compact lightweight and intuitive laser scanner product line.

## BENEFITS

- ▶ Scanning in rough environments while providing protection from dust, debris and water splashes
- ▶ The Focus<sup>M</sup> 70 delivers a full scanning workflow at best return on investment in the market
- ▶ Achieve confidence in scan results by using award winning FARO quality
- ▶ Maintain familiar workflows through freedom of choice in processing scan data in various software packages
- ▶ Easily navigate the scanner controls using the large and luminous touch-screen

## PERFORMANCE SPECIFICATIONS

### Ranging unit

Reflectivity	90% (white)	10% (dark-gray)	2% (black)	
Range <sup>1</sup>	0.6-70m	0.6-70m	0.6-50m	
Ranging noise <sup>2</sup>	@10m	@10m - noise reduction <sup>3</sup>	@25m	@25m - noise reduction <sup>3</sup>
90% reflectivity	0.7mm	0.4mm	0.7mm	0.4mm
10% reflectivity	0.8mm	0.4mm	0.8mm	0.4mm
2% reflectivity	1.5mm	0.8mm	2.1mm	1.1mm

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

Ranging error<sup>2</sup>: ±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<sup>3</sup>/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

### Laser (optical transmitter)

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

### 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

### 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.  
 Compass<sup>4</sup>: The electric compass provides each scan with orientation.  
 GNSS: Integrated GPS & GLONASS



<sup>1</sup> For a Lambertian scatterer. <sup>2</sup> Ranging error is defined as a systematic measurement error at around 10m and 25m. <sup>3</sup> 2x150°, homogenous point spacing is not guaranteed. <sup>4</sup> Ferromagnetic objects can disturb the earth magnetic field and lead to inaccurate measurements. <sup>5</sup> 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! All accuracy specifications are one sigma, after warm-up and within operating temperature range; unless otherwise noted. Subject to change without prior notice.

## 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 temperature<sup>5</sup>: -20° - 55°C  
 Storage temperature: -10° - 60°C  
 Ingress Protection: IP54  
 Humidity: Non-condensing

Weight incl. battery: 4.2kg  
 Size: 230 x 183 x 103mm  
 Maintenance / calibration: Annual



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