# FARO® Laser Scanner Focus<sup>3D</sup> X 330 The Perfect Instrument for 3D Documentation and Land Surveying





## Extended scanning - 330m range

The Focus<sup>3D</sup> X 330 can scan objects up to 330 meters away. Large buildings, land-site excavations and vast terrains can be surveyed with fewer scans, thus resulting in quicker project scanning completion.

#### Easy positioning - integrated GPS receiver

With its integrated GPS receiver, the laser scanner is able to correlate individual scans in post-processing making it ideal for surveying based applications.

#### Outdoor scanning capability

The Focus<sup>3D</sup> X 330 now is able to perform fast and highly precise scanning in direct sunlight.

## Low noise performance

The new FARO Focus<sup>3D</sup> X 330 delivers extraordinary scan data quality at extended range with very low noise.

#### Wireless LAN

WLAN remote control permits you to start, stop, view or download scans at a distance.

## Extended outdoor scanning in full sunlight

The new FARO Focus<sup>3D</sup> X 330 a high-speed 3D scanner with extra-long range. The Focus<sup>3D</sup> X advances into entirely new dimensions: it can scan objects up to 330 meters away even in direct sunlight.

With its integrated GPS receiver, the laser scanner is able to correlate individual scans in post-processing making it ideal for surveying based applications.

With its increased range and scan quality, the FARO Focus<sup>3D</sup> X 330 considerably reduces the effort involved in measuring and post-processing. The 3D scan data can easily be imported into all commonly used software solutions for accident reconstruction, architecture, civil engineering, construction, forensics, industrial manufacturing and land surveying. Distance dimensions, area and volume calculations, analysis and inspection tasks and documentation can thus be carried out quickly, precisely and reliably.

## **Benefits**

The new FARO Focus<sup>3D</sup> X 330 is the leading tool for surveying and 3D documentation.

Scanning range - 330m, integrated GPS, the possibility to work in direct sunlight as well as the specially for the scanner designed protection cover make it a ideal tool for outdoor environments.

## FARO® Laser Scanner Focus<sup>3D</sup> X 330 FARO®

www.faro.com

## Performance Specifications Focus<sup>3D</sup> X 330

Ranging unit

Unambiguity interval: By 122 till 488 Kpts/sec at 614m; by 976 Kpts/sec at 307m

Range Focus<sup>3D</sup> X 330: 0,6m - 330m indoor or outdoor with normal incidence to a 90% reflective surface

Measurement speed (pts/sec): 122,000 / 244,000 / 488,000 / 976,000

Ranging error<sup>1</sup>: ±2mm

Ranging noise <sup>2</sup>	@10m	@10m - noise compressed <sup>3</sup>	@25m	@25m - noise compressed <sup>3</sup>
@ 90% refl.	0.3mm	0.15mm	0.3mm	0.15mm
@ 10% refl.	0.4mm	0.2mm	0.5mm	0.25mm

Colour unit

Resolution: Up to 70 megapixel colour Dynamic colour feature: Automatic adaption of brightness

Parallax: 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: 5,820rpm or 97Hz

Laser (optical transmitter)

Laser class:
Wavelength:
Laser class 1
1550nm

Beam divergence: Typical 0,19mrad (0,011°) (1/e, halfangle)

Beam diameter at exit: Typical 2,25mm (1/e)

Data handling and control

Data storage:SD, SDHC™, SDXC™; 32GB card includedScanner control:Via touchscreen display and WLAN

New WLAN access: Remote control, scan visualisation and download are possible on mobile devices with Flash®

**Multi-Sensor** 

Dual axis compensator: Levels each scan: Accuracy 0,015°; Range ± 5°

Height sensor: Via an electronic barometer the height relative to a fixed point can be detected and added to a scan.

Compass<sup>4</sup>: The electronic compass gives the scan an orientation. A calibration feature is included.

GPS: Integrated GPS receiver



<sup>1</sup> Ranging error is defined as a systematic measurement error at around 10m and 25m, one sigma <sup>2</sup> Ranging noise is defined as a standard deviation of values about the best-fit plane for measurement speed of 122,000 points/sec.<sup>3</sup> A noise-compression algorithm may be activated to average points in sets of 4 or 16, thereby compressing raw data noise by a factor of 2 or 4. Subject to change without prior notice. <sup>4</sup> Ferromagnetic objects can disturb the earth magnetic field and lead to inaccurate measurements

## General

Power supply voltage: 19V (external supply)

14.4V (internal battery)

Power consumption: 40W and 80W (while battery charges)

Battery life: 4.5 hours
Ambient temperature: 5° - 40°C

Humidity: Non-condensing

Cable connector: Located in scanner mount

Weight: 5.2kg

Size: 240 x 200 x 100mm

Maintenance / calibration: Annual







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www.faro.com Freecall 00 800 3276 7253 info@faroeurope.com



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