FARO® Laser Scanner Focus^{3D} X 130 HDR

The Imaging Laser Scanner

HDR PHOTO OVERLAY

With the Focus3D HDR you will now master challenging lighting conditions. Predefined HDR profiles increase the picture quality recorded in very bright or dark environments.

HD PHOTO RESOLUTION

The increased camera resolution of Focus^{3D} X 130 HDR delivers extraordinary color overlays for scanned point clouds. This improves the visualization of important details on site.

XTRA PORTABLE

The Focus^{3D} X 130 HDR has the size of only 24 x 20 x 10 cm and a weight of just 5.2kg. Waterproof Pelicase and a ergonomic backpack incl. tripod holder make the device truly portable.

MID RANGE SCANNING - UP TO 130M

The 130m range allows the Focus3D X 130 HDR to scan in all kinds of applications in the architecture, BIM, heritage, forensics, shipbuilding, construction and process industries.

XTRA POSITIONING - INTEGRATED GPS RECEIVER

Effortlessly determine the position of the scanner. This helps to facilitate the registration process and provides the exact time and location of the users' scans.

X-SERIES HDR LASER SCANNER FOR MID-RANGE APPLICATIONS

The X-series laser scanner FARO Focus^{3D} X 130 HDR is a powerful high-speed 3D scanner delivering realistic and true-to-detail scan results.

The ultra-portable Focus^{3D} X 130 HDR enables fast, straightforward, and yet accurate measurements of façades, complex structures, production and supply facilities, accident sites, and large-volume components. Combining the highest-precision scanning technology with authentic mobility and ease-of-use, the 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 accident reconstruction, architecture, civil engineering, construction, forensics or industrial manufacturing.

With a battery runtime of 4.5 hours, the laser scanner has also a high level of flexibility and endurance. The Focus' light weight, small size and SD-card makes the scanner truly mobile.

BENEFITS

- Safe and fast as-built data capturing with superior color detail
- Reliable life-like visualization, even under extreme lighting conditions
- Reduced complexity by integrated scanning and imaging workflow for all kinds of measurements even in challenging environments
- Increased onsite productivity due to one person operation
- Revolutionary price/performance ratio, as all-in-one device

FARO® Focus3D X 130 HDR

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PERFORMANCE SPECIFICATIONS

Ranging unit

Unambiguity interval:	By 122 till 488 Kpts/sec at 614m; by 976 Kpts/sec at 307m
Range:	0.6m - 130m indoor or outdoor with upright incidence to a 90% reflective surface
Measurement speed (pts/sec):	122,000 / 244,000 / 488,000 / 976,000
Ranging error[1]:	±2mm

Ranging noise[2]	@10m	@10m - noise compressed[3]	@25m	@25m - noise compressed[3]
@ 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 170 megapixel color
HDR:	High Dynamic Range (HDR) photo recording, 3x / 5x
Parallax:	Co-axial design

Deflection unit

Field of view (vertical/horizontal):	300°[4] / 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:	Laser class 1
Wavelength:	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 included
Scanner control:	Via touchscreen display and WLAN
New WLAN access:	Remote control, scan visualisation are possible on mobile devices with Flash® and HTML5

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[5]:	The electronic compass gives the scan an orientation. A calibration feature is included.
GPS:	Integrated GPS receiver

CLASS 1 LASER PRODUCT

[1] Ranging error is defined as a systematic measurement error at around 10m and 25m, one sigma. Improved compensation available for dedicated mounting (fee-based service). [2] Ranging noise is defined as a standard deviation of values about the best-fit plane for measurement speed of 122,000 points/sec. [3] A noise-compression algorithm may be activated thereby compressing raw data noise by a factor of 2 or 4. [4] 2x150° Homogenous point spacing is not guaranteed. [5] Ferromagnetic objects can disturb the earth magnetic field and lead to inaccurate measurements. Subject to change without prior notice.

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

ISO 9001 BUREAU VERITAS Certification

ANAB ACCREDITED

GSA Contract Holder

Global Offices: Australia ▪ Brazil ▪ China ▪ France ▪ Germany
India ▪ Italy ▪ Japan ▪ Malaysia ▪ Mexico ▪ Netherlands
Philippines ▪ Poland ▪ Portugal ▪ Singapore ▪ Spain ▪ Switzerland
Thailand ▪ Turkey ▪ United Kingdom ▪ USA ▪ Vietnam

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Revised: 11 Apr. 2016 | © 2016 FARO | EU-04REF201-603-EN