Specifications

System Overview	
FARO Orbis	Mobile scanner powered by GeoSLAM technology offering mobile and stationary Flash scanning in one device
FARO Stream	Mobile app for field operation of FARO Orbis and FARO Focus Laser Scanner
FARO Connect	Desktop processing software for FARO Orbis and legacy GeoSLAM mobile scanners
FARO Scene	Desktop registration software for all 3D reality capture data
FARO Sphere XG	Cloud-based platform for all reality capture data including FARO Orbis

Performance	
General	
Range	120m
Points Per Second	640,000
Field of View	360° x 290°
No. of LIDAR channels	32
Camera	Full 360° image of 8M pixels captured every second
Mobile Scanning	
Precision[1]	5mm
Trajectory & Mapping	Robust SLAM powered by GeoSLAM technology
Settings	Automatic Standard and Preset Processing Environments
Stationary Flash Scanning	
Precision[1]	2mm
Duration	15 sec. including color
Resolution	19M points (13mm @ 10m)
Registration	Real Time and Fully Automatic with GeoSLAM technology

General	
Environment	Indoor and Outdoor
Laser Class[2]	Class 1, Eye Safe
Weight	Scanner: 2.10kg, Datalogger: 0.95kg, Battery: 0.55kg
Protection Class	IP 54
Transport Case Dimensions	500mm x 625mm x 250mm
Operating Temperature	0° to +40°C
Manufacturer Warranty	1 Year

Operation	
Stand-alone Operation	One button to start/stop data capture; One button to capture Flash scans
Smartphone Operation	FARO Stream app (for iOS and Android): scanner control, real-time data visualization, and direct sync to cloud processing with FARO Sphere XG
Control Points Capture	Stop-and-Go, checkerboard, reflective, and spherical targets for alignment and/or georeferencing
Advanced Registration	When desired, register multiple mobile, Flash and/or FARO Focus scans
Configuration	• Handheld with Datalogger on Shoulder Strap • Monopod with Scanner and Datalogger mounted together • Accessories available: Car Mount, Backpack, Cradle
Scanner Orientation	Can be used in any orientation: upright, upside down, sideways
Battery Duration	Typical 3 hours
Internal Storage	1TB, up to 100 hours of continuous data capture
Data Transfer	WiFi, RJ45 or directly with USB stick

Data/Processing	
Data	Point clouds with Intensity and Color, 360° Images, Trajectory
Raw Mobile Data Size	350MB/min uncompressed
Flash Scan Data Size	125MB
Desktop Processing	FARO Connect for Mobile and Flash Scans, FARO Scene for Advanced Registration
Cloud Processing	Fully automated with FARO Sphere XG
Output	Mobile scan: E57, LAS, LAZ, PLY, TXT - Flash scan: E57

[1] Given as one sigma | [2] In accordance with IEC EN60825-1 | Specifications are subject to change without prior notice

FARO

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Fast Mobile Scans and **Quality Flash Scans** in One Device

Orbis solves the trade-off between speed and accuracy in an all-encompassing mobile scanning solution. Featuring the latest scanning technology and integrated with FARO Flash, Orbis provides high-class precision and scan density. Capture dynamic scans by walking through your jobsite with Orbis or attach the scanner to the included monopod accessory for employing Flash scans of key areas, like complex pipework, in just 15 seconds.

10X Faster Than Other Surveying Methods

10x faster than traditional surveying methods, mobile scanning enables operators to capture entire sites at the speed of the operator. The increased speed of capture saves time and money, prevents jobsite disruption and allows for real-time decision making.

Repeatable, **Repeatable**, Repeatable

With faster data capture, mapping with Orbis streamlines the process of repeat scanning for tracking changes over time, leading to a significant reduction in downtime. The integration of optional cloud processing and 4D data comparison within FARO Sphere® XG makes progress tracking and project management seamlessly efficient.

Scanning **Made Simple**

The compact design of Orbis, combined with real time data feedback and advanced software automations, allows for effortless capture of high-quality data. It simplifies complex mapping and surveying tasks, allowing for efficient data collection in various industries like mining, construction or urban planning.

Delivering **Best-in-class** SLAM

Dynamic innovation and direct customer input from real-world applications has culminated in the cutting-edge SLAM (Simultaneous Localization and Mapping) algorithm that drives Orbis today. Powered by GeoSLAM's proprietary SLAM, Orbis provides best-in-class reliability, giving you the confidence to capture the most challenging jobsites.

Versatile Processing Options to Suit All Needs

FARO offers a complete portfolio of cloud and desktop software to process your data. Provide stakeholders with point cloud information with optional cloud-based processing and storage in FARO Sphere XG. Alternatively, locally process your point cloud data in FARO Connect. For unparalleled data quality and global accuracy, register your Flash scans using FARO SCENE and its interactive registration capabilities, mirroring the control of a terrestrial laser scanner.