

# FARO® Scanner Freestyle<sup>3D</sup>

Efficiency in your hands

**FARO**



# FARO® Freestyle<sup>3D</sup>

## 3D HANDHELD SCANNER

The new FARO Scanner Freestyle<sup>3D</sup>, a handheld scanner for professionals provides a fast and easy to use scanning solution with verifiable accuracy of the 3D colour scan data.

The Freestyle<sup>3D</sup> is the only industrial-grade handheld device allowing you to scan all kinds of surfaces and environments. With its versatile design, small size, and light weight it can be used flexibly to easily perform scanning tasks especially in hard to reach areas or narrow spaces.

Moreover, the 3D handheld device maximises your productivity offering fast data acquisition, real-time visualisation and the largest scan volume on the market. With this the scan time in the field is reduced enormously during the point cloud acquisition as well as with the processing of your scan results.

The 3D scan data can easily be imported into all commonly used software solutions for architecture, accident reconstruction, civil engineering, construction, facility management, forensics or industrial manufacturing.



### INTUITIVE PLUG AND PLAY SYSTEM

The Freestyle<sup>3D</sup> provides highest productivity in the field since no warm up times are required.



### REAL TIME POINT CLOUD VISUALIZATION

The real-time point cloud visualization supports the intuitive data acquisition, even for inexperienced users.



### LIGHTWEIGHT INDUSTRIAL GRADE DEVICE

The Freestyle<sup>3D</sup> is the only industrial grade handheld device with IP 5X rating and weighs only 0.98Kg.



### 3D DOCUMENTATION SOLUTION

The user can combine seamlessly results from the Focus<sup>3D</sup> with Freestyle<sup>3D</sup> results.

# Architecture & Interior Design



## ARCHITECTURE & INTERIOR DESIGN

Industries such as construction, civil engineering, interior design and BIM demand on reliable, fast and accurate data. Information and spatial reference are essential through all phases of surveying and construction projects.

FARO's Scanner Freestyle<sup>3D</sup> offers the user an ideal solution, smoothing the workflow, making processes faster and more efficient, delivering accurate data and satisfying statutory requirements.

## APPLICATIONS

**Measurements of complex structures and objects:** The device can be used to cover areas that the FARO Focus<sup>3D</sup> is unable to easily obtain. Areas such as voids above suspended ceilings, down vertical shafts, and around objects that require higher accuracy and density, that are complex and would require too many setups with the Focus. Some examples of these complex objects would be mechanical equipment like chillers, engines, HVAC units, and elevator pumps.

**Project supervision:** Whenever there are restorations, renewals, renovations or reconstructions, there is a need for close monitoring of the individual project phases to meet the project's requirements.

**Deformation monitoring:** With the Freestyle<sup>3D</sup> you can determine if the surveyed structure or object is changing shape or moving.

**Quality control:** Precise laser scanning ensures that the final as-built condition fit design intent and minimises the chance of potential problems.

**Enhancement to FARO Focus<sup>3D</sup> scans in larger projects:** Great tool to complete/enhance Focus<sup>3D</sup> scans where we could find shadows or would need too many scans.



## BENEFITS

Time-saving, simple and complete recording of the current condition of surveying or as built environment

Real-time, digital 3D data capture

Best productivity in the field, since no warm up times are required

Best ROI on the market

# Restoration & 3D Modelling



## RESTORATION & 3D MODELLING

With the Freestyle<sup>3D</sup>, FARO provides conservators, civil engineers and 3D artists with an efficient tool for rapid, seamless and precise documentation of the current status of buildings and building assets of every kind.

Weighing just under one kilogram, the Freestyle<sup>3D</sup> scanner is ideal for mobile usage on the building site. It records building shells, areas above ceilings, architectural features (ornate mouldings) and areas of buildings in 3D – completely, quickly and cost-effectively.

## APPLICATIONS

**Area construction progress monitoring:** Seamless capture and monitoring of construction progress for legal and technical documentation.

**Built environment:** Precise geometrical recording of existing properties as the basis for conversions or extensions.

**Free-form components inspection:** Precise dimensional check of complex components such as free-form shape elements.

**Deformations control:** Documentation of deformation processes and monitoring of countermeasures.

**Reverse engineering:** Copies of products and components for which no construction plans and/or CAD data are available.

**Restoration & Conservation:** Creation of 3D models for restoring purposes preserving the original building substance and protection of historical/archaeological material and inventory.



## BENEFITS

Revolutionary price/performance ratio

Provides architects, interior designers or building owners with an intuitive option to capture almost any structure in a highly accurate point cloud

After processing, all the data can be exported to all commonly used CAD programs

Simple variance comparison in the construction process and in the case of final building inspections

Seamless integration with Focus<sup>3D</sup> laser scan data

Cost-efficient, quick and accurate 3D capture of as-built geometry

# Construction & Facility Management



## CONSTRUCTION & FACILITY MANAGEMENT

The handheld scanner Freestyle<sup>3D</sup> offers quick and reliable 3D documentation data. The scan data can be used for building management, collision detection for retrofits, as-built documentation for CAD modelling and other plant design tasks.

Through the real-time visualization of the captured 3D point cloud directly on the tablet, the intuitive user interface and the light weight (less than 1Kg) of the scanner, the data acquisition process can be fast and easily done even by inexperienced users.

## APPLICATIONS

**Documentation:** The Freestyle<sup>3D</sup> accurately records the asset data that is needed by Facility Managers – be it the structural situation on a production plant or the building services equipment in an office block.

**Planning of structural alterations:** The scan data provides an accurate three-dimensional model of the actual status of the building. As a result Facility Managers can run through the usage options for rooms and installations even before planning actually begins.

**Re-planning of technical modifications:** Changes to technical equipment, such as pipes, air ducts and electrical supply lines, can be depicted and checked in advance in the virtual model. This offers a stable basis for re-planning.

**Reconstruction:** Detailed 3D data for reconstruction of lost appearance of components of historical sites or archaeological objects.



## BENEFITS

Intuitive Plug and Play system. The Freestyle<sup>3D</sup> provides highest productivity in the field since no warm up times are required.

Lightweight industrial grade device. The Freestyle<sup>3D</sup> is the only industrial grade handheld device with IP 5X rating and weighs only 0.98Kg.

After processing, all the data can be exported to all commonly used CAD programs.

Digital 3D capturing of complex forms of historic material and inventory at a high level of detail.

Seamless integration with Focus<sup>3D</sup> laser scan data.

# Forensic



## FORENSIC

With FARO's Freestyle<sup>3D</sup> the entire crime scene can easily be captured, high detailed and extremely fast. With this digital data forensics teams can acquire the whole crime scene, reconstruct it and share it with other departments without losing evidence quality over years.

The Freestyle<sup>3D</sup> captures effortlessly almost any surface type in a wide range of environments by simply pointing the FARO Freestyle<sup>3D</sup> towards the surface or the object.

## APPLICATIONS

**Crime scenes investigation & analysis:** Complex and timely investigations made easier and faster.

**Digital proof collection:** Quick and accurate capture of evidences, scan data of objects and evidence found at the scene.

**Process integration:** The Freestyle<sup>3D</sup> can be used by combining traditional investigative methods with cutting-cutting-edge laser scanning technology for better results.

**Accessibility:** With the digital data captured, specialists can investigate the whole crime scene, reconstruct it and share it with other departments without losing evidence quality.

**Fire Investigation:** Detailed fire scene acquisition.



## BENEFITS

Revolutionary price/performance ratio

FARO certified accuracy in capturing process

Seamless integration with Focus<sup>3D</sup> laser scan data

High detailed, extremely fast data acquisition

# Accident Reconstruction



## ACCIDENT RECONSTRUCTION

Investigators in law enforcement industry depend on reliable, fast and accurate data. Information and spatial reference are essential through all phases of investigation.

FARO's Scanner Freestyle<sup>3D</sup> offers an ideal solution, smoothing the workflow, making processes faster and more efficient, delivering accurate data and satisfying statutory requirements.

Weighing just less than one kilogram, the Freestyle<sup>3D</sup> scanner is ideal for mobile usage on the accident scenes or in fire investigation.

## APPLICATIONS

**Traffic accident investigation & analysis:** Handling, investigating and analysing road incidents is fast and reliable using the FARO Freestyle<sup>3D</sup>.

**Passive safety of cars:** Reducing consequences of accidents with laser scanner tested passive safety systems can be vital for passenger survival.

**Collision reconstruction:** Complex and timely investigations are made easier and faster with the Freestyle<sup>3D</sup>.

**Digital proof collection:** The Freestyle<sup>3D</sup> is used for quick and accurate capturing of evidences and provides scan data of objects found on-site.

**Digital accessibility:** With the digital data captured, police and investigators can enter the the whole crime scene digitally, reconstruct it and share it with other departments without losing evidence quality.



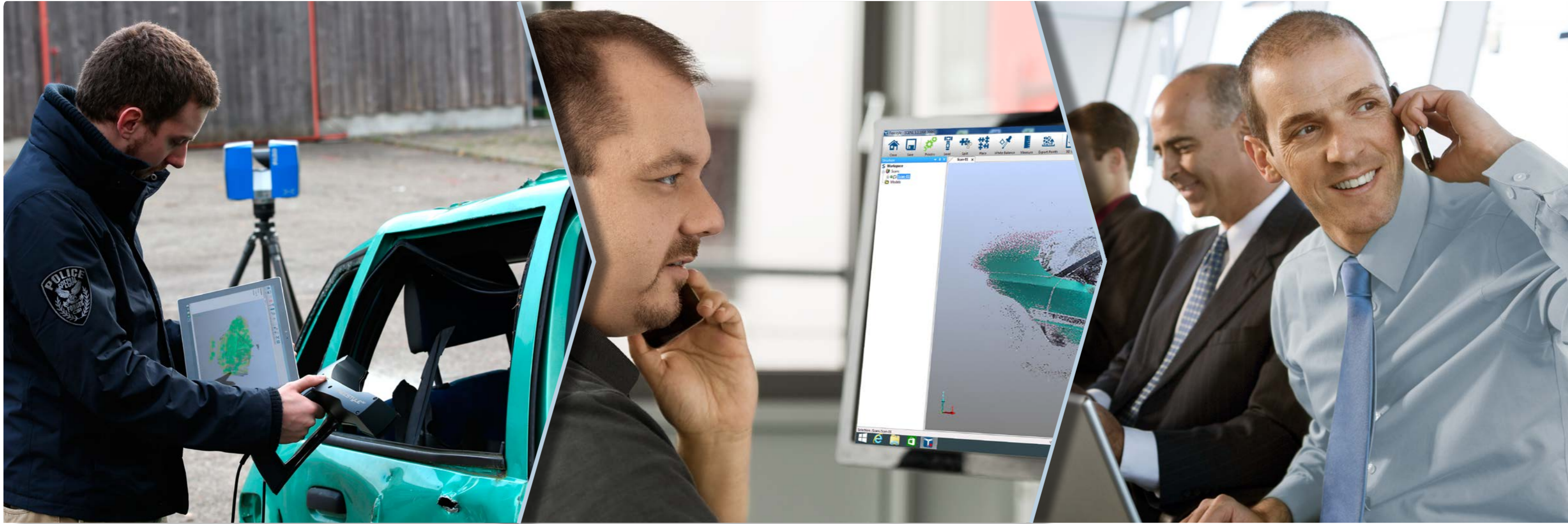
## BENEFITS

Export functionality to several law enforcement diagramming software solutions

Time-saving, simple and complete recording of the current accident sites

Real-time, digital 3D data capture and analysis of materials, volumes, structures

# 3D Documentation Workflow



## INDUSTRY LEADING FARO WORKFLOW IN 3D DOCUMENTATION

Simplify the workflow even in your most complex scanning projects with the new Freestyle<sup>3D</sup> integration. Scan full scenes with FARO's Laser Scanner Focus<sup>3D</sup> X130 or X330. Add even more details and capturings by the brand new FARO Freestyle<sup>3D</sup>.

Now you can capture points in areas where a positioning of a laser scanner isn't possible or when high details from different angles are needed. Point clouds are edited with the powerful FARO SCENE software. With its unique automated scan placement, scanning on site is even faster and processing easier. Share your results securely via WebShare Cloud and collaborate worldwide with your project- and business partners.

## STEP 1 - SCAN

Setup the FARO Laser Scanner Focus<sup>3D</sup>. Acquire scan data of any environment under almost any weather condition.

Add additional detail in your point clouds by capturing data with the brand new FARO Freestyle<sup>3D</sup>.

## STEP 2 - PROCESS

Process and merge point clouds in FARO SCENE. You can instantly perform measurements, calculate volumes and add annotations to your scan data. The powerful automatic features of SCENE will speed up editing and give you a never before seen software experience.

## STEP 3 - COLLABORATE

Your processed scan data can be shared quickly and securely via the FARO hosted WebShare Cloud service with colleagues, project- and business partners.



### FARO® LASER SCANNER FOCUS<sup>3D</sup> X 330

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.



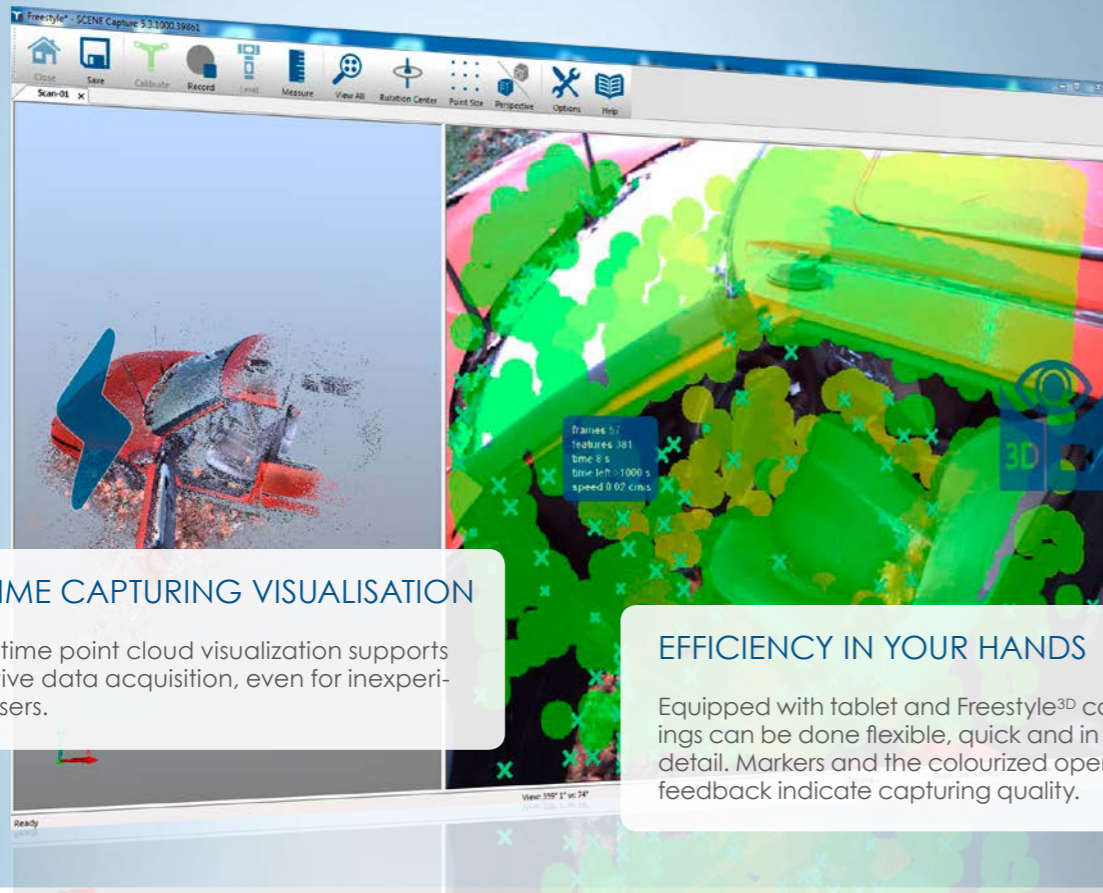
### FARO® LASER SCANNER FOCUS<sup>3D</sup> X 130

The ultra-portable Focus<sup>3D</sup> X 130 enables fast, straightforward, and accurate measurements up to 130 metres. 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.



# SCENE

# SCENE WebShare Cloud & App Center

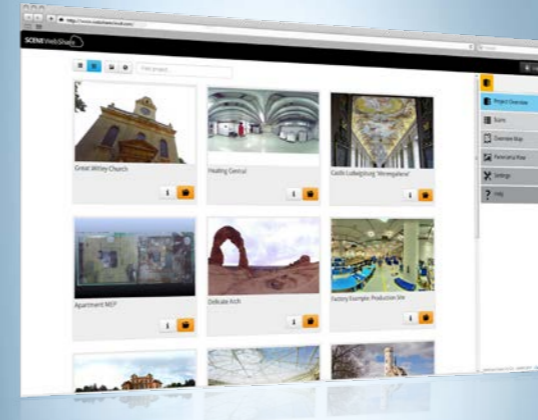


## REAL-TIME CAPTURING VISUALISATION

The real-time point cloud visualization supports the intuitive data acquisition, even for inexperienced users.

## EFFICIENCY IN YOUR HANDS

Equipped with tablet and Freestyle<sup>3D</sup> capturing can be done flexible, quick and in high detail. Markers and the colorized operator feedback indicate capturing quality.



## DATA SHARING WITHOUT LIMITS

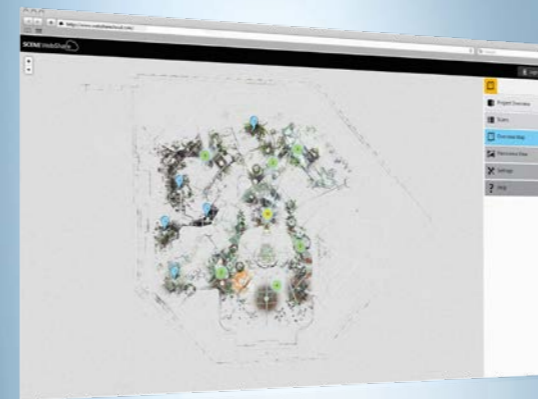
With SCENE WebShare Cloud, FARO offers a comprehensive service to provide users with simple access to 3D documentation. Neither technical training nor specialist skills in 3D laser scanning are necessary to work with the intuitive user interface.

Digital data, such as 3D documentation, often has to be available to many different project partners. Previously, users had their own internet server, could use SCENE WebShare to present their laser scan projects to clients and project partners. Now FARO goes considerably further, offering the SCENE WebShare Cloud solution, a hosting service with various packages at different prices.

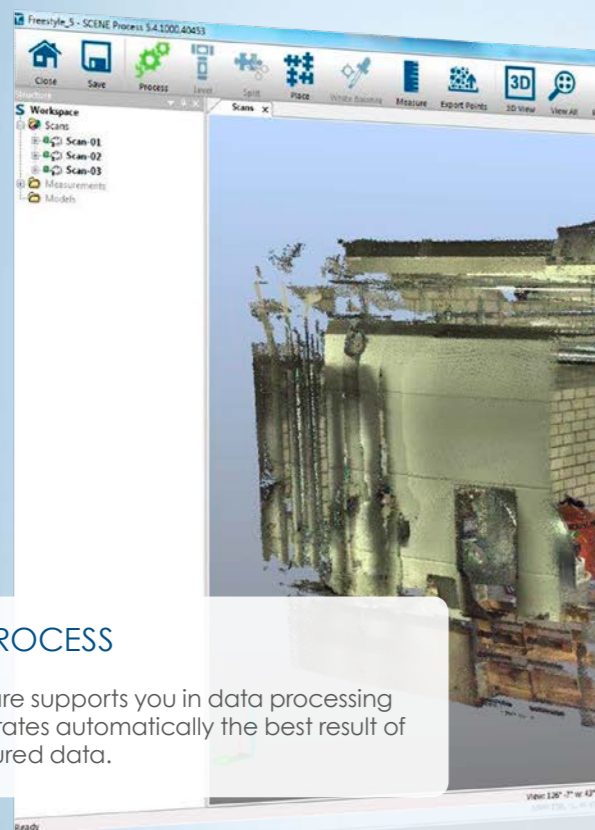
### Features

- Easy data sharing and collaboration
- Best possible security level
- Minimal set up and maintenance effort
- Persistent measurements & annotations
- Hosting service offered by FARO
- Support for mobile devices

[www.websharecloud.com](http://www.websharecloud.com)



Our offer	Getting Started	Small Enterprise	Medium Enterprise	Large Enterprise
Storage	50GB	100GB	200GB	500GB
Downloads / month	50GB	100GB	200GB	500GB
Assigned users	10	25	50	100



## FARO PROCESS

The software supports you in data processing and generates automatically the best result of your captured data.

## SUPPORTED LANGUAGES

FARO knows the value of localized software applications. Therefore FARO Capture, FARO Process and FARO SCENE are essentially delivered with following language packs.



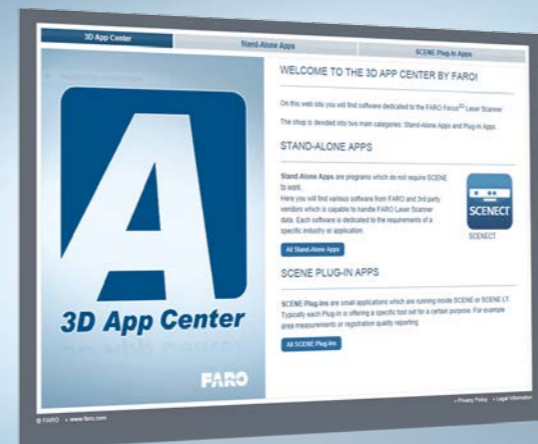
## EXPORT TO FARO SCENE

After the highly efficient processing is finalized, you can start editing your data in the powerful FARO SCENE software. With SCENE you have several export options to various CAD programs.

## APP CENTER

The FARO 3D App Center!  
In the 3D App Center you will find software dedicated to the FARO 3D Documentation world. The shop is divided into two main categories: Stand-alone apps and plug-in apps.

[3d-app-center.faro.com](http://3d-app-center.faro.com)



# Accessories



## RUGGEDIZED PELI™ CASE FOR TRANSPORT

The waterproof and extremely sturdy Pelicase, with lots of compartments for important accessories, stores besides the FARO® Freestyle<sup>3D</sup> device, the Microsoft® Surface Pro 3 and the carbon calibration plate.

The ultra high impact copolymer polypropylene is extremely strong and flexible against external impacts. Stainless steel pins are used in hinges, latches and handles to prevent corrosion.



## CALIBRATION PLATE

The FARO® Freestyle<sup>3D</sup> comes with a full carbon calibration plate. This plate can be used for in-field calibration, whenever needed.

The in-field calibration gives any operator the opportunity to ensure high accuracy scan data in any environment or surrounding condition. With the calibration plate FARO provides the user with the opportunity to determine and verify that the device is within the expected specifications.



## MICROSOFT® SURFACE PRO 3 TABLET

**It's a tablet and laptop all in one device**  
Barely tipping the scales at 798 g, the 12-inch Surface Pro 3 has all the power and performance of a premium laptop in a thin and lightweight design.

12 Inch ClearType Full HD Plus Touch Display  
Pre-loaded with Windows 8.1 Pro  
Wireless: Wi-Fi 802.11ac/802.11 a/b/g/n  
Two 5MP HD cameras, front and rear-facing  
Up to 9 hours battery life



## 1.5M USB 3.0 EXTENSION CABLE

This USB extension cable is suitable, when you have to bridge a wider distance between tablet and Freestyle<sup>3D</sup>.

The USB extension cable meets all USB specification and comes with up to 5Gbit/s transmission speed. It complies with fully rated cable specifications reducing electromagnetic/radio frequency interference (EMI/RFI).

The USB extension cable has a lifetime warranty.

# You are in good hands



## LEARN MORE

The Freestyle<sup>3D</sup> has an intuitive control concept, enabling even inexperienced users to get started straight away. Valuable tips and suggestions are to be found in the tutorial section which is stored on the tablet. However we also offer workshops, seminars and training courses for specific applications and tasks. In these, we teach you how you can use your Freestyle<sup>3D</sup> even more efficiently.



## CUSTOMER SERVICE & LIFETIME SUPPORT

**Phone:** Our customer service staff is available from 8am to 5pm (CEST) from Monday to Friday.  
Free call number: 00 800 3276 7378  
**E-Mail:** support@faro-europe.com  
**Online-Support Center:** www.faro.com/support  
**On-site:** Our application engineers will help you on-site.

The lifetime service includes hotline support, calibration and repair services for professionals. If you like to add an additional service contract you will receive a 10% discount on all accessories and free re-certification, and on-call advice.



## SOFTWARE COMPATIBILITY

The Freestyle<sup>3D</sup> and its SCENE software are compatible with the most common CAD software applications. SCENE can be used to export scan data to over 50 common software solutions, such as:

- General CAD: AutoCAD, Microstation, Rhino
- Plant construction: AVEVA PDMS, Intergraph PDS, AutoCAD Plant 3D, Microstation, Rhino
- Architecture: AutoCAD Architecture, REVIT
- Civil engineering / Surveying: AutoCAD Civil 3D, PolyWorks Surveyor, Carlson, Microsurveys
- Heritage: 3D Reconstructor
- Quality control: Geomagic Qualify, PolyWorks Inspector, Rapidform XOV
- Forensics: AutoCAD, SCENE Forensics
- Reverse engineering: Geomagic Studio, PolyWorks Modeler, Rapidform XOR
- Tunnelling: RR Tunnel, TMS
- Visualization: Pointools

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