

# VirtuSurv

## Use and evaluation of laser scan data with or without CAD



For more information contact Synergy Positioning Systems or visit the Synergy Positioning Systems website at [www.synergypositioning.co.nz](http://www.synergypositioning.co.nz)  
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Do you use laser scanning for fast data collection?  
Find point clouds too confusing?  
Looking for a fast and easy workflow?  
Want to start without training?

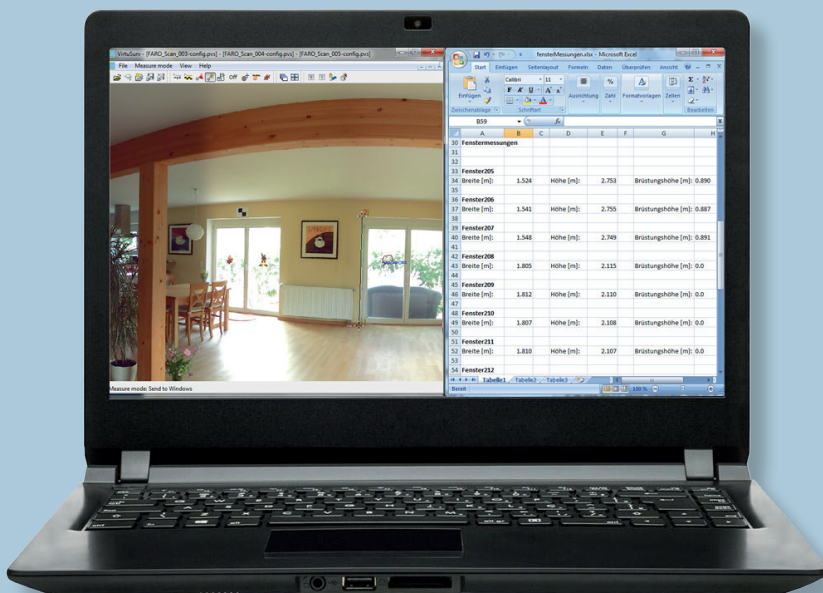
VirtuSurv is the solution

- Fast loading through an optimized file format
- Fast and intuitive navigation within photo-like scan views
- Transfer of measurements into forms and databases
- Direct interface to CAD and other Windows applications
- No bulky point clouds inside CAD
- Support of familiar workflows
- Support of numerous scan data formats

The software can be used anywhere measurement data needs to be extracted from laser scans.

Areas of application are for example

- Collection of as-built data for the preservation of historical monuments, construction and architecture
- Measurements for window construction, interior fittings, interior design, etc.
- Survey of industrial facilities
- Archaeological excavation documentation
- Accident and crime scene documentation
- Preservation of evidence



### Evaluate laser scan data with or without CAD

VirtuSurv is FARO's standalone software for working with highly visual laser scan data. The program supports the import, export and display of numerous structured scan data formats and has interfaces for Windows based programs as well as various CAD and BIM packages. This flexible platform makes the use of laser scans extremely easy. Take accurate measurements within seconds.

### Stream data into forms and databases

VirtuSurv supports a completely digital, less error-prone workflow. Take measurements easily to navigate photo-like scan view and send them directly into the Windows application of your choice. Fill in forms, Excel sheets, databases or tables with distances or coordinates. Generate results in just three steps:  
Load the project. Connect to Windows application. Measure.

### Create CAD drawings and 3D models from scan data within minutes

Click and measure desired points within VirtuSurv and the design is simultaneously drawn into a CAD plan, BIM design. Find coordi-

nates, distances and draw CAD objects without loading large and bulky point clouds into a CAD environment. Adapting VirtuSurv to a current workflow is fast and efficient.

Write macros with CAD commands and make them easily available using hot keys. Take advantage of predefined and comfortable command strings.

### Display laser scans fast and as clear as photos

High resolution views make it possible for the user to navigate intuitively, recognize needed objects and easily survey them within the familiar photo-like view of the scans.

### Work in a homogeneous environment

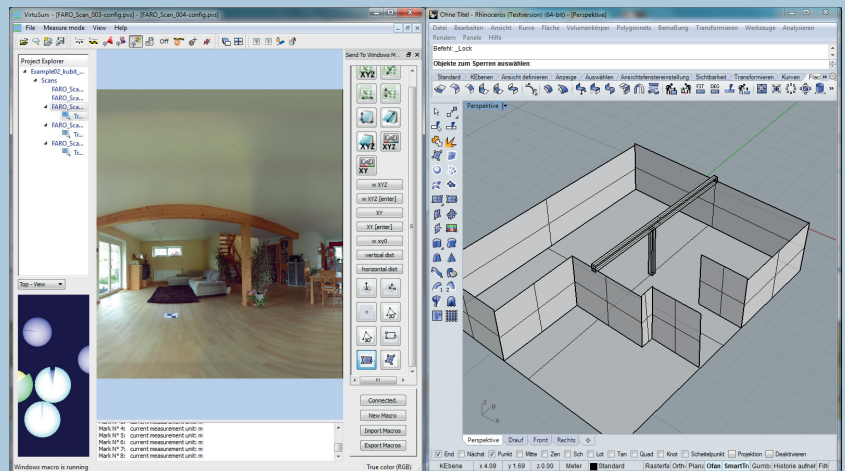
Do you have scans of the same scene, but taken with different scanners in different formats? Combine them in a single VirtuSurv project and measure across the single scan boundaries.

## Speed up your processing - Adapt VirtuSurv to your specific workflow

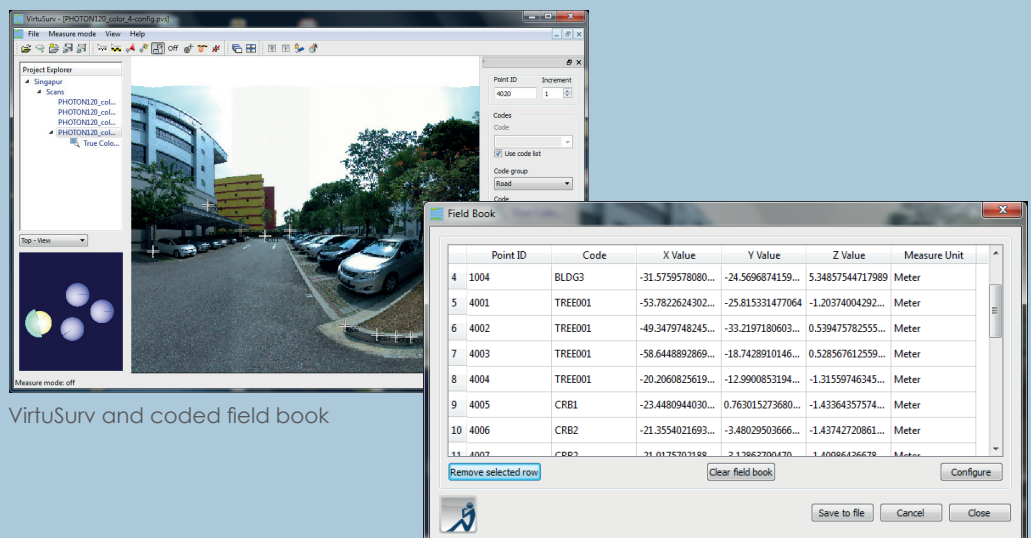
VirtuSurv provides macros which can control the actions of external programs from within the VirtuSurv interface. This speeds up the evaluation of scan data considerably and prevents from switching between VirtuSurv and the target application. As an experienced user, customize the macros at will and create new macros in order to optimize workflows.

## Create a coded field book

Surveyors traditionally using a total station and coded field books to generate a finished drawing upon import to their CAD package can now combine laser scanning with this familiar workflow. The "Create Field Book" option within VirtuSurv supports this traditional procedure and reduces training to a minimum.



VirtuSurv and Rhino



VirtuSurv and coded field book

## Technical Requirements

Operating system	Windows 7 (SP1), Windows 8; Windows 10, 64-bit only.
Hardware-requirements	Computer: processor at least 2,5 GHz better 3-4 GHz; RAM at least 8GB better 32GB and more; Laser scanner: type according to task.
Data requirements	Registered, i.e. scans with station information that have been oriented and geo-referenced to each other.
Supported point cloud exports	LAS, PTS and kubit PTC.
Supported scan data formats	FARO (FLS, FWS, LSPROJ), Standard-Format E57, Leica (PTG), Topcon (CLR, CL3), PTX.
Supported CAD packages	All Windows applications, direct interfaces AutoCAD(LT), BricsCAD, SEMA. Via the generic Windows interface: Rhino, GStarCAD, IntelliCAD, Cadwork, Trimble Business Center, Draft-Sight, AVICAD, Carlson, ZWCAD, MapScenes and many more ; via Field Book: Geograf, Covadis etc.