Leica Photogrammetry Suite

- when it has to be **right**

Leica Geosystems

This image of Walensee, Switzerland, was taken with the Leica ADS40 Airborne Digital Sensor.

Experts in photogrammetry and production mapping today are pushed harder and harder to produce more in a shorter period of time — but not at the expense of accuracy. Most photogrammetric software, while offering in-depth functionality and adequate accuracy, can be complex and difficult to use, not to mention expensive. **That affects production...**

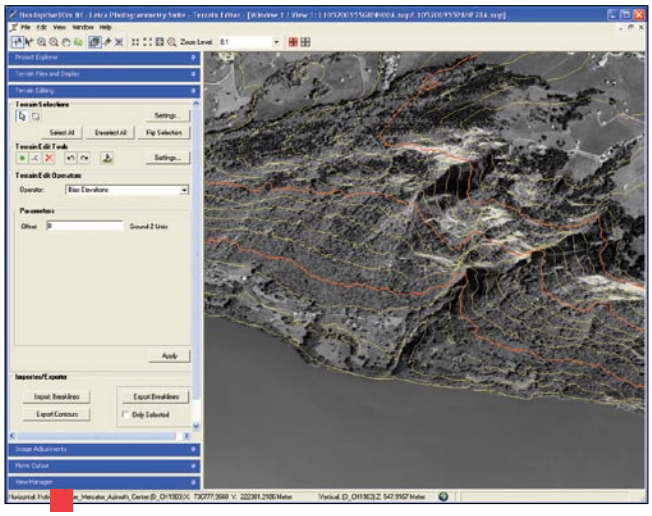
A New Standard in Photogrammetry

The demand for geospatial information is increasing at a remarkable pace. People who are not geospatially oriented are beginning to understand the value geospatial information brings to everyday business needs. For those with photogrammetric needs, one might ask, how do you streamline projects into one fast, manageable workflow? With this, is it possible to reach new levels of production throughput without compromising the detail and accuracy your customers expect or the functionality you've grown accustomed to? You can do all of this and more with Leica Photogrammetry Suite (LPS) from Leica Geosystems Geospatial Imaging. LPS — a new standard in photogrammetry — is a seamlessly integrated collection of software tools that lets you transform raw imagery into reliable data layers required for all digital mapping, GIS analysis and 3D visualization.

With a rich history, Leica Geosystems continues to lead the industry with a growing portfolio of interoperable geospatial solutions in image exploitation, processing, visualization and data management. LPS empowers geospatial professionals to create precise data and put it to work.

Productivity Taken to the Next Level

In today's I-want-it-yesterday environment, it's no longer good enough to just produce accurate data. If your company is like most, additional resources are not an option. That's why we put so much emphasis on designing LPS to make you as efficient as possible without compromising quality and accuracy.

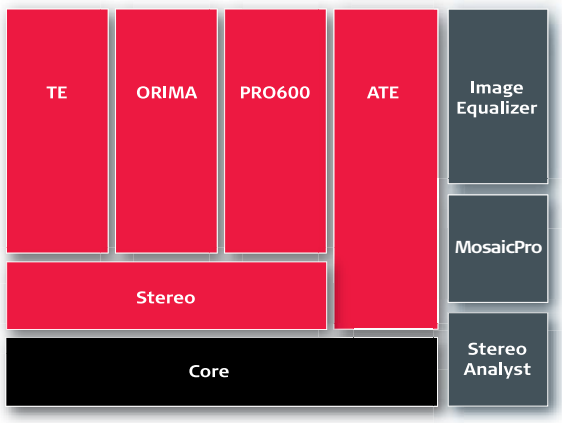


Walensee DTM with a contour interval of 50m.

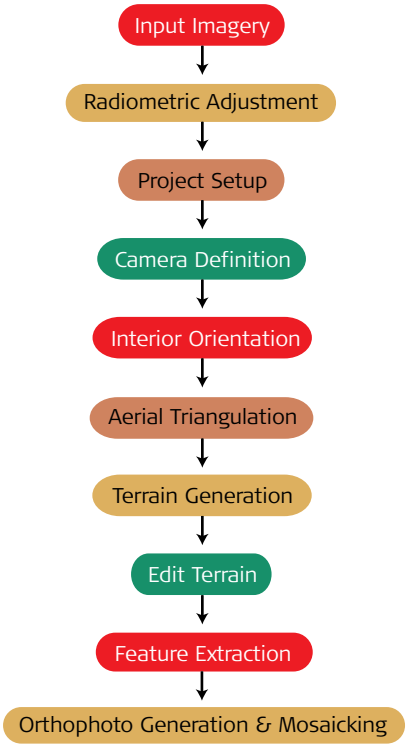
A process-driven workflow is the key to increased productivity, and a process-driven system that efficiently transforms imagery into reliable geospatial content is the engine that drives it. Features such as automatic interior orientation, automatic tie point measurement, automatic terrain extraction and intelligent multiple-image loading let you focus on using your expertise to fine-tune the data by taking many of the repetitive tasks off your hands.

Leica Photogrammetry Suite helps you save time in other ways, too. The clean, intuitive interface makes it easy to learn and easy to use. The workflow driven toolbar guides the process, giving you everything you need to execute a photogrammetric project from beginning to end. Data interoperability is never an issue — data from other leading photogrammetric software may be used in LPS. You may even continue using PRO600 and ORIMA and, if necessary, replace your current software with the relevant LPS modules. In addition, you can streamline production workflow with the LPS process driven toolbar and Project Manager.

LPS Architecture



Photogrammetric Workflow

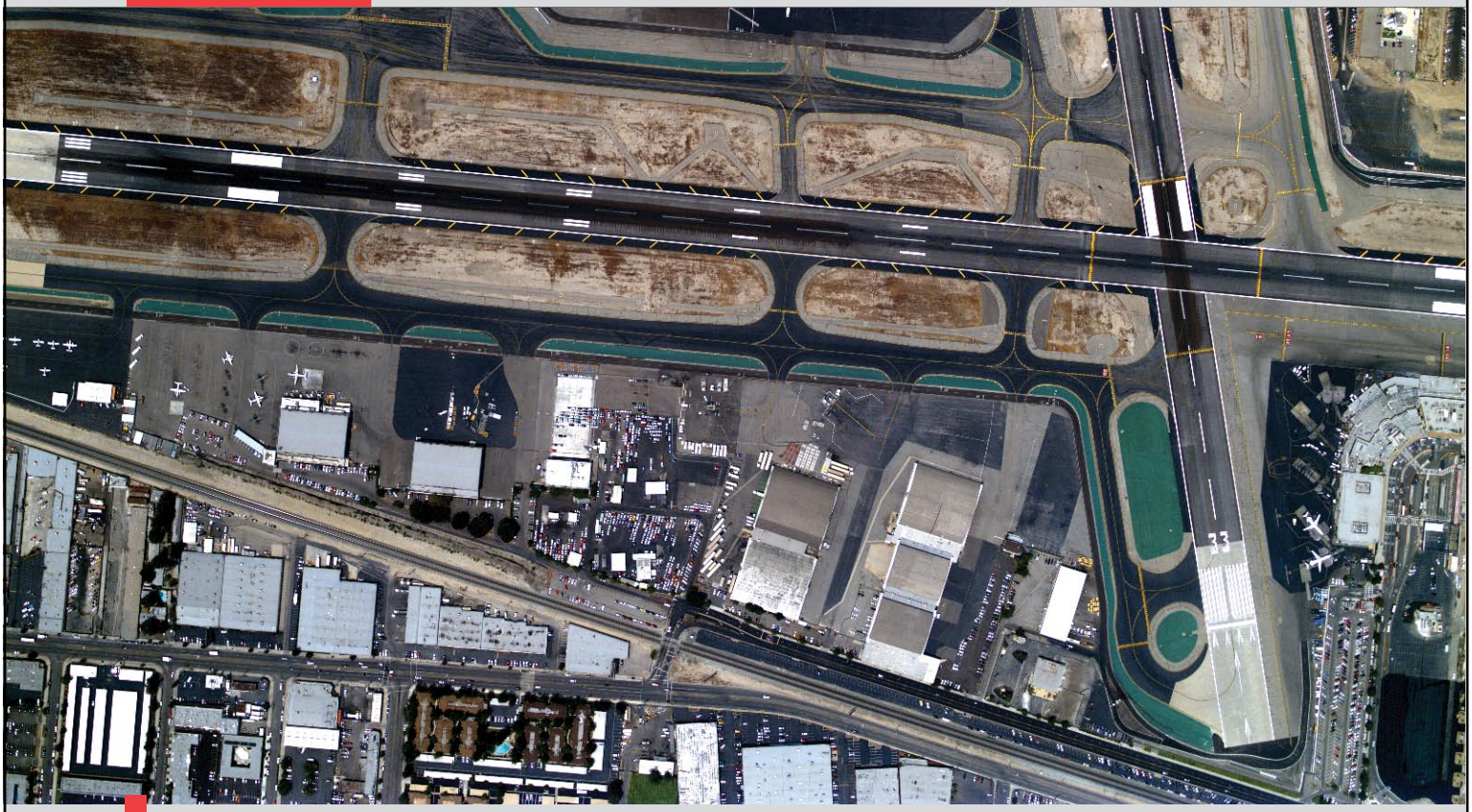


Better Solutions for a Better Price

Superior technology doesn't have to come with a higher price tag. Leica Photogrammetry Suite is affordable, while meeting all of your mapping needs.

The modular design of LPS makes it scalable to accommodate a variety of photogrammetric processes. Add-on modules, productivity bundles and customizability let you tailor your system to your exact needs — you'll never be forced to purchase a tool you won't use.

With LPS, even technical assistance and training services are affordable. We know you depend on your system to be in top working order, so the experienced, knowledgeable professionals at Leica Geosystems stand ready to assist you with everything from training and customized solutions to technical and on-site installation assistance.



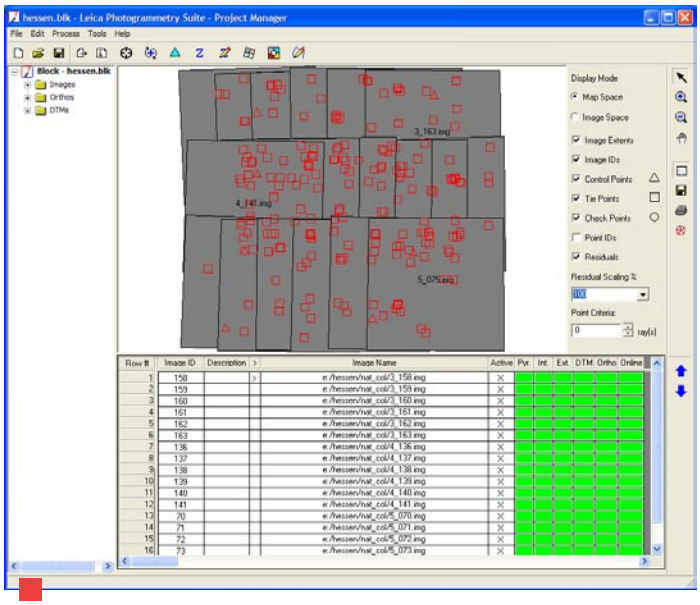
This image of Burbank, California, was taken with the Leica RCD105 39-megapixel medium format digital camera.

Accuracy You Can Depend On

We know how important accuracy is in the photogrammetry industry. Because of this, LPS uses state-of-the-art photogrammetric and image-processing technology to fine-tune your data and report results:

- Automatic point measurement and terrain extraction
- Subpixel stereo display and point positioning
- Proven and accepted triangulation
- Rigorous sensor models
- Built-in data quality checks

With LPS, accuracy is never in doubt.

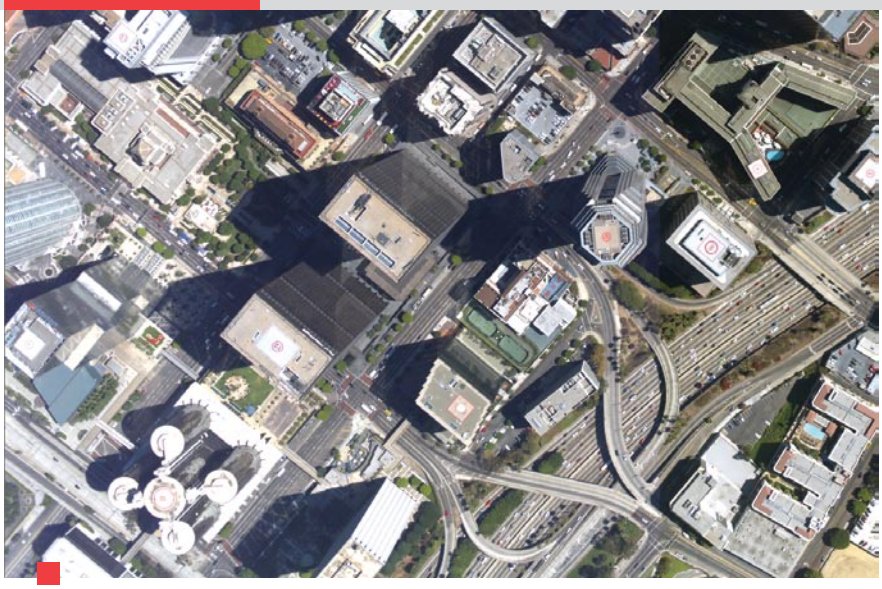


LPS Project Manager

Leica Photogrammetry Suite Core

LPS Core enables you to perform powerful yet simple orientation and orthorectification. The Core module provides all of the necessary tools required to transform raw imagery into reliable geospatial data. This comprehensive suite includes:

- ERDAS IMAGINE® Advantage
- Image Imports and Exports
- Map Compositioning
- Image Processing Tools
- Automatic Interior Orientation
- Manual and Automatic Point Measurement
- Image Viewer
- Color Balancing
- 3D Surfacing
- Ortho-mosaicking
- Triangulation



This image of downtown Los Angeles was taken with the Leica RCD105 39-megapixel medium format digital camera.

Add-On Modules

LPS is scalable, so you can purchase only the tools you need to build your solution on top of the Core. The add-on modules provide additional production-oriented tools that help maximize data throughput.

LPS Stereo brings you the power of extracting geospatial content in a stereo viewing environment. It features subpixel pointing, continuous roaming and zooming, as well as fast-graphics rendering. Viewing options include Stereo, Split Panel, Mono and Tri-View.

LPS Terrain Editor (TE) includes point, area and line-based terrain editing needed to clean DTMs using stereo imagery as a reference backdrop. TE supports many DTM formats, including the Leica Terrain format, TerraModel TINs and raster DEMs.

ORIMA Digital Photogrammetry (DP) for LPS is a modern, easy-to-use orientation management software that processes large datasets of image coordinates, ground control points and GPS coordinates. ORIMA lets you perform production-focused aerial triangulation for analog and digital frame and Leica ADS40 imagery with outstanding diagnostic tools.

PRO600 puts flexible, easy-to-learn CAD-based tools in your hands for large-scale digital mapping using stereo imagery, including signs, symbols, colors, line thickness, user-defined line-types and forms.

Automatic Terrain Extraction (ATE) allows for fast, accurate automatic terrain extraction from multiple images using sophisticated techniques with built-in accuracy reporting.

Leica MosaicPro™ features improved seam editing capabilities, enhanced functionality and improved radiometric adjustment abilities. With seam editing, image previewing and a streamlined user interface, Leica MosaicPro increases efficiency through a smooth process and improved functionality, which ultimately reduces project time.

ImageEqualizer® corrects variations and flaws in imagery due to hot spots, vignetting, atmospheric effects and film processing in scanned aerial photography or unbalanced satellite images.

Stereo Analyst for IMAGINE is feature extraction, 3D model generation, interpretation, measurement and visualization tool which uses stereo imagery to derive 3D information.

The New Standard - Just a Phone Call Away

You can have it all with the new standard in photogrammetry — the Leica Photogrammetry Suite, from the company geospatial professionals have trusted for generations. Take your photogrammetry technology to the next level today. Call +1 877 463 7327 or e-mail info@gi.leica-geosystems.com for more information.

About Leica Geosystems Geospatial Imaging
To be successful in our changing marketplace, you need reliable, enterprise-enabled geospatial information. Leica Geosystems Geospatial Imaging transforms your raw data to useable information, integrating a broad range of geospatial technology throughout your enterprise, via web-based, mobile and desktop clients. Delivering the most comprehensive solutions in image exploitation, processing, visualization and data management, Leica Geosystems provides robust image compression techniques and the most efficient delivery of imagery over the Internet or within an organization. With Open Geospatial Consortium (OGC) and International Organization for Standardization (ISO) interoperability, Leica Geosystems develops solutions with the most advanced service-oriented platform available.

Those who use Leica Geosystems products trust them for their precision, seamless integration, interoperability and superior customer support. Geospatial solutions from Leica Geosystems - when it has to be right.

Leica Geosystems is part of the Hexagon Group, Sweden. For more information about Leica Geosystems or its products and services, please call +1 770 776 3400, toll free +1 866 534 2286, or visit www.gi.leica-geosystems.com.

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