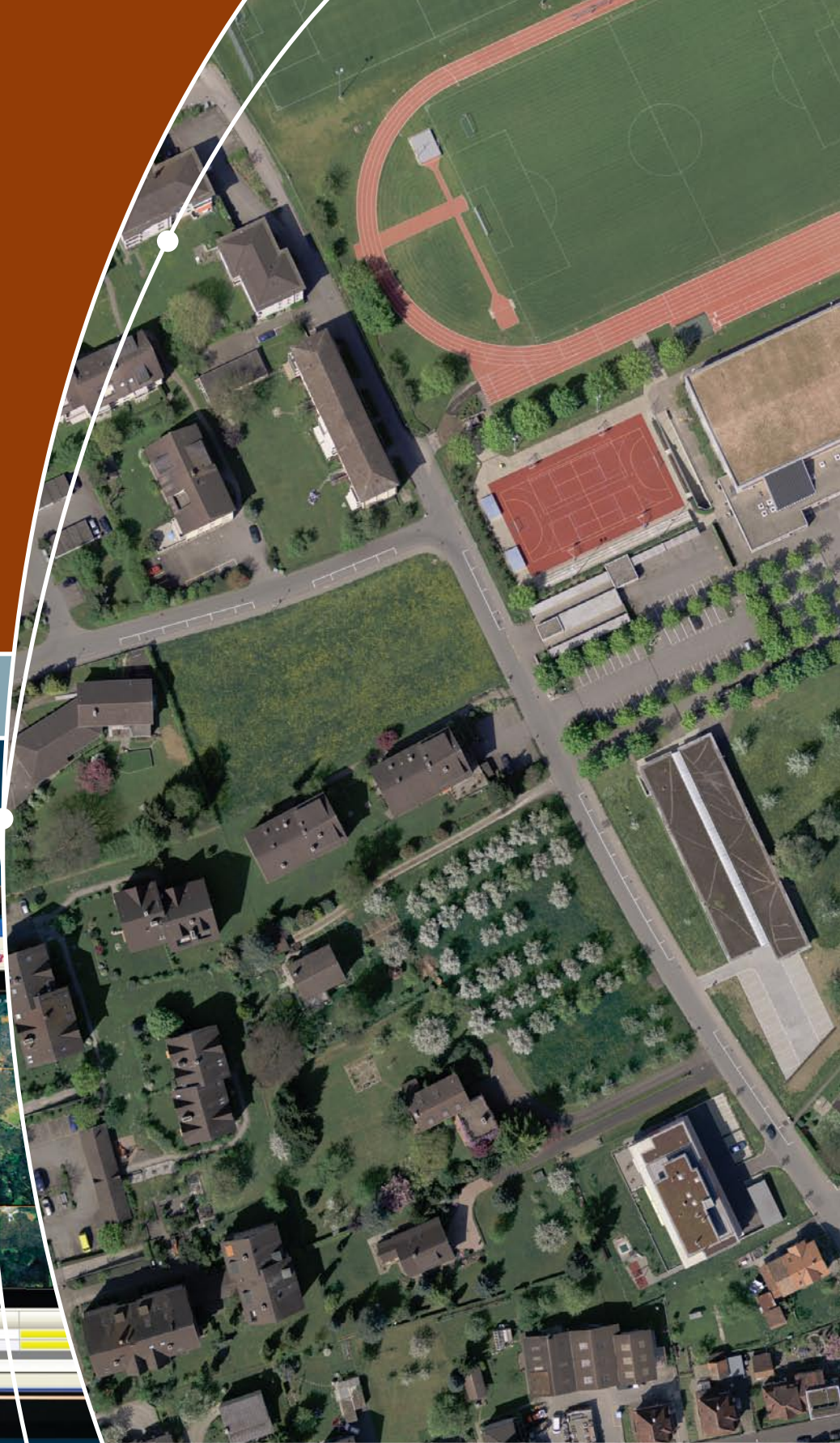
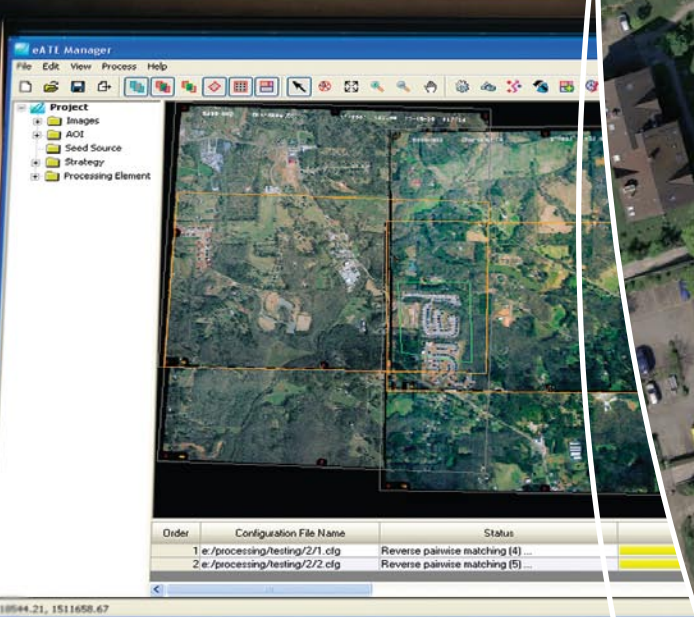
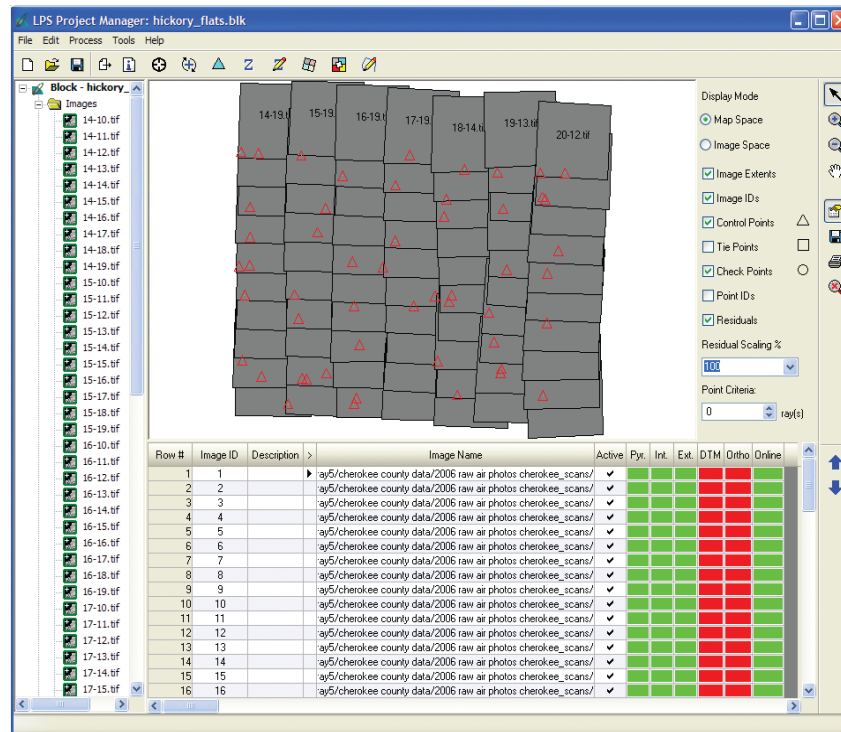


# LPS 2010

Complete Suite of  
Photogrammetric  
Production Tools





Project Visualization and Management in LPS Core

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.

### A New Standard in Photogrammetry

For those with photogrammetric needs, one might ask, how do you streamline projects into a single 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 have grown accustomed to? You can do all of this and more with LPS.

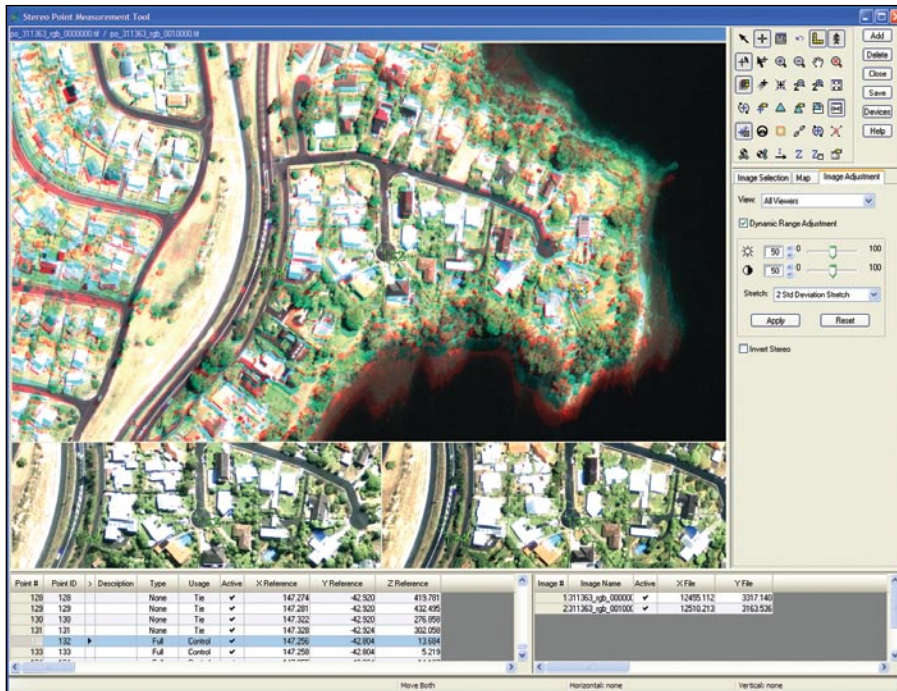
LPS is a seamlessly integrated collection of software tools that enable you to transform raw imagery into reliable data layers required for all digital mapping, GIS analysis and 3D visualization needs. LPS provides rigorous support for a wide variety of air, space, and terrestrial sensors.

LPS is the most flexible photogrammetry solution, handling a variety of workflows including:

- Triangulation and ortho-mosaic production
- Broad area mapping
- Transportation planning
- Engineering and facilities mapping
- Defense applications
- Close-range applications

In addition, LPS users can now go beyond standard photogrammetric products with the added power of IMAGINE Advantage, a tier of ERDAS IMAGINE® included with LPS. ERDAS IMAGINE is the leading solution for remote sensing and digital image processing. With a rich history in mapping, ERDAS continues to lead the industry with a growing portfolio of interoperable desktop and enterprise geospatial solutions.





Stereo Point Measurement in LPS Core *Image courtesy of GeoEye*

## We Increase Your PRODUCTIVITY

LPS makes you as efficient as possible without compromising quality and accuracy. LPS was designed for ease-of-use and does not feature the steep learning curve often associated with photogrammetric software.

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. From classic frame photography to large-format digital and pushbroom to satellite sensors, LPS supports numerous workflows.

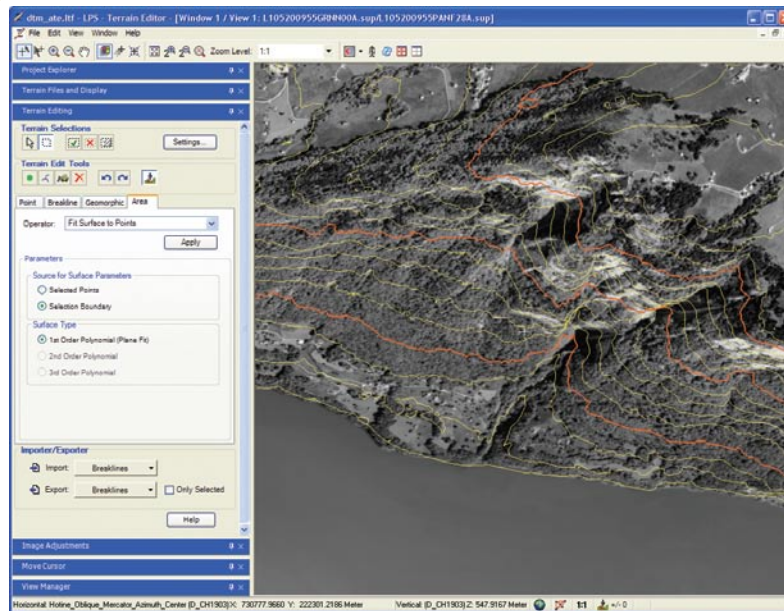
These workflows may be tailored to fit various requirements to generate a variety of products. Features such as automatic interior orientation, automatic tie point measurement, automatic terrain extraction and intelligent multiple-image loading let you focus on using your expertise to fine-tune the data by taking many of the repetitive tasks off your hands.

LPS 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 with the extensive variety of input and output formats supported, including data from other leading photogrammetric software.

## We Provide VALUE

Superior technology does not have to come with a higher price tag. LPS is affordable, while meeting all of your mapping needs. In addition, including IMAGINE Advantage with LPS provides the largest array of functionality for the price in the industry. Integrating LPS with the capabilities of ERDAS IMAGINE enables multiple workflows, including:

- Landcover mapping and terrain categorization
- Color balancing, mosaic and compression
- Map composition, printing and report generation
- Data conversion



Terrain editing in LPS Terrain Editor

- Feature capture and update
- Image processing and unsupervised classification
- Add-on modules for spatial modeling, hyperspectral processing, and supervised classification, radar processing, automatic feature extraction, automatic registration, 3-D world construction, GeoPDF generation, and more

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 will never be forced to purchase a tool you will not 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 ERDAS stand ready to assist you with everything from training and customized solutions to technical and on-site installation assistance.

## 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

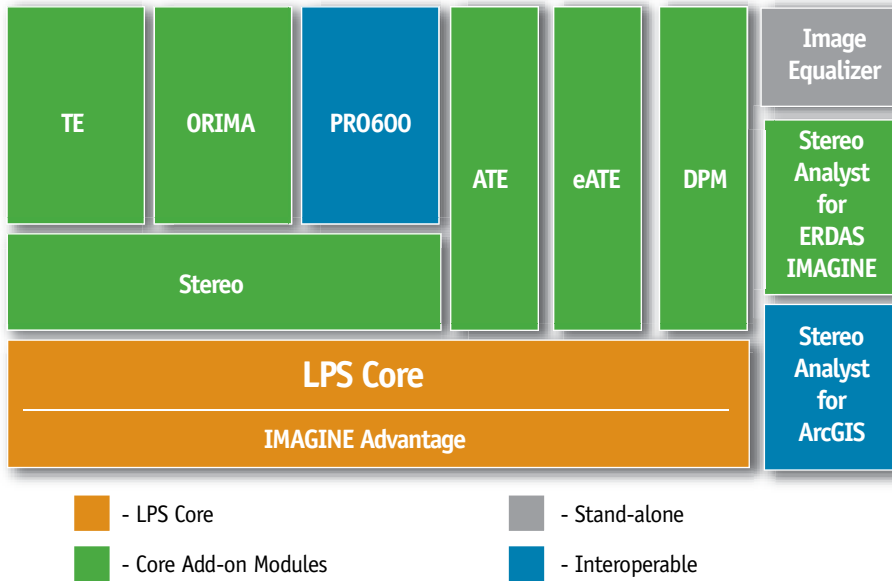
With LPS, accuracy is never in doubt.

## LPS 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:

- Photogrammetric project setup and management
- Support for numerous sensor models
- Automatic interior orientation
- Manual and automatic point measurement

## LPS Architecture



- Triangulation
- Orthorectification
- Terrain preparation and conversion
- ERDAS IMAGINE Advantage®, including ERDAS MosaicPro, featuring powerful automatic seamline generation and on-the-fly editing capabilities, advanced radiometric processing, localized output preview capability, combined orthomosaicking, and direct to compressed output
- Image processing tools
- Image, terrain, and vector import and export
- Map composition

### 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 and editing terrain and feature data in a stereo viewing environment. It features subpixel pointing, continuous roaming and zooming, and fast-graphics rendering. Viewing options include Stereo, Split Panel, Mono and Tri-View.

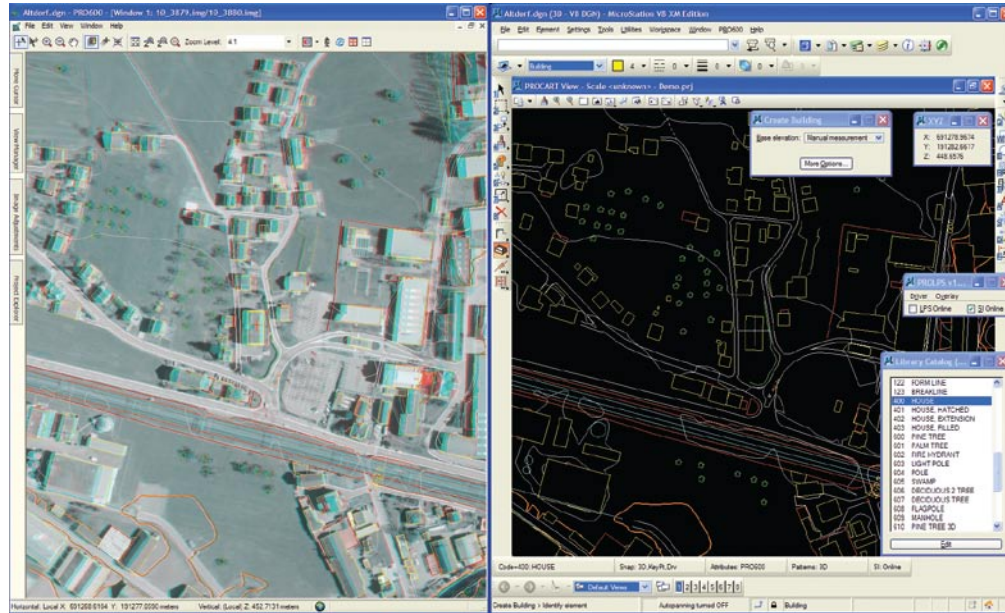
**LPS ATE** allows fast, accurate automatic terrain extraction from multiple images using sophisticated techniques with built-in accuracy reporting.

**LPS eATE** is a new enhanced terrain generation solution, featuring dense pixel-level output surfaces, simultaneous multiple format output including RGB-encoded LAS, integrated point classification for filtering and bare earth generation, and multi-threading and distributed processing. No other product combines all of these.

**LPS Terrain Editor (TE)** includes point, area and line-based terrain editing needed to clean DTMs using stereo imagery as a reference backdrop. TE also supports many DTM formats, including both TINs and grids.

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





Feature extraction in PR0600

**ORIMA** is a modern, easy-to-use high-end triangulation 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 Geosystems ADS40 and ADS80 imagery with outstanding intuitive graphical diagnostic tools, support for GPS/IMU corrections, and self calibration and boresighting.

**DPM:** The Defense Productivity Module extends the already large suite of sensors and formats provided in LPS Core with support for NTM data in TFRD and NITF formats, including AMSD metadata and provides additional defense-oriented capabilities.

### LPS Interoperable Photogrammetric Modules

**PRO600** puts flexible, easy-to-learn Bentley Microstation-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. PRO600 also includes terrain-oriented tools for projects that require both feature and terrain data.

**Stereo Analyst for ArcGIS®** creates and revises a comprehensive database of feature data. Tightly integrated with ArcGIS®, Stereo Analyst for ArcGIS® enables stereo collection inside the environment you are accustomed to with the tools and features of ArcGIS.

**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.

### The New Standard — Just a Phone Call Away

You can have it all with the new standard in photogrammetry — LPS, from the company geospatial professionals have trusted for generations. Take your photogrammetry technology to the next level today. For more information, call +1 770 776 3400, toll free +1 877 GO ERDAS or visit [www.erdas.com](http://www.erdas.com).