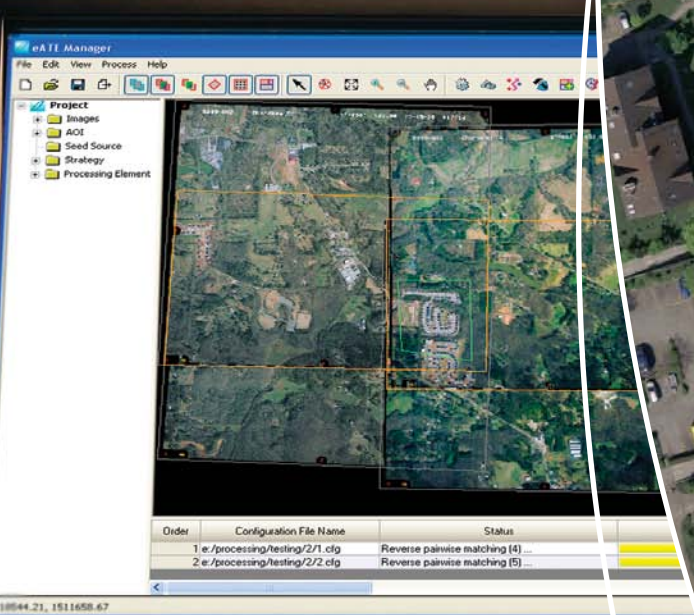
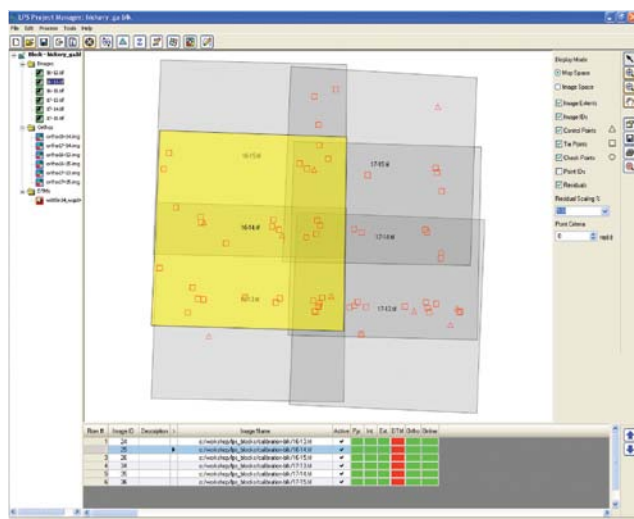


LPS

Your Complete Suite
of Photogrammetric
Production Tools





Project Visualization and Management in LPS Core

Today, photogrammetry and production mapping experts are under pressure to produce more in less time — while maintaining a high degree of accuracy. ERDAS understands.

A New Standard in Photogrammetry

How do you consolidate multiple photogrammetry projects into a single fast, manageable workflow? 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? LPS enables all of this, and more.

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 on the market, handling a variety of workflows including:

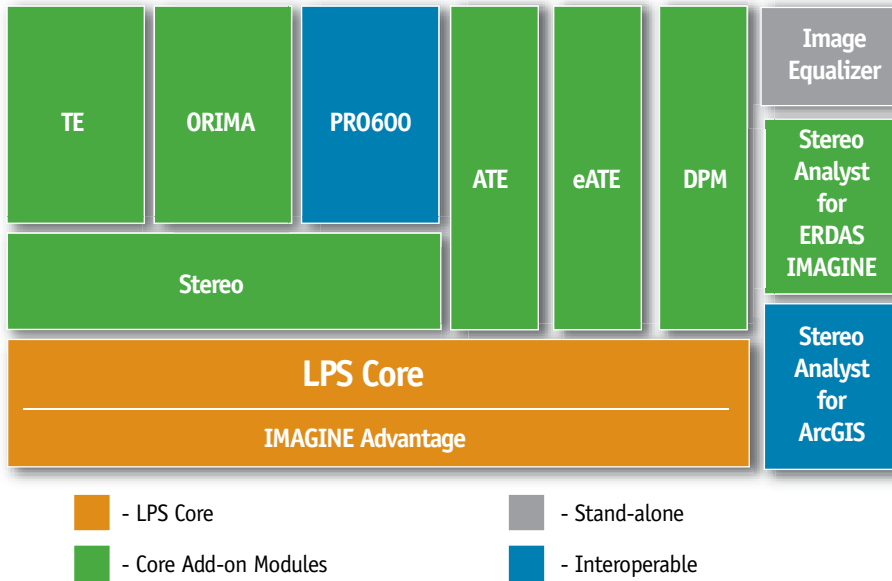
- Triangulation and orthomosaic production
- Broad area mapping
- Transportation planning
- Engineering and facilities mapping
- Defense applications
- Close-range applications

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.

We Increase Your PRODUCTIVITY

LPS maximizes efficiency without compromising quality and accuracy. Designed specifically for ease of use, it frees users from the steep learning curve often associated with photogrammetric software.

LPS Architecture



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.

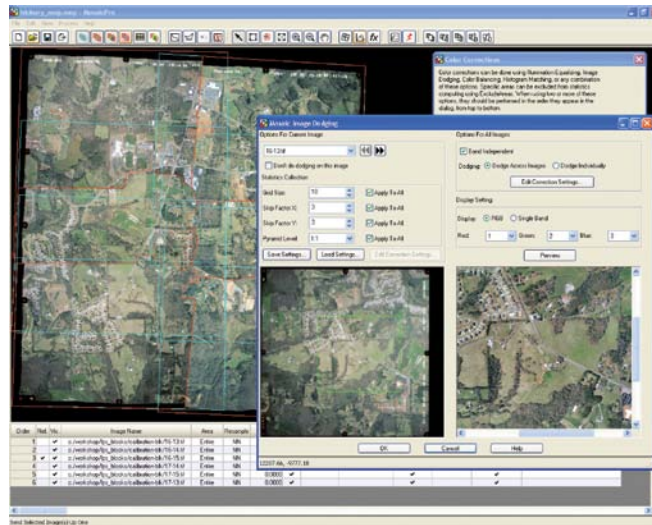
These workflows may be tailored to fit various requirements to generate a variety of products. Features such as automatic interior orientation, automatic tie point measurement, automatic terrain extraction and intelligent multiple-image loading let you focus on using your expertise to fine-tune the data 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, mosaicking and compression
- Map composition, printing and report generation
- Data conversion
- 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, 3D world construction, GeoPDF generation and more
- Terrain Prep Tool allows you to create, split, merge, thin and filter a variety of input terrain data formats including LAS, ASCII and TINs



Mosaicking in ERDAS IMAGINE

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

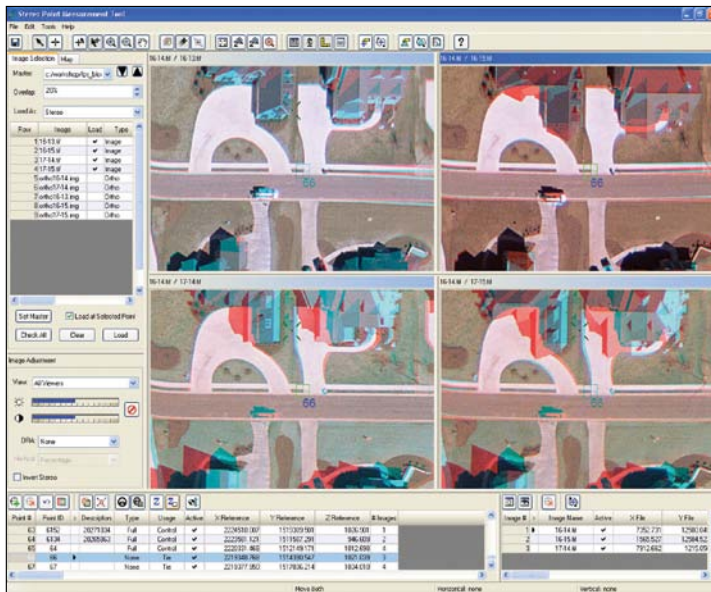
With LPS, accuracy is never in doubt.

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
- Triangulation and orthorectification
- Terrain preparation and conversion
- ERDAS IMAGINE Advantage® features 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



Stereo Point Measurement
in LPS Core

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.

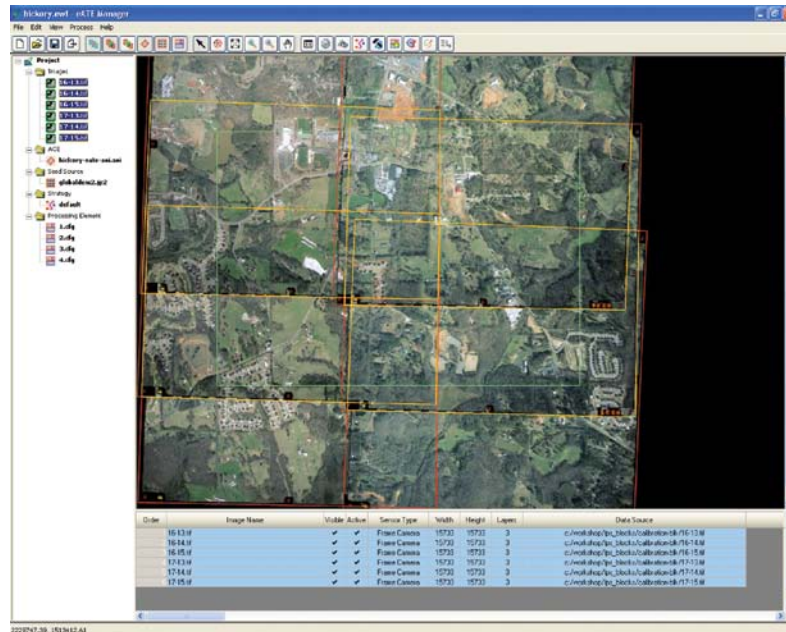
LPS Stereo brings you the power of extracting and editing terrain and feature data in a stereo viewing environment. It features subpixel pointing, continuous roaming and zooming, and fast graphics rendering. Viewing options include Stereo, Split Panel, Mono and Tri-View.

- Moving cursor/fixing image and fixed cursor/moving image
- Active and passive three-dimensional viewing eyewear supported
- Drag and drop images into viewer
- Fast graphics rendering
- Automatic Z placement of cursor from a terrain model or image matching
- Multiple stereo views can be opened simultaneously
 - o Each view can be monoscopic, stereo, split-screen or tri-view (stereo and split-screen)
- Continuous zoom in and out, as well as discrete steps such as 1:1 and 2:1
- On-the-fly resampling for subpixel cursor positioning and measurement

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

- Automatically extract, subset and mosaic individual DTMs for an entire project area.
- Support for aerial frame, Leica ADS, digital, video and non-metric cameras, as well as satellite sensors with stereo capability (SPOT, IKONOS, QuickBird, WorldView, GeoEye, etc.)
- Customized DTM extraction strategy parameters
- Embedded quality assurance, quality control and accuracy reporting tools

- Extracted DTMs can be output in ERDAS raster formats, LTF TINs, 3D Shapefiles, TerraModel TINs, or ASCII files
- Support for batch processing



LPS eATE Manager

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.

- Support for pixel by pixel correlation for high-density output terrain products
- Support for multi-ray matching increases correlated terrain point reliability
- Full control over project visualization and image rendering, including project graphics such as image footprints, areas of interest (AOIs), seed data boundaries, and processing element graphic
- XML accuracy report file containing processing statistics, along with quality-based graphics
- Output support for TIN, Grid and point cloud terrain formats
- Output options for a merged surface defined by input images or a user-defined bounding box
- Terrain output splitting options, with the ability to define an overlap percentage
- Terrain thinning options allow for a regularly-spaced terrain output, plus the ability to thin out redundant points on planar surfaces
- Optimized performance via multi-threaded processing
- Increased throughput with support for multi-core processing on a single computer system using the IMAGINE Batch Tool
- Support for distributed processing across a network of computer systems using Condor

- Interactive graphical tools for analysis of blocks and identification and elimination of blunders or weak areas, with error ellipses, error rectangles, ray intersection geometry and image area identification for point-and-click supervised re-measurement
- Flexible input formats from GPS and IMU data
- Available in multiple languages

The **Defense Productivity Module (DPM)** 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.

PRO600 Fundamentals is a streamlined version of PRO600 that runs on the Bentley PowerMap platform. PRO600 Fundamentals is designed for GIS-oriented feature extraction, utilizing Bentley PowerMap's desktop GIS capabilities. This includes support for common GIS data formats, including the ability to write 3D data products to KML. It also includes a DTM-read capability that allows building extrusion to a user-specified terrain model.

Stereo Analyst for ArcGIS®: LPS can be used to produce oriented imagery and terrain data for use in Stereo Analyst for ArcGIS. Features are collected and attributed with an X,Y and Z position for each vertex. The software can also update existing feature datasets with 2D to 3D feature conversion tools. 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.

- Perform balancing and dodging on single or multiple images
- Interactive previewing capabilities
- Save capability that stores the image's statistic data with the images and loads it automatically when the project is re-opened

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.