INPHO SOFTWARE
LPMaster

POWERFUL AIRBORNE LIDAR PROCESSING AND QUALITY ASSURANCE DESIGNED FOR USE WITH TRIMBLE AX AERIAL MAPPING SYSTEM. WITH A FOCUS ON EASE-OF-USE AND PRODUCTIVITY, LPMASTER IS FULLY INTEGRATED INTO THE INPHO SOFTWARE LINE OFFERING A TRUE END-TO-END LIDAR WORKFLOW.
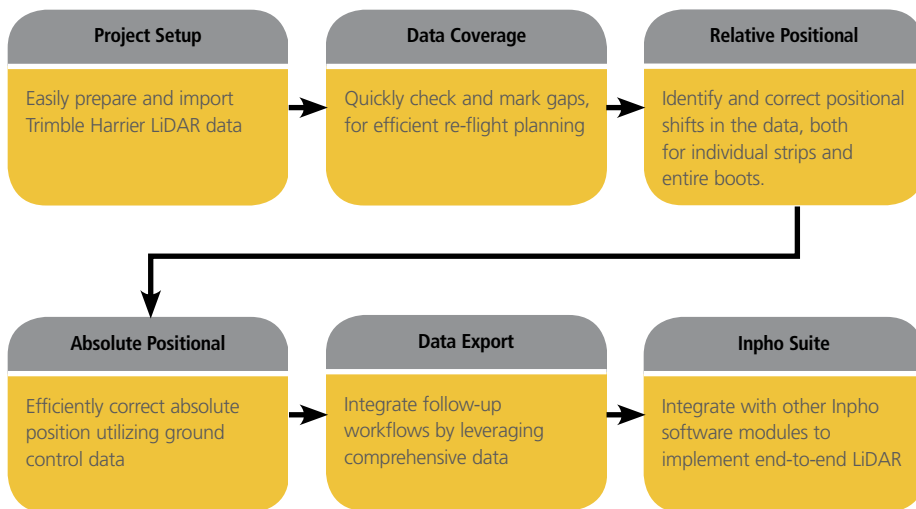
KEY FEATURES

Simplified and automated workflow

Straightforward data coverage control in the field and office optimized for productivity.

Efficiently check and refine positional accuracy.

Automated batch processing for very large data sets.

Tight integration with orthophoto and point cloud modules available within Inpho software, allowing LiDAR processing, image processing and analysis workflows that combine for a seamless solution providing high accuracy and precision

Project Setup	Data Coverage	Relative Positional
Easily prepare and import Trimble Harrier LiDAR data	Quickly check and mark gaps, for efficient re-flight planning	Identify and correct positional shifts in the data, both for individual strips and entire boots.

Absolute Positional	Data Export	Inpho Suite
Efficiently correct absolute position utilizing ground control data	Integrate follow-up workflows by leveraging comprehensive data	Integrate with other Inpho software modules to implement end-to-end LiDAR

USABILITY

Intuitive Interface
- Reduce production team ramp-up time
- Fast and efficient production workflows

Fast and easy project setup
- Simple project generation
- Automate data assembly and selection

PRODUCTIVITY

Automation
- Full automatic LiDAR strip adjustment for homogeneous quality

Fast Coverage Check
- Conduct data coverage assessments in the field and office
- Fast data coverage computation

Quality Control
- Relative and absolute positional accuracy control and adjustment

Windows 64 Bit processing
- Automatic sequential data processing
- Native 64 bit operating system support

WORKFLOW INTEGRATION

Inpho Software
- Seamless workflow integration
- End-to-end LiDAR workflow
- Photogrammetric processing
- Data analysis

Comprehensive data export
- Supports 3rd party workflows

OPTIONS

- Monthly rental and updates from previous versions
- Maintenance (1st year included in software price) includes support and version updates
- Network licensing available

SUPPORTED SENSOR TYPES

- TRIMBLE-AX series of airborne LiDAR scanners and imaging sensors

SYSTEM REQUIREMENTS

- Multi-core PC workstation (1 license supports up to 16 cores)
- 8 GB RAM
- High-capacity disk system
- Windows 7, 64 bit

SUPPORTED FORMATS

- Supported image formats:
  - Georeferenced orthos: GeoTIFF, TiffWorld (tfw), ADS+tif/tfw
  - TIFF, JPG, BigTiff
  - JPEG2000, TIFFjpeg
  - EXIF
  - 8/12/16 bit
- Height model / morphology data formats
  - Grid-operations:
    ◊ *.dtm *.rdh *.bil *.fit *.tol *.grd *.tif *.tiff *.smti *.tpix.shp, BIL, BWNP, BXYZ, DTM, DXF, DXF_TIN, FLT , GRD, LAS, LASZip, SHP_TIN, TIFF16, TIFF32, VRML, VRML_TIN, WNP, XYZ
  - Point-cloud operations
    ◊ LAS, LASZip, XYZ, BXYZ

COMPLETE SOLUTION WITH ADDITIONAL INPHO SOFTWARE MODULES

LPMaster can be used either standalone or as part of a larger Inpho LiDAR and photogrammetric workflow. As a standalone, LPMaster covers the necessary steps to transform raw AX data into a homogeneous and quality-approved point cloud. Adding DTMaster provides full point cloud processing capabilities, facilitating the creation of higher-level products such as gridded and classified DTM or DSMs, point density images, relief images or contour lines. OrthoMaster and OrthoVista complete the workflow, offering processing functionality for turning raw image data into mosaicked ortho imagery or true ortho photos.

	LPMaster	DTMaster Stereo	OrthoMaster OrthoVista
COVERAGE ANALYSIS			
POINT CLOUD, FLIGHT PATH & STRIP COVERAGE	✔		
REFLIGHT PREPARATION	✔		
POINT CLOUD PROCESSING			
AUTOMATED STRIP ADJUSTMENT	✔		
POINT CLOUD CLIPPING	✔		
POINT CLOUD SUBSETTING, THINNING & FILTERING	✔	✔	
POINT CLOUD TILING		✔	
COORDINATE SYSTEM TRANSFORMATION		✔	
POINT CLOUD COLORING FROM IMAGERY		✔	
AUTOMATIC GAP FILLING PROJECT-WIDE		✔	
LOCAL RE-INTERPOLATION AND FILTERING (BRUSH)		✔	
MULTI-FILE EDITING (EDITOR & BATCH)		✔	
STEREOSCOPIC EDITING		✔	
VECTOR DATA			
FLIGHT PATH	✔		
VECTOR EDITING	✔	✔	
CONTOUR LINE GENERATION		✔	
RASTER DATA GENERATION			
RASTER DSM	✔		
RASTER RELIEF IMAGE	✔		
RASTER DIFFERENCE IMAGE IN OVERLAP AREAS	✔		
RASTER INTENSITY IMAGE	✔		

	LPMaster	DTMaster Stereo	OrthoMaster OrthoVista
GRID PROCESSING			
DSM GRID GENERATION		✔	
DTM GRID GENERATION		✔	
POINT DATA EDITING, MERGING & INTERPOLATION		✔	
COORDINATE SYSTEM TRANSFORMATION		✔	
CONTOUR LINE GENERATION		✔	
VISUALISATION			
SHADING, COLORIZED HEIGHT CODING, CONTOURING ON-THE-FLY		✔	
RGB COLORIZED POINT CLOUD		✔	
STEREOSCOPIC 3D VISUALISATION		✔	
3D PROFILE		✔	
TILE MANAGER		✔	
ORTHO BACKDROP IMAGERY FOR COVERAGE CHECK AND EDITING		✔	
GENERAL			
IMAGE EO-FILE GENERATION	✔		
COMMANDLINE BATCH PROCESSING	✔		✔
MULTITHREADING	✔	✔	✔
DATUM TRANSFORMATION OF ALL PROJECT DATA	✔	✔	✔
IMAGE PROCESSING			
ORTHO & TRUE ORTHO GENERATION			✔
ORTHO & TRUE ORTHO TILING			✔
AUTOMATIC SEAM GENERATION / MOSAICKING			✔
AUTOMATIC COLOR MATCHING, BALANCING			✔
SEAM EDITING, COLOR EDITING			✔
MULTICHANNEL IMAGERY SUPPORT			✔

For prices and distribution partner information please contact: sales@inpho.de

Trimble.