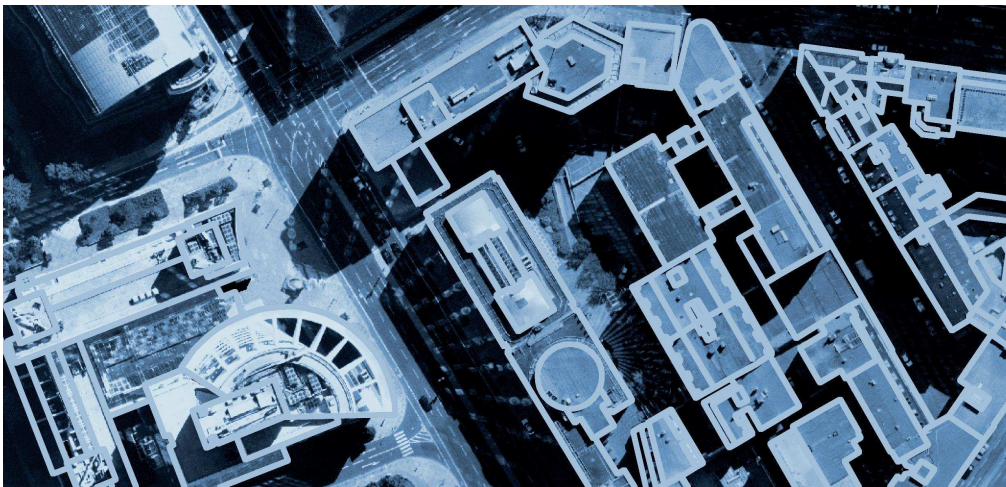


OrthoMaster

It was never easier to bring aerial or satellite imagery to the ground.

OrthoMaster is INPHO's professional software for rigorous ortho-rectification of digital aerial or satellite imagery. It offers a high degree of processing automation and is optimized for high performance orthophoto production.



OrthoMaster can introduce shape lines of man-made objects for easy and low-cost surface model generation.

OrthoMaster generates high quality ortho-photos, i.e. digital images with constant scale, using digital aerial or satellite imagery, their exterior orientations and digital terrain models (DTMs) as the source data. **OrthoMaster** is versatile and handles both, single images and complete image blocks.

The rigorous differential rectification process is performed fully automatically. In case there is no DTM available, rectification onto a plane is also possible. On demand, **OrthoMaster** derives DTMs from a set of arbitrarily distributed XYZ points and breaklines.

In combination with OrthoVista, **OrthoMaster** is able to generate true orthomosaics, in which all man-made 3D objects (e.g. buildings and bridges) are presented in their true locations, without disturbing relief displacements.

OrthoMaster effectively eliminates the relief displacements by intersecting the given 3D object data with the basic DTM, and utilizing advanced computation algorithms for generating true orthophotos.

OrthoMaster and OrthoVista are bundled in our OrthoBox offering unique performance.

OrthoMaster is part of INPHO's modular system. It is delivered with ApplicationsMaster, the core of the system, providing a comprehensive collection of essential tools. For details see pages 32ff.

*OrthoMaster is a trademark of INPHO GmbH.
All other brands and product names are trademarks of their respective owners.*

Features

- Orthophoto generation from aerial images (frame and line sensors), and from various types of satellite imagery (Ikonos, Quickbird, WorldView, Spot, Landsat, IRS C/D, Aster, Cartosat).
- Automated processing of single images.
- Automated one-step batch processing of complete aerial image blocks; also in batch mode.
- Orthophoto generation in pre-set area-of-interest; flexible definition/import of optimal ortho areas.
- Automatic ortho area generation:
 - For excluding fiducial marks from orthophotos
 - By defining the overlap percentage of adjacent orthophotos
- Unique true-ortho capability in combination with OrthoVista; advanced modelling of bridges, buildings and other man-made objects.
- On-the-fly generation of hybrid grid-based DTMs or TIN models.
- DTM data import:
 - SCOP DTM, Winput
 - GeoTIFF, TiffWorld (tfw)
 - ERS, ECW, JPEG2000 (ER Mapper)
 - XYZ mass points, break/form lines
 - DXF
 - ArcGIS Shapefile, ArcGIS ASCII Grid
 - LAS (ASPRS Lidar Data Exchange Format)
 - NED Float
 - Import of multiple raw data files, merged with SCOP functionality
- Output georeference formats:
 - GeoTIFF, TiffWorld (tfw)
 - ERS (ER Mapper)
 - ADS40 (ads + tif, or ads + tfw)
- Optional distributed processing in combination with DPMaster

Options

- OrthoMaster Lite
 - Restricted to ortho-rectification of single aerial or satellite images
 - No batch processing
- OrthoMaster (DPL)
 - High-volume extension using Distributed Processing technology
 - Efficiency increase by using OrthoMaster in a multi-core setup

Benefits

- Increases the efficiency, profitability and quality of orthophoto production.
- High productivity through:
 - High processing speed
 - High level of automation
 - Minimum level of user interaction
- Excellent geometric precision through precise integrated DTM generation with rigorous consideration of break lines and man-made structures (buildings, bridges).
- Excellent radiometric quality through advanced processing algorithms.
- Unique true-ortho capability.
- Powerful handling of very large DTMs.

Recommendations

- Easy integration into any third-party workflow.
- High-end PC workstation
- 4 GB RAM
- High capacity disk system
- Windows Vista/XP/2000, 32 or 64 bit

