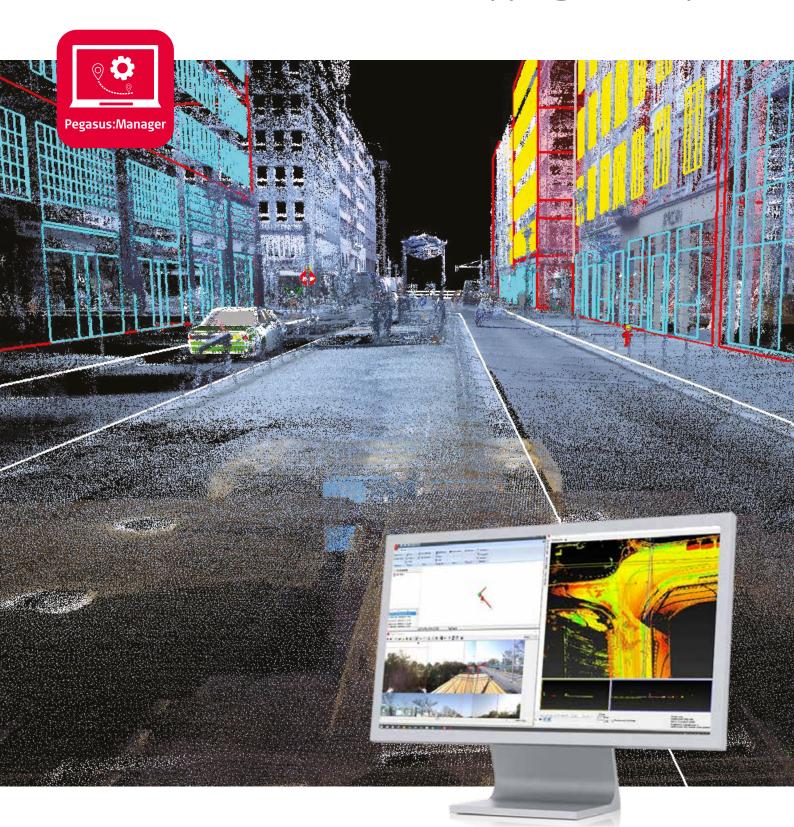
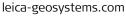
# **Leica Pegasus:Manager**Mobile Mapping Desktop

















#### Leica Pegasus:Manager

#### Completing your Mobile Mapping Solution

Efficient, easy workflows, from mission planning to batch extraction and Jetstream collaboration to online web-sharing

Leica Pegasus:Manager is the Reality Capture software client for mobile mapping, a single desktop application for processing, analysing, and extracting features from point clouds and images acquired by the Leica Pegasus Mobile Mapping systems. The Leica Pegasus:Manager desktop client, composed of different modules and enables a tailor-made software suite aligned to your industry focus or project scope. Accurate mission planning, data processing, automated feature extractions, integrated quality reporting, and online publishing makes Leica Pegasus:Manager an efficient single workflow for high-precision deliverables. As an option, Leica Pegasus:Manager can publish Jetstream files enabling Cyclone users to combine multi-sensor projects into a single file for efficient data sharing.

#### Pegasus:Manager Viewer

Leica Pegasus Viewer is free software that offers quick checks on the quality and accuracy of your acquired data from the Pegasus Mobile Mapping system. The display shows the captured mission, allowing the user to seamlessly navigate through the images and point clouds. With the Leica Pegasus Viewer showing imagery and LiDAR data, measurements can be taken and reports created in combination with GIS information.

#### Mobile Mapping Software Customer Care Package

The Software Customer Care Packages for Mobile Mapping customers includes the Basic CCP package. The Basic CCP includes Software Customer Support and Software Maintenance provided by our Mobile Mapping professionals and Software experts.



Software Customer Support

E-Mail support working days from 8 a.m. to 5 p.m. CET. Access to experienced, trained professionals who work with you individually to address software questions as they arise

Software Maintenance

Covers all software updates with new features. Ensures that you stay up-to-date with the latest tools and enhancements to maximise productivity and quality of deliverables.





#### Leica Pegasus:Manager

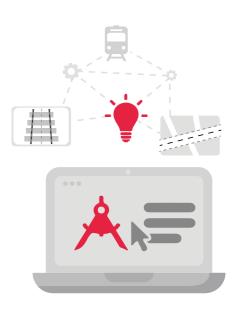
## Complete workflows for reality capture projects











#### Mission Planning

#### Mission Planning

- Plan a mission with confidence for perfect quality
- Leica Pegasus:Manager claculates the best time for precise data collection
- Reduce the risk of necessary reacquisition by predicting expected trajectory quality
- Get an accurate forecast of GNSS availability along the planned path.
- Leverage 3D information from buildings and other obstacles to estimate shadowing effects (sun and GNSS signal)
- Be guided through an optimized reference ground control point distribution

# Data Acquisition



- With any Leica Mobile Mapping platform you can capture point cloud and imaging data, and also enrich a mission with information from additional sensors, including GNSS, IMU and DMI.
- Well-selected sensor combinations perfectly aligned to the mission scope – deliver the best quality and performance
- Have full control over the complete project workflow with one complete mobile mapping solution
- Plan, acquire, process and deliver fast and with confidence

# Processing

 Leica Pegasus:Manager processing delivers results quickly and efficiently integrating data from IMU, GNSS, cameras, and laser scanners

Processing

- Full automatic adaptation of processing parameters for geo-referencing ensures highest positioning quality without requiring expert skills
- Calibrated and geo-referenced LiDAR points, pavement imagery, multi-view and spherical images are unified into one complete 3D project from multiple missions.

#### Refinement

#### Trajectory Adjustment

- Select from separate module variations (Basic or Advanced) depending on project scope and expertise
- Automatically combine overlapping trajectories (multi-passes) with auto-detected tie points
- Auto pick user-definable ground reference point targets
- Simultaneously solve and correct misalignments between multiple trajectories, loop closure and optional ground reference point offsets in one adjustment process
- Precise alignment of data acquired at different dates/times or with different hardware systems

#### Blur Tool

- Comply with data privacy regulations to be protected from legal consequences when sharing deliverables
- Completely anonymise/blur people and vehicles
- Find and blur objects in all associated imagery, leveraging the latest AI (artificial intelligence)
- Automatic anonymisation is about
   30 times faster than manual editing

**Feature Extraction** 



- Seamless all-digital workflow for maximum efficiency
- Minimise need for interactive refinements
- Classification based on latest Al (artificial intelligence) technology
- Powerful batch processing to compute hundreds of kilometres of acquired data at maximum speed with a single click
- Meet project deadlines with complete confidence on quality of deliverables.

## RealTime Data Exchange

- Easily embed Leica Pegasus:Manager into an already existing workflow
- Interface to directly stream 3D coordinates and points between Leica Pegasus:Manager and any local 3rd party application
- Simple virtual surveys and mapping from calibrated immersive 360° imagery aligned with the point cloud.

#### SLAM

- Apply SLAM (Simultaneous Localisation and Mapping) technology to accurately geo-reference trajectories in areas with low or no GNSS coverage (interiors or long tunnels)
- Selective application of SLAM in missions with intermittet GNSS availability or trajectory quality
- Take full control over repositioned areas
- Benefit from detailed quality checks with statistics and graphical accuracy plots to further fine tune the solution
- Seamlessly apply the refined trajectories to associated point clouds for a perfect fit

#### Road:Factory

- Extract road-relevant elements acquired with Leica Pegasus systems
- Detect and extract lane lines and street furniture
- Create road profiles, clearance tests, DTM and contour lines
- Complex road surface analysis
- OpenDrive / OpenCRG compliant deliverables

#### # Rail:Factory

- Extract rail-relevant elements
- As-built rail track geometry
- Detect and classify wires, cabling, platforms, catenary, sleepers, trackbed, vegetation and buildings
- 3D clearance tests of any object,
- 3D meshing for terrain or trackbed



- Precisely calculates and extracts the rail geometry elements as a position of the track in 2D and height (1D gradient)
- ATrack calculates the curvatures and parameters of each element
- Advanced track-geometry-calculation allows an optimisation of the geometric elements in 2D



#### **Online Video Tutorial**

Increase your product knowledge and productivity.

- Benefit from online video tutorials for software
- Available for Mobile Mapping customers with valid CCP

#### Leica Geosystems - when it has to be right

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems, part of Hexagon, creates complete solutions for professionals across the planet. Known for premium products and innovative solution development, professionals in a diverse mix of industries, such as aerospace and defence, safety and security, construction, and manufacturing, trust Leica Geosystems for all their geospatial needs. With precise and accurate instruments, sophisticated software, and trusted services, Leica Geosystems delivers value every day to those shaping the future of our world.

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

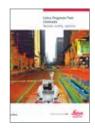
Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at hexagon.com and follow us @HexagonAB.



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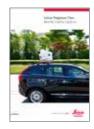
Leica Pegasus: Backpack Mobile Reality Capture



Leica Pegasus:Two Ultimate Mobile Reality Capture



**Leica Pegasus:Swift**Mobile Reality
Capture



**Leica Pegasus:Two**Mobile Reality
Capture

