

Leica RealCity

Airborne reality capture



- when it has to be **right**





Leica RealCity

Designed for airborne urban mapping

In an urban environment, particularly for smart city applications, the need for a geospatial base layer goes beyond traditional data products. This includes digital surface and elevation models, qualitative data on vegetation, street information, built-up areas and land use. In addition, the base layer requires 3D information in the form of GIS-ready buildings for planning purposes and 3D meshes for visualisation.

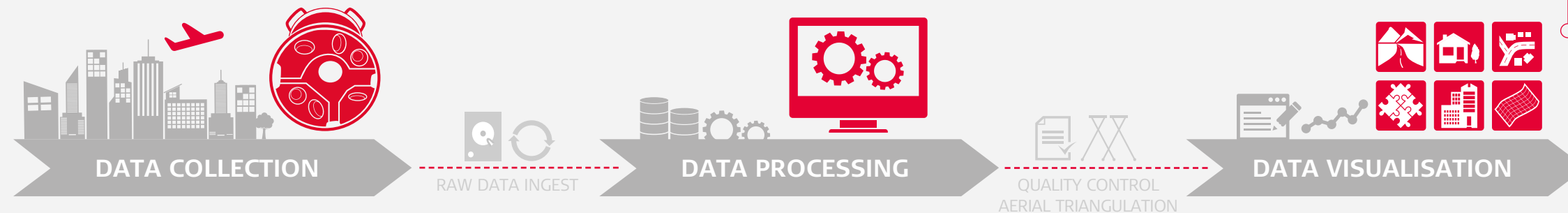
Leica RealCity, the innovative airborne reality capture solution, addresses these issues by combining the world's only hybrid sensor, Leica CityMapper-2, with the high-performance multisensor workflow, Leica HxMap.

Work smarter, make informed decisions

HxMap turns CityMapper-2 data into the most comprehensive geospatial base layer for smart city applications, the SmartBase.

It consists of up-to-date, highly accurate 2D and 3D data products, generated from simultaneously acquired data.

RealCity offers the most efficient way to provide geospatial information for rapidly changing urban environments as well as the foundation to work smarter and make informed decisions.



Leica CityMapper-2

New generation sensor technology

The CityMapper-2 is the world's first hybrid airborne sensor combining oblique and nadir imaging with a LiDAR system into one sensor head. Bringing together the best of both worlds, it is specifically designed for urban mapping.

One sensor now collects all data you need to produce any data product and create the most detailed geospatial base layer, the SmartBase. Collect and process oblique and nadir imaging and LiDAR data plus derivative products, from orthophotos to point clouds and 3D models, with one sensor, in one flight.

Leica HxMap

High-performance post-processing

HxMap is the high-performance multisensor workflow for airborne sensors featuring the industry's fastest data throughput. Process the data captured with the CityMapper-2 in one simple, intuitive user interface and generate any data product at the push of a button. We call this comprehensive data output, the SmartBase.

HxMap is modular, scalable, upgradable and perfectly adaptable to your needs. Since urban environments are subject to rapid change, the flexible HxMap workflow simplifies post-processing to provide the fastest updates in the shortest available time.

HxMap modules for Leica RealCity

Enabler Enabler	●
Provider Ingest, Raw QC, Workflow Manager, PointCloud Generator, Projection Engine	●
Core Image APM, Aerial Triangulation, InfoCloud, Ortho Generator	○
Core LiDAR AutoCalibration, Registration, Color Encoding, Data Metrics, LiDAR QC	○
3D Modeller City Modeller, Texture Mapper, 3D Editor, Building Finder	○

● = Required module ○ = Included in bundle ○ = Optional



Sophisticated 3D city modelling

RealCity is the complete solution for airborne 3D city modelling and urban mapping. It is specifically designed to frequently capture data in rapidly changing urban environments, allowing you to stay current on city transformation and development to provide vital information needed for smart city applications.



Creating a SmartBase

As a professional in the urban mapping and smart city industry, you can now generate the most accurate and comprehensive 2D and 3D geospatial base layer, the SmartBase, in just one flyover and in one intuitive high-performance workflow. RealCity simplifies city modelling and allows you to produce derivative data products at the push of a button.



Innovation put to work

By joining two world innovations, RealCity provides you with a complete urban mapping solution. 200 years of innovation experience are the base for the development of the CityMapper-2, the world's only hybrid sensor and HxMap, the world's fastest post-processing workflow, once again revolutionising the airborne mapping industry.

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems 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 surveying and engineering, safety and security, building and construction, and power and plant, trust Leica Geosystems to capture, analyse and present smart geospatial data. With the highest-quality instruments, sophisticated software and trusted services, Leica Geosystems delivers value every day to those shaping the future of our world.

Leica Geosystems is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technologies that drive quality and productivity improvements across geospatial and industrial enterprise applications.



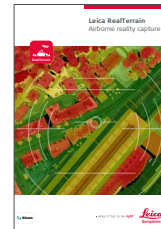
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Leica CityMapper-2
 More information,
 smarter decisions



Leica HxMap
 Unified high-
 performance
 multisensor
 workflow



Leica RealTerrain
 Airborne reality
 capture



Leica TerrainMapper-2
 Highest accuracy
 for regional
 mapping points

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