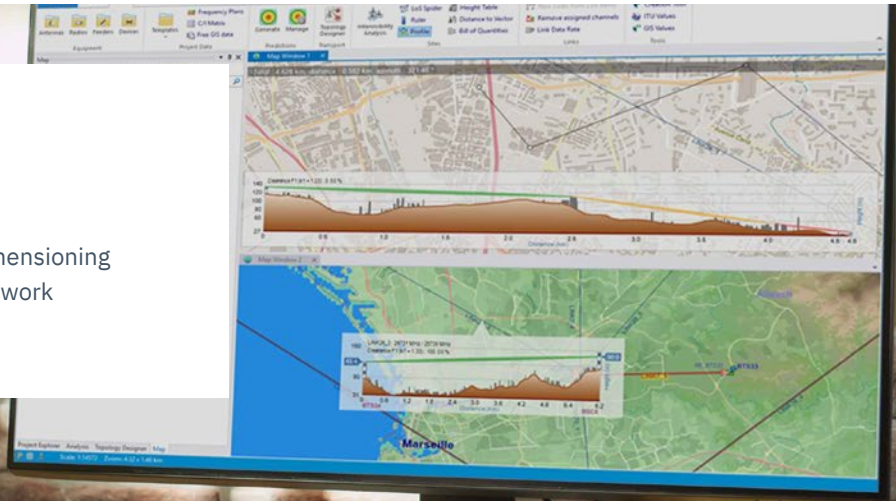


DATASHEET

Ellipse

Ensure your backhaul design and dimensioning seamlessly supports your mobile network



Deliver efficient backhaul dimensioning and microwave link planning with Ellipse

Ellipse enables you to plan, dimension and optimize any wireless or wired backhaul network. It includes support for the design of the latest 5G X-haul technologies relying on point-to-point and/or point-to-multipoint wireless transmission and incorporates all the latest ITU and 3GPP specifications for the most accurate and efficient transport network design and optimization. Ellipse helps you ensure you have the backhaul capacity and availability to support your network.

Why Ellipse?

Get your backhaul 5G-ready

Proactively upgrade transmission networks in support of 5G considering mmWave frequencies, line of sight (LOS) and non-line-of-sight connections.



Analyze 5G backhaul requirements

Model the impact of carrier aggregation, MIMO, multiband links and adaptive modulation to ensure accurate 5G transport dimensioning.



Deliver urban network densification

Support for detailed 3D planning and point-to-point and point-to-multipoint technologies ensure seamless planning of dense urban backhaul.



Optimize backhaul costs

Accurately dimension required backhaul upgrades, based on least-cost routing, capacity assessments and fiber vs. microwave feasibility.



Increase planning efficiency

Increase transmission engineer efficiency with automation functions for tasks such as path routing, antenna height optimization and channel allocation.



Manage your complete backhaul network

Support for wireless and non-wireless links, including copper and fiber, means Ellipse can take care of all your backhaul planning in a single tool.



Use cases

5G network backhaul planning

Advanced reflection analyses in 3D and support for point-to-multipoint, line-of-sight (LOS) and non-line-of-sight (NLOS) technologies enable accurate backhaul planning in dense urban areas – critical for successful 5G network deployments. Additionally, detailed interference analysis and Automatic Channel Allocation allow transmission planning engineers to cost-effectively meet reliability, capacity, quality and availability targets.



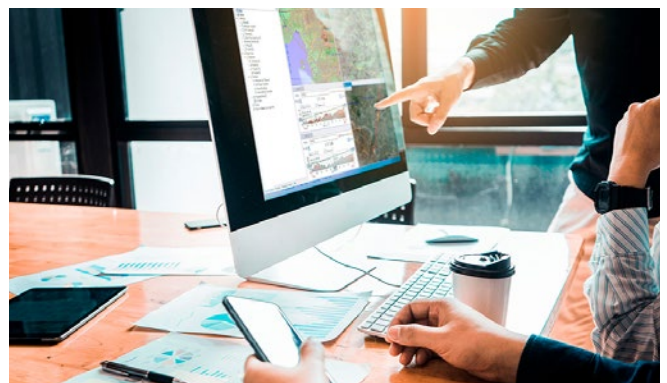
Link performance analysis

Ellipse features extensive path-profile analysis that includes Fresnel zone clearance, multiple k-factors, terrain/clutter/building visualization, reflection analysis and antenna height optimization. The software also includes multiple propagation models, rain rate models, water vapor models, performance models as well as diversity models to ensure the highest levels of simulation accuracy.



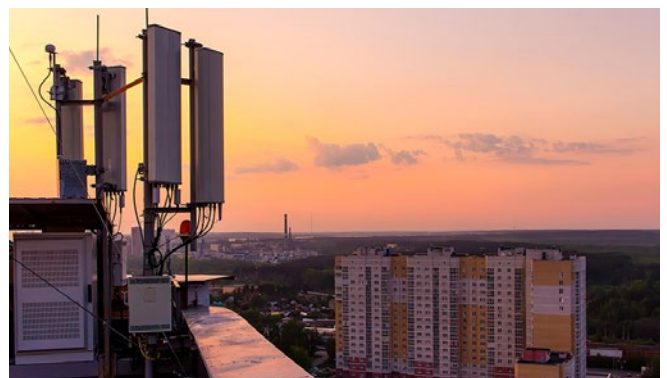
Automated topology design

Ellipse can automatically design or optimize your network considering all existing locations. This includes finding the best path to carry the specified traffic from site A to site B, automated creation of new links for the suggested hops, and display of high and low status' for microwave links. The solution also includes a path-finding feature to visualize all possible transmission paths from one location to another or from multiple locations to a concentration node.



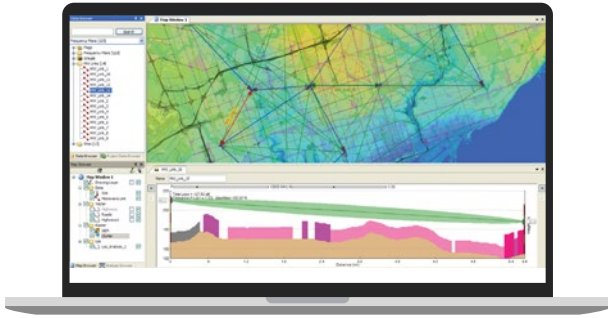
Transport network design and optimization

The Ellipse transport module allows you to define site paths and create circuits and rings across your transport network. Each path or circuit can be comprised of multiple microwave hops, fiber links and copper links. These circuits can then be analyzed with Ellipse providing routing analysis, network capacity and delay analysis and link failure analysis.



Choose the Ellipse edition that best suits your needs

Ellipse is offered in four distinct editions to meet your requirements and your budget.



- **Basic Edition:** microwave link design including project management and advanced geodata handling.
- **Professional Edition:** a professional-grade solution for microwave network design and wireless backhaul management.
- **Enterprise Edition:** a centralized, multi-user solution capable of managing large wireless backhaul networks with several engineers collaborating on the network design.
- **Ultimate Edition:** a high-end solution for enterprises, including all Ellipse modules.

	Basic	Professional	Enterprise	Ultimate
Microwave link design	Yes	Yes	Yes	All inclusive
Network design and management	No	Yes	Yes	All inclusive
Multi-user collaboration	No	No	Yes	All inclusive
Add-ons	No	Optional	Optional	All inclusive
Integrated with Planet	Yes	Yes	Yes	All inclusive
Licensing	Standalone or Shared	Standalone or Shared	Standalone or Shared	Standalone or Shared

Part of the Infovista Planet Suite for RAN planning and optimization

Deliver the best wireless network with end-to-end RAN planning and optimization

Planet Suite is our portfolio of solutions to address every aspect of planning and optimizing your RAN network whether it be just 5G, or a combination of multiple technologies. Leveraging decades of expertise in radio and backhaul network modeling and underpinned by extensive automation, 3D simulations and machine learning, the Planet Suite helps you to deliver the best wireless network - one that reliably provides the exceptional subscriber experience for the possible lowest cost.

THE PLANET SUITE

Planet

RF planning and optimization

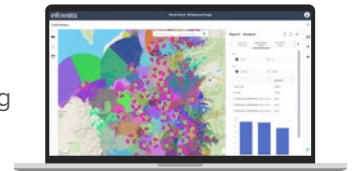
Increase radio design accuracy and accelerate 5G network roll-out



Planet Cloud

Cloud-based RF planning and optimization

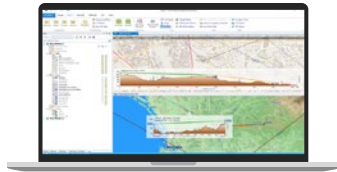
Adopt cloud-native planning for performance, scalability and efficiency



Ellipse

Backhaul planning and optimization

Design backhaul network topologies, capacity and latency to support 5G



Geodata

Maps for wireless network design

Accurately model your wireless network with modern geodata sets



Why choose the Planet Suite?



Leverage Machine Learning to improve propagation accuracy with AIM, Planet's AI-driven 3D propagation model.



Automate and integrate easily via open APIs, removing repetitive tasks from engineers and benefitting from cross-departmental collaboration.



Base your network planning on real-world data insights from external data sources including crowdsourced data for improved accuracy.



Optimize your network CAPEX return on investment by considering revenue and cost metrics when determining the optimal network design.



Accurately dimension your backhaul network based on least-cost routing, capacity assessments and fiber vs. microwave feasibility.



Ensure an accurate baseline from which to plan with our best-in-class geodata, designed and validated specifically for RF planning.



About Infovista

Infovista is the global leader in network lifecycle automation (NLA) for the next-gen networks era. With its unique NLA approach, Infovista allows communications service providers (CSPs) and enterprises to improve their network performance and customer experience, optimize their productivity, and reduce their costs, while maximizing return on their investments. Spanning the entire network lifecycle, Infovista's products and solutions leverage an open, integrated, cloud native portfolio that automates tasks, flows, analytics, and decisions to the greatest extent possible. More than 1,000 customers, including 400 Mobile Network Operators, around the world rely on Infovista to plan, design, deploy, test, operate, support, optimize, evolve, report on and monetize their networks.



For more information please visit www.infovista.com
For sales inquiries please email info@infovista.com

EUROPE HEADQUARTERS Infovista S.A.S.

3 rue Christophe Colomb,
91300 Massy, France

Telephone: +33 1 64 86 79 00
Fax: +33 1 64 86 79 79

AMERICAS HEADQUARTERS Infovista Corporation

20405 Exchange Street, Suite 300
Ashburn, VA 20147 USA

Telephone: +1 855 323 5757
Fax: +1 703 707 1777

EASTERN EUROPE, ASIA, AND AFRICA HEADQUARTERS

PO Box 54753, Office 429, 4th Floor,
Building 8WB, Dubai Airport Freezone

Telephone: +971 4256 7101