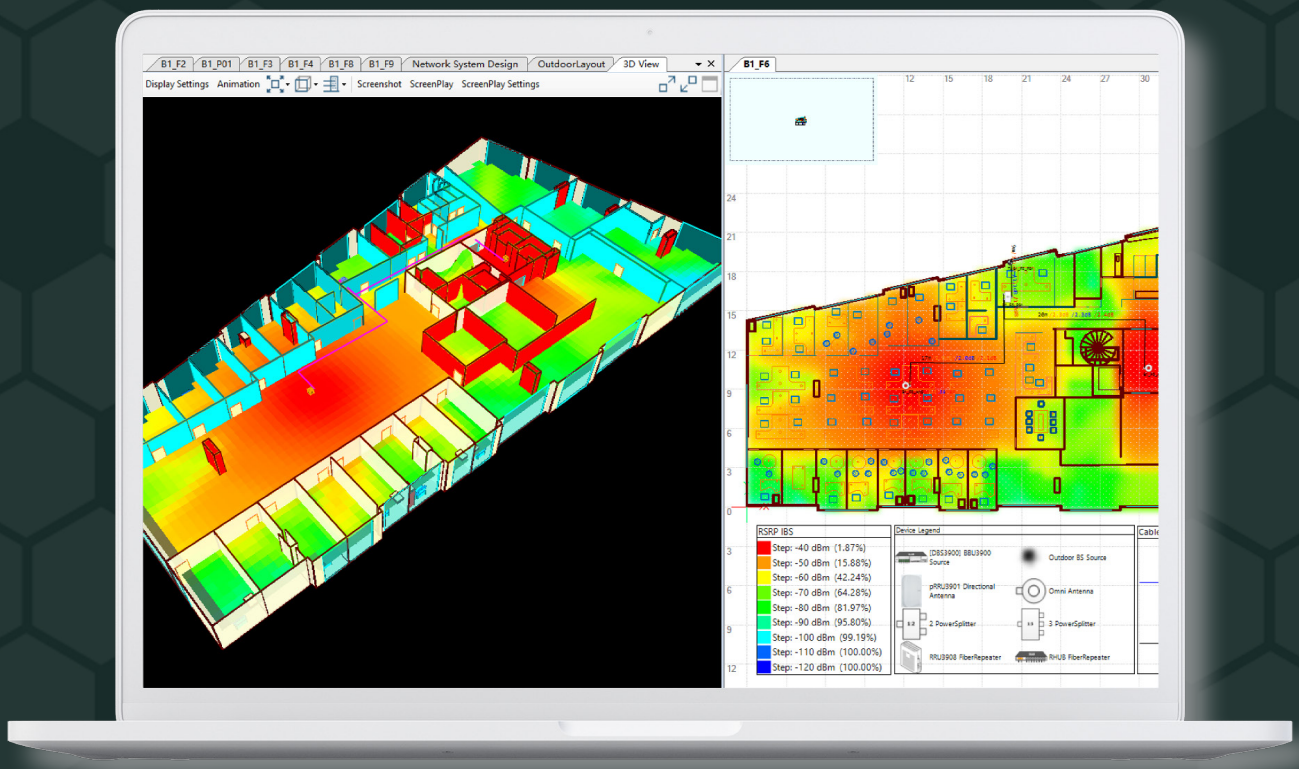
Ranplan In-Building Lite

A simple and cost-effective in-building wireless network design tool



What is Ranplan In-Building Lite?

Ranplan In-Building Lite is an agile tool that enables RF engineers to cost effectively and quickly design in-building networks for small or medium size enterprise projects. With access to Ranplan's 3D propagation engine, Intelligent Technology Optimisation technology, and automation tools, you can significantly reduce the time it takes to design networks for even the most challenging environments requiring ubiquitous coverage.

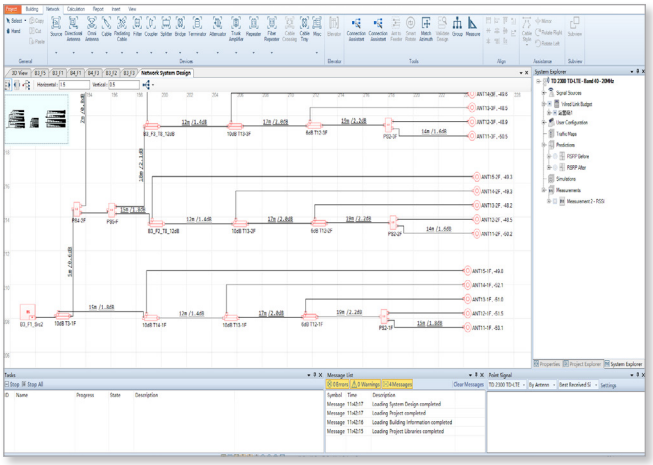
Key Benefits

- Supports indoor solutions such as passive DAS, small cells, and Wi-Fi
- Supports multiple technologies such as 3G, 4G (LTE), 5G NR, IoT
- Accurate in-building wireless network coverage predictions
- Ideal planning tool for Public Safety.

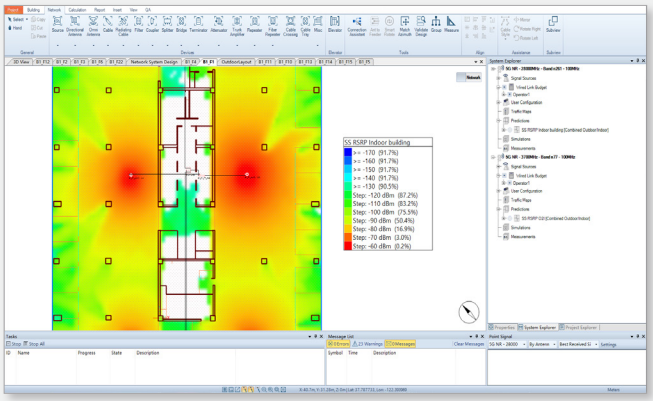
Reduce network design time by up to 50%

Take advantage of the Intelligent Topology Optimisation (ITO) module in In-Building Lite to automatically and efficiently optimise the physical topology of an in-building network. Using the ITO assists the user in obtaining the optimal network layout not only in terms of cable route but also the components used. This leads to significant time savings during the planning phase of a project.

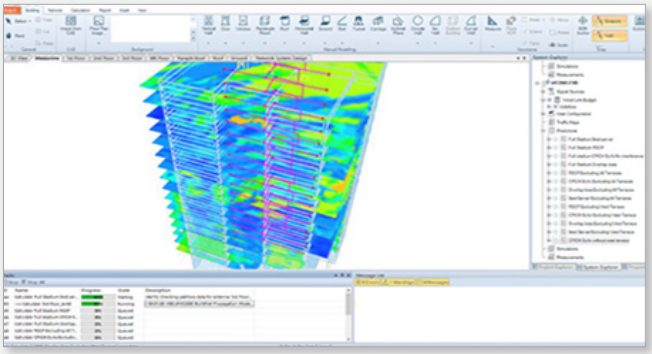
- Passive DAS, small cells, non-fiber based public safety
- Automatic cable length measurements
- Duplicating a system design between floors of the same building
- Intelligent Design Module
- Multi-vendor component database.



Passive DAS System



Simulating indoor coverage



Indoor coverage hetmap

Validate indoor coverage prior to deployment

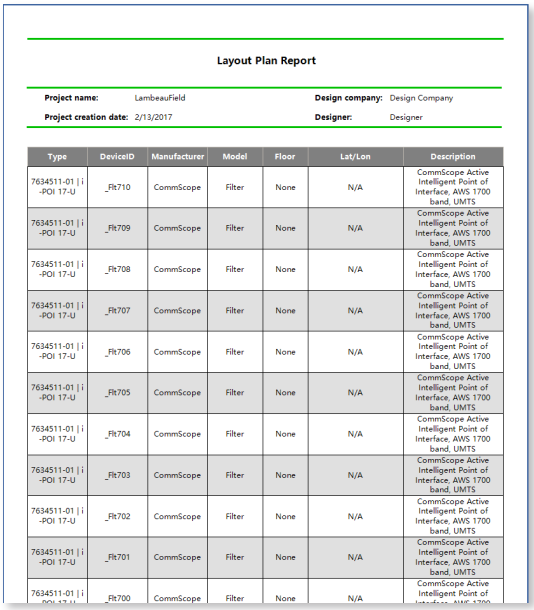
Use the Lite version of the Ranplan's 3D ray tracing propagation engine to validate your indoor coverage designs prior to physical deployment to ensure that you meet your customer's KPIs. This will save you time and cost in having to do any required subsequent upgrades.

- True 3D ray-tacing engine
- Define candidate and target regions KPIs (signal, throughput, leakage)
- Supports designs for passive DAS, small cells, and Wi-Fi.

Generate customisable reporting

The reporting editor allows users such as network planners/designers, equipment installers, project estimators, project managers and related personnel a convenient and fast way of producing relevant reports at the simple click of a button. As reports are automated, any changes made to projects are automatically updated in the reporting viewer in real time.

- Equipment list, equipment budget report, Bill of Materials, and other reports
- Cable routing report and cross-reference report
- Antenna EIRP report and Antenna Link Budget report
- EMF compliance report
- Print Network System Design and Floor Layout Design.



Layout Plan Report

Project name: LambeauField **Design company:** Design Company
Project creation date: 2/13/2017 **Designer:** Designer

Type	DeviceID	Manufacturer	Model	Floor	Lat/Lon	Description
7634511-01 | i -POI 17-U	_Flt710	CommScope	Filter	None	N/A	CommScope Active Intelligent Point of Interface, AWS 1700 band, UMTS
7634511-01 | i -POI 17-U	_Flt709	CommScope	Filter	None	N/A	CommScope Active Intelligent Point of Interface, AWS 1700 band, UMTS
7634511-01 | i -POI 17-U	_Flt708	CommScope	Filter	None	N/A	CommScope Active Intelligent Point of Interface, AWS 1700 band, UMTS
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7634511-01 | i -POI 17-U	_Flt702	CommScope	Filter	None	N/A	CommScope Active Intelligent Point of Interface, AWS 1700 band, UMTS
7634511-01 | i -POI 17-U	_Flt701	CommScope	Filter	None	N/A	CommScope Active Intelligent Point of Interface, AWS 1700 band, UMTS
7634511-01 | i	_Flt700	CommScope	Filter	None	N/A	CommScope Active Intelligent Point of

Customisable Reports

Technical specifications

Hardware requirements

Processor: 2.0 GHz multi-core

Operating System: Windows 7 (32bit)

Memory: 2GB

Hard Disk Space: 20G
Display: 1024 x 768

Recommended hardware requirements

Processor: Core i7 (minimium 4 core) , 2.6 GHz

Operating System: Windows 10 (64bit)

Memory: 8GB (medium projects), 16GB (complex)

Hard Disk Space: 300GB SSD
Display: 1920 x 1080

Wireless technologies supported

5G NR Sub-6GHz and mmWave

4G systems (3GPP Release 16) LTE 600MHz – 3700MHz

3G systems HSPA/HSPA+/WCDMA/1xEV-DO/TD-SCDMA

2G systems GSM/CDMA/EDGE/GPRS/TDMA

Public safety systems P25/PMR/DMR/LMR/TED/TETRA

IoT systems LoRa/eMTC/NB_IoT/SIGFOX

Wi-Fi (IEEE 802.11a/b/g/n/ac/ax)

About Ranplan Wireless

Ranplan Wireless pioneers software solutions that help perfect the design, optimisation and automation of in-building and urban outdoor wireless networks, either in isolation or in coordination.

Our solutions enable companies to deploy next generation wireless networks for a range of applications, supporting multiple technologies and providing an unmatched quality of experience.