



2TEST



# iBwave Design

LITE

YOUR BEST CHOICE FOR AN  
ENTRY LEVEL DAS, SMALL  
CELLS & PUBLIC SAFETY  
NETWORK DESIGN TOOL

iBwave Design Lite will reduce the time you spend designing your in-building passive DAS, Small Cells and Public Safety networks by over 30%.

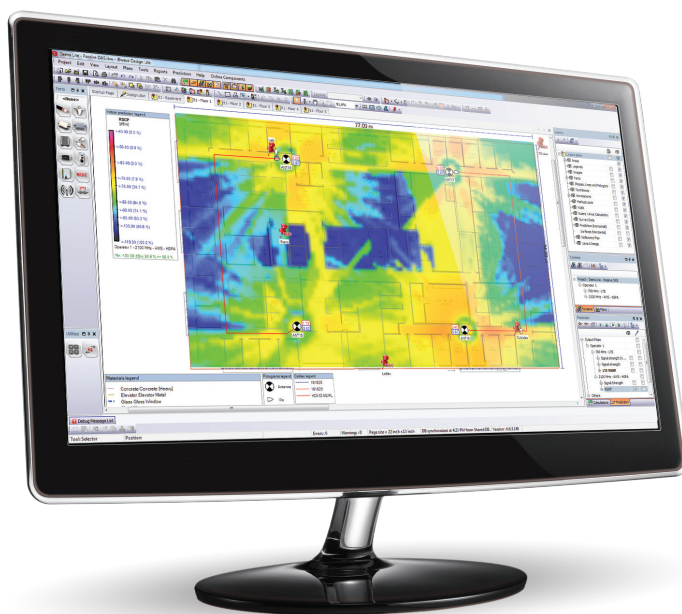
Let us explain how.

With the floor plan on your screen in front of you, you can utilize iBwave Design Lite to begin the **design of the network architecture** by easily dragging and dropping network components and equipment from our database of over 17,000 accurately-modeled vendor parts. With the components and equipment placed on the floor plan, you can now easily view the **automatically computed RF calculations** and generate an **accurate bill of materials**. You can also view and automatically **catch design errors as you go**, ensuring that all design issues are resolved before installation.

To ensure the quality of your network even further, you can use the optional **Propagation** module. With this module you can **model the building** and then run propagation to **accurately predict the signal strength** for each floor of the building.

Once you are done with the design of your wireless network, generating reports is quick and easy. You can **automatically generate your link budget, equipment lists** and perhaps most importantly **compliance reports** to ensure that the network you have designed aligns with the requirements of your customer.

The end result of using iBwave Design Lite? A high performing network that takes you and your customer significantly less time and money to deploy.



HOW IBWAVE DESIGN LITE  
WILL HELP YOU:

**REDUCE YOUR DESIGN TIME BY OVER 30%**

iBwave Design Lite will automate all the work you currently do manually with Excel, Visio and AutoCAD so you can focus on the design.

**REDUCE CAPITAL EXPENDITURE**

You can simulate your network before it's deployed and optimize hardware for the most cost-efficient design.

**IMPROVE NETWORK QUALITY**

You can catch any design errors before the actual installation of your network, significantly reducing the time and money spent on troubleshooting post-installation.

**STANDARDIZE DOCUMENTATION**

Standardize your documentation by using the iBwave format - the worldwide standard for in-building wireless design. This will enable you to share your designs with the rest of your team and external partners and significantly reduce the time for review.

## FEATURES

### SYSTEM DESIGN

- > Trunking diagram for indoor RF system design
- > Multiple system, technologies and bands per project
- > Supports base stations and off-air repeaters
- > Coaxial and CAT5 cable signal distribution
- > Redundant DAS designs
- > Connector validation for coaxial cables
- > Network validation and error checking
- > Custom labeling of system using the band, technology, operator and more
- > Support MIMO 2X2 DAS architectures

### FLOOR PLANS

- > Multi-layered floor plans with layout plans, walls, DAS equipments, cables, and more
- > Import floor plans from .dwg, .dxf, .jpeg, .bmp, .tiff, .gif or .pdf files
- > Automatic cable length measurements
- > Basic drawing tools for walls, lines, shapes, text and images
- > Ruler to calculate dimensions and areas

### BUILDING MODELLING

- > Draw generic walls and surfaces
- > Show floor plans and buildings in 3D showing DAS equipment
- > Show building cuts in 3D

### RF CALCULATION

- > Downlink calculations (Power per Channel, Composite Power, LTE Reference Signal Power, Pilot-CPICH Power, CDMA Overhead, Absolute gain/loss)

### PROPAGATION MODULE (OPTIONAL)

- > Propagation prediction analysis
- > COST 231 and VPLE propagation models
- > Draw walls, surfaces and assign material from built-in materials database
- > Import walls from raster images or AutoCAD files
- > Create signal strength, best server, LTE RSRP and RSCP maps

### PROJECT DOCUMENTATION

- > Print project documentation
- > Create project revisions
- > Advanced text edition
- > Export project to .dxf format
- > Attach annotations (text, voice, picture, video) on design and layout plans
- > Project file password protection

### REPORTS

- > Equipment list
- > Link budget
- > Horizontal Link Budget
- > Compliance
- > Output maps
- > RF survey
- > Annotations

### COMPONENT DATABASE

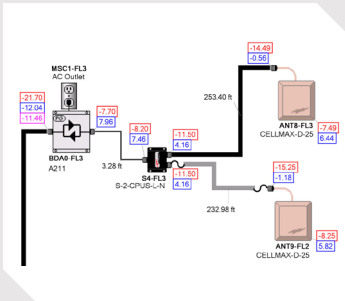
- > Centralized component database of components including detailed technical specifications
- > Over 17,000 components from more than 260 vendors
- > Sub-component support
- > Import and export libraries of components
- > Database editor to add, edit or delete components
- > Share component database between multiple users
- > List of approved parts
- > List of equivalent parts
- > List of errors and warnings configurable in the Database of Components

### TOOLS

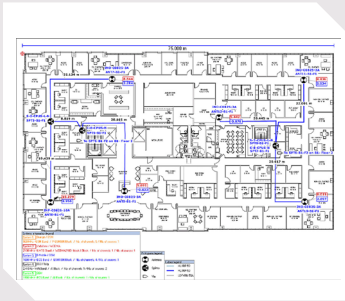
- > Frequency converter

### PLATFORM SUPPORT

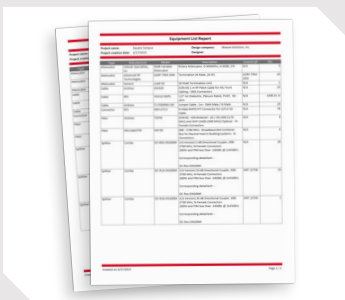
- > 64-bit support
- > Multiple processor support



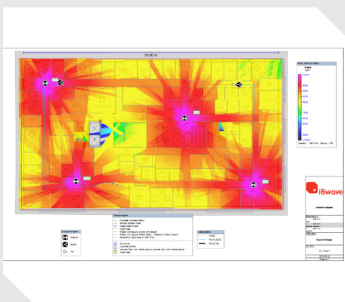
Link budget



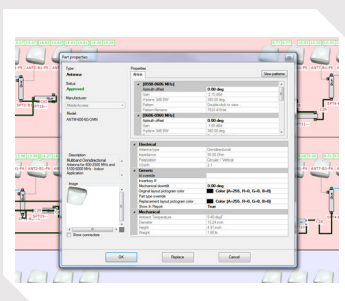
Overlay components on floor plans



Equipment list report



Signal strength map with Propagation module



Detailed components specifications



# USE CASE

How you can increase productivity while reducing costs in your next wireless deployment project with iBwave Design Lite

## PROJECT DETAILS

# 10

STORY OFFICE BUILDING  
PASSIVE DAS DEPLOYMENT



### TIME SAVINGS IN HOURS

**MANUAL DESIGN**  
(XLS, VSD, CAD)

**iBwave  
DESIGN LITE**

<b>3</b>	FLOOR PLAN DIAGRAM	<b>2</b>
<b>0</b>	BUILDING MODELING	<b>2</b>
<b>2</b>	TRUNKING DIAGRAM	<b>1</b>
<b>2</b>	LINK BUDGET AND BOM	<b>0</b>
<b>2</b>	AS-BUILT UPDATES	<b>1</b>
<b>2</b>	REVIEW PROCESS	<b>1</b>
<b>11 HOURS</b>	<b>TOTAL</b>	<b>7 HOURS</b>

# 36% TIME SAVINGS FOR DESIGN ACTIVITIES



## COST SAVINGS.....



**500\$**

Cost per antenna  
(including cabling, installation, etc.)

**X2**

Antennas per floor  
(average savings)

**X10**

10 story building

**10,000\$**  
SAVINGS PER  
PROJECT

## LICENSE IS PAID OUT AFTER ONLY 2 PROJECTS