



iBwave Design

IBWAVE DESIGN: BUILDING INGENUITY INTO WIRELESS NETWORK DESIGN

BUILDINGS are the final frontier of the wireless voice and data network, and one that iBwave Design is taming. iBwave's in-building design solution lets wireless network operators, system integrators and equipment manufacturers bring strong, reliable wireless communications indoors, by automating network design and eliminating guesswork.

EFFECTIVE wireless network design starts with the right inputs: iBwave Design lets you import floor plans for an accurate view of your building, edit the floor plans to accurately reflect the building's physical environment when required, and add annotations to capture the building's materials and RF characteristics.

YOU can start your initial design and work with the network components database to simulate your distributed antenna system, dragging and dropping components and interconnections for your network and assessing their cost-benefit impact on coverage quality. Network validation and advanced calculations let you verify the soundness of your assumptions through error checking, compliance verification and uplink and downlink calculations and when you're ready, you can output a bill of materials for an accurate estimate of costs and the equipment needed. Finally, iBwave Design offers a full range of reports, notes on changes, equipment lists and comparisons of predictions with measured data reports.

For even more accuracy and vision in wireless network design, you can opt for iBwave Design's Propagation, Optimization and Collection modules.

THE Collection Module lets you import survey data and trace routes and display the results on a map. The Propagation Module delivers advanced 3D modelling of indoor and outdoor propagation prediction on your floor plan and building structure to simulate the network coverage in different areas of the building. The Optimization Module fully leverages and integrates indoor solutions with outdoor signals and interferences. It provides network performance predictions with signal quality and data throughput based on the signal emanating from outdoor networks. These three modules take in-building wireless network design to the next level.

Benefits that will help your bottom line :

DESIGN IN THE COMPANY OF EXPERTS

Throughout the project lifecycle, from design and planning to implementation and maintenance, iBwave Design provides a framework for data collection, measurement, component selection, design and documentation.

REDUCE CAPITAL EXPENDITURE

iBwave Design lets you simulate your network before it's deployed, and optimize hardware for the most cost-efficient design.

IMPROVE NETWORK PERFORMANCE

You can design your in-building network for specific voice and data applications and reliability criteria, to deliver performance that will impress and retain subscribers. iBwave Design supports 2G and 3G wireless technologies as well as new technologies such as LTE and 4G.

STAY IN CONTROL OF YOUR PROJECT

With complete information on costs, equipment, timelines and performance, you can deploy your in-building wireless network with no surprises.

FULL INFORMATION IS THE NAME OF THE GAME

KNOW EXACTLY WHAT YOU'RE SPENDING, BEFORE YOU SPEND IT

iBwave Design lets you evaluate the cost of project with an automatically generated bill of materials with data drawn from your design.

DOCUMENT YOUR PROJECT THOROUGHLY AND CONSISTENTLY

iBwave Design's documentation and reporting function provide a project archive for more efficient and standardized information sharing, versioning and management.

KNOW YOUR PHYSICAL ENVIRONMENT

iBwave Design lets you simulate your network before it's deployed, and optimize hardware for the most cost-efficient design.

STAY IN CONTROL OF YOUR PROJECT

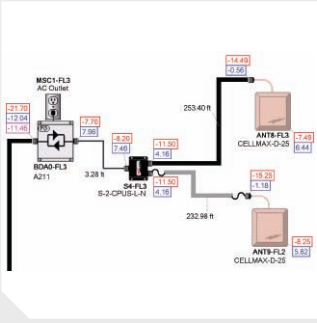
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AND IT'S ONLY GETTING BETTER...

iBwave Design will soon be available in an Enterprise version that will:

Improve business decision-making and enable collaboration within and across teams for fast deployment of even complex projects.

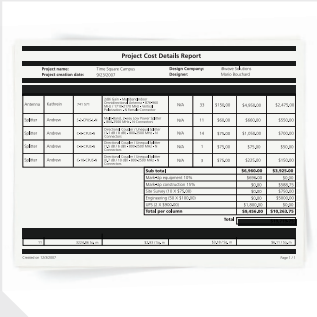
Better control your design-making process by enabling projects to be driven by a workflow engine for better file versioning and exchange during the approval process.



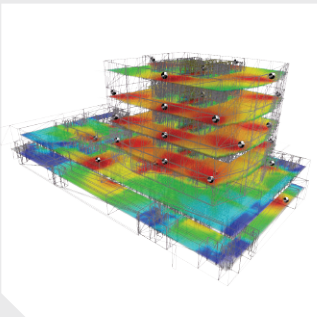
iBwave DESIGN, Link budget



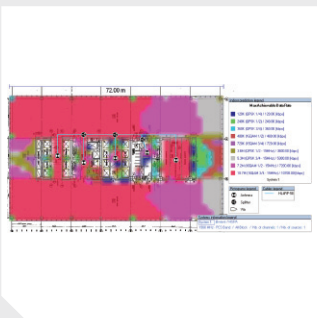
iBwave DESIGN, Overlay Components on floor plan



iBwave DESIGN, Project cost details



PROPAGATION Module, 3D building prediction analysis



OPTIMIZATION Module, Data rate map

IMPORT FLOOR PLAN

Import floor plans from .dwg, .dxf, .jpeg, .bmp, .tiff, .gif or .pdf file

EXPORT CAD

Export Project to .dxf format

MODEL BUILDING

Create, modify and delete Building and Floor Plan entities • View & modify Building and Floor Plan Properties • Draw and manipulate walls & set wall height • Draw horizontal and inclined surfaces • Design Plan Organizer • Calculate dimensions and areas • Show Floor Plan and Building in 3D • Export Building to Google Earth

NETWORK VALIDATION

Check error & verify Compliance

DAS DESIGN

Add/remove System • View Systems Properties • View / modify DAS Properties • Add, move and delete components and interconnections • Reshape Cables • Add, move and delete vias • Draw lines, shapes, text and images onto DAS plan

CALCULATIONS

Advanced UL & DL

PROJECT DOCUMENTATION

Create, Duplicate and Save Project • View / modify Project Properties • Manage revision history • Print project documentation

REPORTING

Equipment List and Cost Details • Antennas • Link Budget • Comparison of Prediction vs. Measured Data • Electromagnetic Field

For more informations, please visit us at www.ibwave.com