

Cambium LINKPlanner

EASY, ACCURATE LINK-PLANNING TOOL



Wireless network operators are constantly looking at how to reduce the total cost of ownership of the network in order to increase their return on investment. Keeping costs down starts with selecting the right equipment with the correct configuration for the desired performance and reliability. Cambium has developed the LINKPlanner tool to simplify the design of these networks whether they are point-to-point or point-to-multipoint. By designing the network with predictable performance up-front the cost of procurement, installation, configuration and on-going support can be minimized.

Predictable performance. Shorter installation time.

OPTIMIZE FOR YOUR NEEDS

Designed for use with our point-to-point and point-to-multipoint solutions, LINKPlanner allows you to easily and quickly design networks for optimal deployment and cost effectiveness. With versions for Microsoft® Windows® and Intel®-based Mac® systems, LINKPlanner is a free, easy to use link-design tool that can be downloaded from our web site.

LINKPLANNER LETS YOU:

- Engineer a highly reliable wireless link even in challenging environments
- Plan and optimize a single link or multiple links simultaneously
- Plan an entire project including PTP and PMP products
- Perform calculations for both licensed and unlicensed products
- Automatically load path terrain profiles and environmental factors such as rain fade
- Display a comprehensive overview of your entire point-to-point wireless network via Google™ Earth
- Conduct “what if” scenarios based on geography, distance, antenna height and transmit power and instantly see the effects on performance
- Generate reports that validate projected performance and serve as time-saving deployment guidelines
- Create a bill of materials for PMP and PTP networks including accessories
- Plan multi-sector towers and multi tower networks assigning SM's to the best AP
- Export list of SM's and associated modulation modes to the Cambium Capacity planning tool

SUPPORTED PRODUCTS:

Sub-6GHz Point to Point

PTP 650 / 650S / 650L

PTP 600

PTP 500

PTP 450*

PTP 250

Licensed Point to Point

PTP 800

PTP 810

Point to Multipoint

PMP 450*

ePMP 1000*

**Coming Soon (Note: PMP 450 3.65 GHz, ePMP 1000 5.9 GHz)*

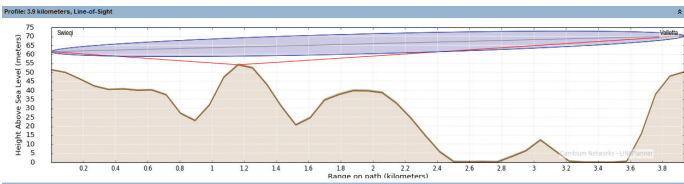
LINKPlanner performance reports give you confidence that your chosen system will meet your needs and provide your installers with configuration guidelines that enable them to quickly deploy the network. Thousands of our customers have obtained accurate link performance projections using the LINKPlanner tool.

LINKPLANNER IN ACTION

The first step in link design is to enter information about the sites you want to connect. The recommended method to insert sites into a project is to import the latitude and longitude information from sources such as Google Earth™.

LINKPlanner then automatically imports a path profile to which the user can add additional obstructions to accurately model the environment.

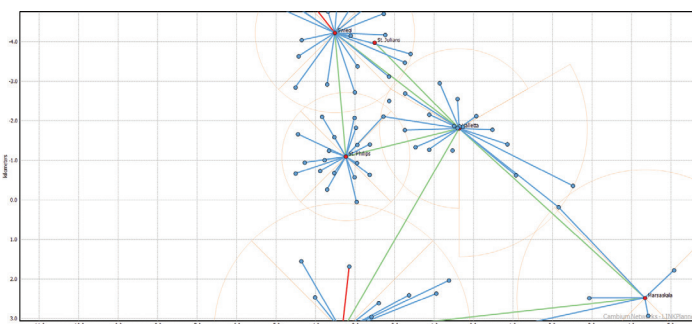
PATH PROFILE WITH OBSTRUCTIONS



GOOGLE EARTH NETWORK VIEW



MAP OF THE SITES AND LINKS IN THE PROJECT



By modifying system characteristics such as antenna type and height, you can obtain the optimal configuration to achieve the performance you need to meet your throughput and availability requirements. In addition to throughput and availability, you will also see projected system gain margin and path loss for the link.

PREDICTED PERFORMANCE AT EACH END OF LINK

Performance Summary

Performance to AP - Airport

Predicted Receive Power : -75 dBm \pm 7 dB

Max Usable Mode : MCS11 (16QAM 0.5)

Link Summary

Free Space Path Loss : 113.60 dB

Gaseous Absorption Loss : 0.02 dB

Excess Path Loss : 0.00 dB

Total Path Loss : 113.62 dB

Performance Summary (Vigants-Barnett)

Performance to Swieqi

Predicted Receive Power : -64 dBm \pm 5 dB

Mean IP Predicted : 171.34 Mbps

Mean IP Required : Mbps

% of Required IP : 3427 %

Min IP Required : Mbps

Min IP Availability Required : %

Min IP Availability Predicted : 100.0000 %

While LINKPlanner projections have proven to be extraordinarily accurate, such precision depends on obtaining accurate and complete path data. Based on the path data provided, LINKPlanner reports can predict after-deployment performance and provide your installers with the information they need to successfully install the links in your network.