cnHeat™ Radio Frequency Predictions for Fixed Wireless

QUICK LOOK:

cnHeat is built upon Cambium Networks' expertise in fixed wireless Radio Frequency (RF) planning, propagation and modeling as seen in LINKPlanner and integrated with GIS data down to one-meter precision. cnHeat generates highly accurate RF predictions and derivative services that precisely represent the reality of the RF world.

cnHeat features four capabilities:
Locate, Identify and Optimize and LiDAR

Key Highlights

Locate

- Best-in-class RF Prediction Software: Provides a 3D view with resolution down to one meter covering site radius of eight miles.

- 3 GHz nLOS / NLOS propagation model: Accurate predictions of coverage behind trees and buildings for all your 3 GHz access points.

- Ease of Use: Customer service representatives can find the best place to install on any property (latitude, longitude and height) in seconds.

- Operational Savings: Improve successful install times and avoid failed installs.

Identify

- Find New Customers: Find the building locations and addresses that have coverage per desired installation height and RSSI requirements.
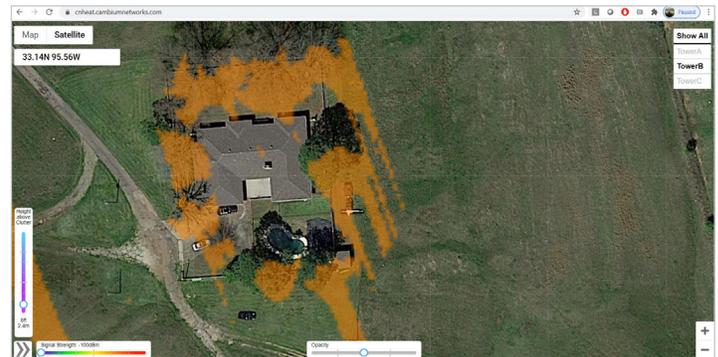
Optimize

- Find Optimal Greenfield Site Locations: Determine the optimal locations to cover the most subscribers.

LiDAR

- Obtain high resolution DTM (Digital Terrain Model) and DSM (Digital Surface Model) from high resolution LiDAR.

- This DTM and DSM allows for cnWave planning using the ANP (Advanced Network Planning) tool.

cnHeat™ Radio Frequency Predictions

Key Features

Location bubble shares latitude and longitude, clutter height, distance from towers, coverage heights for LOS and NLOS.

Height and Signal Strength sliders allow dynamic control of coverage for heat map.

Identify determines green circled home on the left has coverage for desired install height above roof and red circle home on the right does not. Location and addressing information is provided for the home on the left and all similar buildings.

Locate your subcribers with high-resolution heat maps

Uses one-meter or better, resolution GIS data

One meter prediction display resolution

Installation height provided to optimize SM placement

Installation height dynamically configurable

Coverage RSSI dynamically configurable

Coverage display shows either RSSI or height

Trillions of RF prediction calculations at the user's fingertips

Select location on map with cursor and bubble appears:

- Latitude and Longitude

- Distance from AP sites

- Height required for LOS to each AP site

- Height of clutter (e.g. building height or tree height)

- Coverage heights required for LOS and various RSSI levels in 3 GHz NLOS

Travel to location instantly via address, latitude and longitude, or common names

### Identify your susbcribers with locations and addresses

User specifies the height of coverage above the roof and the minimum RSSI level

All buildings that meet coverage criteria are found in the Summary of total buildings covered:

- Location (Latitude and Longitude) for each building provided

- Address for each building provided

- Target market based on locations and addresses

cambiumnetworks.com

cnHeat™ Radio Frequency Predictions
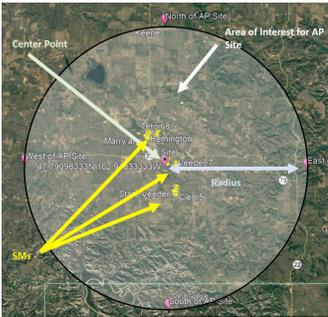
Subscriber locations, area of search, and site heights are input.
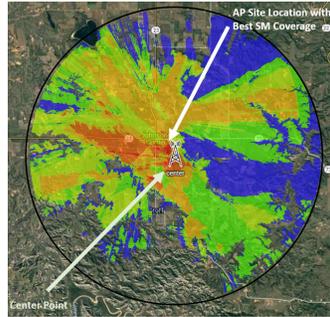
Heat map with one meter resolution output.

Best-in-Class Propagation Models
Propagation models reflect reality

Propagation model experience from leading RF equipment provider and cutting-edge RF propagation tools such as LINKPlanner

3 GHz nLOS / NLOS developed to support the fixed point-to-multipoint experience

Powered by High-Performance Computing

Trillions of calculations are needed to handle a site's GIS data

Trillions more calculations needed for 3D one-square-meter predictions covering eight-mile radius

Calculations facilitating predictions available instantly via cnHeat's user interface

Optimize your Greenfield site placement

Up to 32K subscriber locations

Center point for Greenfield site search and radius of search

Two desired site heights

Receive heat map showing subscribers covered at every square meter

LiDAR for cnWave Planning

Specify your AOI (area of interest) up to one square mile of coverage

High resolution LiDAR used to create high resolution DTM (Digital Terrain Model) and DSM (Digital Surface Model) for your AOI

DTM and DSM used in ANP (Advanced Network Planning) tool to optimize coverage, cost, and throughput of cnWave network

Cambium (services@cambiumnetworks.com) or a Cambium authorized distributor provides ANP planning

High-Resolution GIS
Driven by one-meter or better GIS resolution

Up to 32K subscriber locations

Center point for Greenfield site search and radius of search

Two desired site heights

Receive heat map showing subscribers covered at every square meter

Try out a demo version of cnHeat

cn**Heat** DEMO WEBSITE:　　ACCOUNT NAME: cnheat

cnheat.cambiumnetworks.com　　PASSWORD: demo

ABOUT CAMBIUM NETWORKS

Cambium Networks empowers millions of people with wireless connectivity worldwide. Its wireless portfolio is used by commercial and government network operators as well as broadband service providers to connect people, places and things. With a single network architecture spanning fixed wireless and Wi-Fi, Cambium Networks enables operators to achieve maximum performance with minimal spectrum. End-to-end cloud management transforms networks into dynamic environments that evolve to meet changing needs with minimal physical human intervention. Cambium Networks empowers a growing ecosystem of partners who design and deliver gigabit wireless solutions that just work.

cambiumnetworks.com

11092020