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DATA SHEET

AirMagnet® Planner

Wireless Network Planning Tool

Overview

Haphazard planning of a wireless deployment can lead to overspending, as well as underserved and less-than-thrilled end-users. AirMagnet Planner is a Wi-Fi network planning tool that saves time, money, and frustration by accounting for building materials, obstructions, access point configurations, antenna patterns and a host of other variables to provide a predictive map of Wi-Fi signal and performance, before the network or physical building is constructed.

- Plan and design WLAN networks (802.11a/b/g/n/ac) without physically rolling out any access points (APs)
- Optimize AP count and layout for maximized coverage and performance by modeling building construction materials/obstructions and AP placement
- Reduce time spent planning by quickly importing walls from CAD floorplans
- Estimate Wi-Fi deployment budgets; generate installer-ready BOM reports
- Plan migration strategies as new users or technologies are introduced

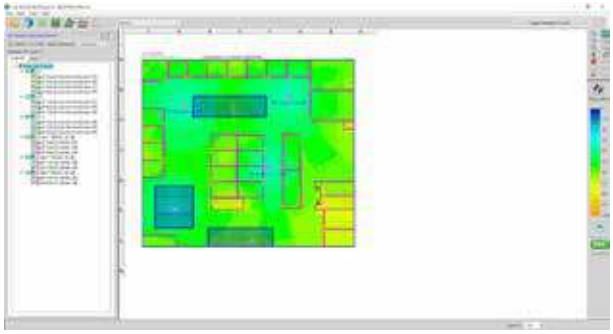
Key Features

Sophisticated WLAN Modeling

AirMagnet Planner makes it easy to build a detailed model of any wireless environment - even before the network is deployed or the building is constructed. Simply load in a map of the location and use the built-in library of walls, doors, and windows to precisely match the building's characteristics.

AirMagnet Planner allows users to add APs to any location and experiment to find the ideal placement within the environment, based on their requirements. AirMagnet Planner also provides independent settings for 2.4 GHz and 5 GHz radios. Users can set the AP channel, IP address, transmit power, antenna type, orientation, height, and 802.11 specifications. After the planning session is complete, users can generate a professional Bill of Materials report that includes the necessary information to properly install the network. Along with RF coverage information, users can access performance metrics such as data rates and throughput.

An "advisor feature" is included with AirMagnet Planner to automatically place APs on-site floor plans. Users can specify the minimum signal coverage expected, the transmit power, the media type of the AP, and more while marking Wi-Fi coverage areas and areas where APs cannot be placed.



Automated WLAN Modeling

Set AP Details

Automatic Wall Extraction (AWE)

Users can reduce the amount of time spent preparing a floor plan for wireless deployment by quickly importing walls from CAD floor plans with only a few clicks of the mouse. Each CAD layer can be individually selected and given a unique attenuation type.

Automatic Wall Extraction

Integration with WLAN Infrastructure Vendors

Users can create and export planner projects directly to Cisco Prime. This saves time and resources needed for setting up maps, AP placement locations, and other WLAN deployment modeling activities by eliminating the need to repeat these tasks within Cisco Prime. This integration dramatically increases operational efficiencies for both AirMagnet and Cisco Prime users by eliminating the need to repeat wireless planning and site survey tasks commonly associated with deployment and ongoing management of a WLAN network.

Integration with WLAN Infrastructure

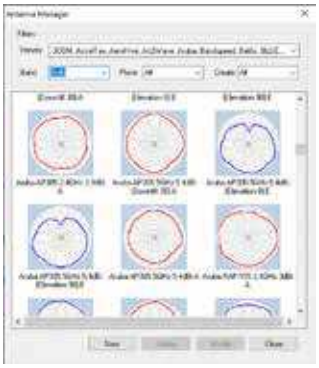
802.11 Modeling

With AirMagnet Planner, users can design new 802.11 networks and plan their migration strategies for existing legacy networks, such as, including one-to-one replacements, or the phased introduction of devices into their legacy network. Plan deployments for user capacity or performance without any tedious physical AP rollout. AirMagnet Planner provides unique coverage maps for WLAN throughput and other technology-specific heat maps, such as signal coverage, Operating Modes, MCS Transmit Rate, Channel Width, and Channel Overlap. This feature allows users to predict the WLAN performance at every location on the floor, easily offering the best design that minimizes any rework after network deployment. Since AirMagnet Planner is part of a single, seamless application with AirMagnet Survey PRO, users can validate “modeled” 802.11 results against “real-world” or “active” post-deployment surveys.

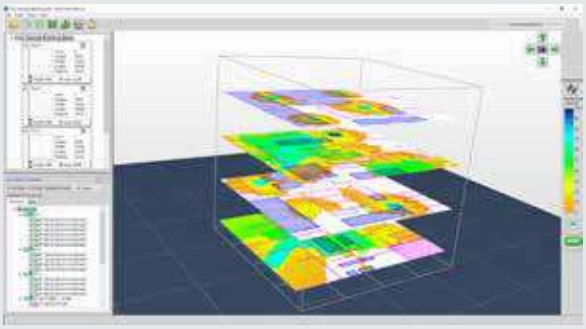
802.11 Modeling Properties Window

Custom Antenna Design

AirMagnet Planner includes over 300 of the most popular antenna patterns on the market for customizing APs, including Cisco, Aruba, Ruckus Wireless, Extreme Networks, Meru, Fortinet, Huawei, Meraki, Mist, and more. AirMagnet Planner also includes a built-in tool to create customized antenna patterns, allowing users to replicate the characteristics of literally any available antenna.



Customized Antenna Patterns



Multi-Floor Modeling using AirMagnet Planner

Multi-Floor Modeling

When users plan and design wireless access in multi-floor buildings, reusing services of APs lower equipment deployment costs. AirMagnet Planner's multi-floor planning capability allows planners to capitalize on resuing services by visualizing coverage and performance via heat maps across floors, providing powerful insight into service bleed over onto adjacent floors.

Empower your organization with visualizations of signal strength, data rates, Operating Mode, MCS Transmit Rate, Channel Width, Channel Overlap between floors, and more.

Ordering Guide

Model Number/Name	Description
AM/A4012	AirMagnet Planner (Standalone)
AM/A4018	AirMagnet Survey PRO (includes Planner)

Bundles

Model Number/Name	Description
AM/A1480	AirMagnet WLAN Design and Analysis Suite Bundle (Survey PRO/Planner, WiFi Analyzer PRO and Spectrum XT)
AM/A1481	AirMagnet WiFi Analyzer PRO and Survey PRO/Planner
AM/A1490	AirMagnet WLAN Design and Analysis Suite Bundle with Multi Adapter Kit (Survey PRO/Planner, WiFi Analyzer PRO, Spectrum XT, and (3) NetAlly 11ac USB adapters). Available in US & Canada only.
AM/A1580	AirMagnet Survey PRO/Planner and Spectrum XT Bundle

Support

Model Number/Name	Description
AM/A4012G-1YS	1 year AllyCare Support for AirMagnet Planner - AM/A4012
AM/A4012G-3YS	3 year AllyCare Support for AirMagnet Planner - AM/A4012
AM/A4018G-1YS	1 year AllyCare Support for AirMagnet Survey PRO (includes Planner) - AM/A4018
AM/A4018G-3YS	3 year AllyCare Support for AirMagnet Survey PRO (includes Planner) - AM/A4018
AM/A1480-1YS	1 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle - AM/A1480
AM/A1480-3YS	3 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle - AM/A1480
AM/A1481-1YS	1 year AllyCare Support for AirMagnet WiFi Analyzer PRO and Survey PRO/Planner - AM/A1481
AM/A1481-3YS	3 year AllyCare Support for AirMagnet WiFi Analyzer PRO and Survey PRO/Planner - AM/A1481
AM/A1490-1YS	1 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle - AM/A1490
AM/A1490-3YS	3 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle - AM/A1490
AM/A1580-1YS	1 year AllyCare Support for AirMagnet Survey PRO/Planner and Spectrum XT Bundle - AM/A1580
AM/A1580-3YS	3 year AllyCare Support for AirMagnet Survey PRO/Planner and Spectrum XT Bundle - AM/A1580

System Requirements

Laptop/Notebook/PC/Tablet PC
Operating Systems: Microsoft Windows 8.1 PRO/Enterprise 64-bit, or Microsoft Windows 10 PRO/Enterprise 64-bit
Intel® Core™ 2 Duo 2.00 GHz (Intel® Core™ i5 or higher recommended)
4 GB or higher
800 MB free hard disk space
A site map in a format supported by AirMagnet Planner (supported formats are: .bmp, .dib, .dwg, .dxf, .emf, .gif, vsd, .jpg, .wmf, .vdx or .png)

Apple® Macbook® PRO
Operating Systems: MAC OS X v10.5 (Leopard™) or higher running a supported Windows OS (as noted under Laptop/Notebook PC/Tablet PC section) using Boot Camp®
Intel®-based CPU 1.6 GHz or higher
4 GB or higher
800 MB free hard disk space
A site map in a format supported by AirMagnet Planner (supported formats are: .bmp, .dib, .dwg, .dxf, .emf, .gif, vsd, .jpg, .wmf, .vdx or .png)

netally.com/products/airmagnet-planner

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DATA SHEET

AirMagnet® Spectrum XT

Network Interference Analyzer

Overview

Trying to pinpoint the source of Wi-Fi interference on a wireless network is hit or miss with the wrong tools. AirMagnet Spectrum XT is a Wi-Fi spectrum analyzer that offers a combined view of RF interference and its impact on the wireless network's overall performance. This versatile solution is available in a universal USB form factor, and works on any Microsoft Windows notebook, netbook or tablet PC.

- Simplify interference troubleshooting by eliminating the need to interpret squiggly lines or manually match classification patterns
- Locate any Wi-Fi or non-Wi-Fi interference sources operating in the RF environment with the built-in device locator tool
- Prioritize Wi-Fi interference troubleshooting activities and reduce time to locate and fix wireless network issues
- Secure the Wi-Fi network by inspecting No Wireless Zones and detecting intentional RF interference sources such as RF jammers

Key Features

Automatic Identification and Location of RF Interference Sources

AirMagnet Spectrum XT offers real-time detection and identification of non-Wi-Fi interference sources that lower the performance of wireless networks. The extensive device source list can include Bluetooth devices, cordless phones, microwave ovens, wireless game controllers, digital video converters, baby monitors, RF Jammers, radar, motion detectors, ZigBee devices, and more.

Spectrum XT also provides detailed information for non-Wi-Fi interference sources that allow users to decide which interferer device is causing the most problems, and with an additional Bluetooth adapter plugged into the same PC, the analyzer provides ID, name, services, and more for enhanced interferer analysis.

With the built-in "device locator tool," users can locate any interference sources operating in the RF environment by operating similar to a Geiger counter, the tool beeps louder as users get closer to the location of the device complaints, and reducing costly redesigns of the network.

Automatic Detection of any RF Interference Source

Non-802.11 Interferer Details

Integration with AirMagnet Survey PRO

AirMagnet Survey PRO users running AirMagnet Spectrum XT on the same machine can perform RF spectrum surveys, or sweeps, at the same time as a passive or active site survey, reducing the walk-around time. This information helps users plan the channel settings for the current and planned WLAN infrastructure. Users also get the list of RF interference sources detected by AirMagnet Spectrum XT, within AirMagnet Survey.

With this integration, spectrum analyzer users gain access to unique heat maps within AirMagnet Survey, such as Channel power heat maps and Interferer power/location heat maps.

Integration with AirMagnet Survey Pro

Integrated Reporting

AirMagnet Spectrum XT's integrated report engine makes it easy to turn RF spectrum analysis sessions into professional reports. Customization features allow this Wi-Fi spectrum analyzer to generate reports on all the information collected for the current environment. With the wireless spectrum analyzer, reports can be exported in Word, RTF, PDF, or HTML formats for hand-off.

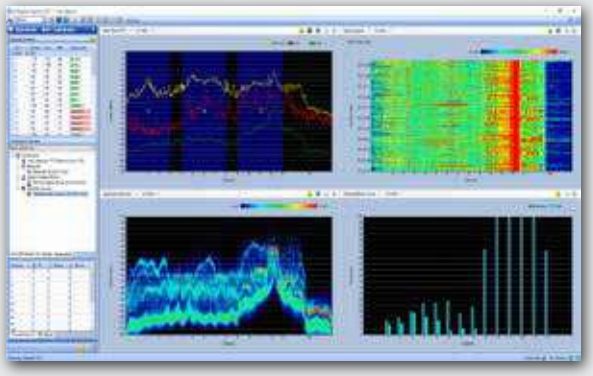
Integrated Reporting

"Zero-day" response to any RF interferer

AirMagnet Spectrum XT includes an automated spectrum analysis capability that monitors the RF environment looking for unique and repeating RF interference patterns from "unknown RF interference sources." Once the pattern of interest is detected and classified, users have the option of creating a customized signature for future alerting.

This wireless spectrum analysis capability provides users with a "zero-day" response to any interference source. This allows the user to have a faster response when troubleshooting performance problems in their network.

Detect and Classify Intefering Sources



RF Spectrum Diagnostic Views

High-resolution RF Spectrum Diagnostic Views

Key graphs and charts include:

Real-Time FFT - Provides a real-time view into the environment.

Spectrum Density – Displays real-time analysis on signals that are common during the current capture session.

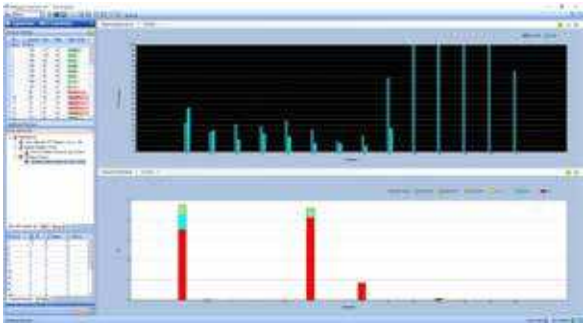
Spectrogram - Shows intermittent spikes of RF energy that may be causing wireless network problems.

Duty Cycle - Displays how often an interfering signal is present.

Event Spectrogram - Provides a visual presentation of interfering devices that are detected.

Channel Power - Shows the maximum and average power levels across all the channels in the selected radio band.

Interference - Displays the average power readings of interfering devices on the selected channel or channels.



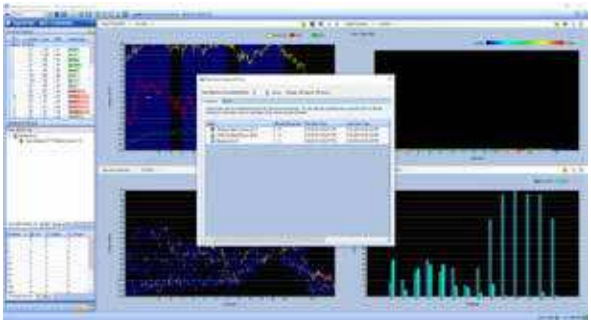
RF Interfence and WiFi Impact Analysis

Visualize Impact of RF Interference on Wireless Network Performance

To optimize and ensure top wireless network performance, AirMagnet Spectrum XT combines the power of RF spectrum analysis with WLAN traffic and device analysis. Spectrum XT users can plug in any supported wireless adapter and instantly see a combined or co-related single screen view showing the impact of interference sources on the overall performance of the WLAN.

AirMagnet Spectrum XT also provides a complete inventory of all Wi-Fi devices operating in the environment and their configured settings. Users are entitled to a selection of Wi-Fi charts to solve problems faster and more efficiently, including:

- **AP Signal Strength**
- **Channels by Speed/Address/Media**
- **Top 10 APs by CRCs/Retry**
- **Channel SNR; Errors/Retry**
- **Channel Utilization**
- **Channel Occupancy**



Record and Playback Features

Record and Playback

AirMagnet Spectrum XT users can save RF spectrum scans as hard evidence and play them back at a later time for post-capture investigation and analysis. The handy “jump-to” feature allows users to quickly navigate within a capture file to the start time of any interferers captured during the scan. The saved trace files can also be shared between users for collaborative analysis and troubleshooting.

Ordering Guide

Model Number/Name	Description
AM/B4070	AirMagnet Spectrum XT (USB Based)
AM/B4072	AirMagnet USB Spectrum Adapter - Replacement Only
AM/A4040	AirMagnet Directional Antenna
AM/D1080	NetAlly D1080 802.11A/B/G/N/AC USB Adapter (different versions available depending on regulatory domain)

Bundles

Model Number/Name	Description
AM/A1480	AirMagnet WLAN Design and Analysis Suite Bundle (Survey PRO/Planner, WiFi Analyzer PRO and Spectrum XT)
AM/A1490	AirMagnet WLAN Design and Analysis Suite Bundle with Multi Adapter Kit (Survey PRO/Planner, WiFi Analyzer PRO and Spectrum XT, and (3) NetAlly 11ac USB adapters) Available in US & Canada only.
AM/A1580	AirMagnet Survey PRO/Planner and Spectrum XT Bundle

Support

Model Number/Name	Description
AM/B4070-1YS	1 year AllyCare Support for AirMagnet Spectrum XT
AM/B4070-3YS	3 year AllyCare Support for AirMagnet Spectrum XT
AM/A1480-1YS	1 year AllyCare Support for AirMagnet WLAN Design & Analysis Suite Bundle
AM/A1480-3YS	3 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle
AM/A1490-1YS	1 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle with Multi-Adapter Kit
AM/A1490-3YS	3 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle with Multi-Adapter Kit
AM/A1580-1YS	1 year AllyCare Support for AirMagnet Survey PRO/Planner and Spectrum XT Bundle
AM/A1580-3YS	3 year AllyCare Support for AirMagnet Survey PRO/Planner and Spectrum XT Bundle

Specifications

General	
Frequency range	2402 to 2494 MHz; 5160 to 5330 MHz; 5490 to 5710 MHz; 5735 to 5835 MHz; 4910 to 4990 MHz
USB Specs	Unit width 38.1 mm; length 108.2 mm; height 8 mm; weight 31.2 grams; operating temp: 0° to 70° C (32°F to 158°F)
DC power	Voltage supply 5 volts; Active Power: 2 Watts
Capture Limit	Dependent on Hard disk space
Amplitude accuracy	+/- 2 dB
Resolution Bandwidth	156.3 KHz
Max Input	0 dbm
Sweep time	64 msec per 20 MHz or 64m sec per channel

Technical Specifications for Directional Antennas			
	MIN	**NOM**	**MAX**
Frequency Range **- 2.4 GHz Band** **- 5 GHz Band**	 2.4 GHz 4.9 GHz	 - -	 2.5 GHz 5.9 GHz
VSWR		1:1.5	
Impedance		50 Ohms	
Gain		5 dBi	
Polarizaiton		Linear	
Front-to-Ratio		>20dB	
Azimuth Beamwidth (V-pol)		55 deg	
Elevation Beamwidth (V-pol)		50 deg	

System Requirements

Laptop/Notebook/PC/Tablet PC
Operating Systems: Microsoft Windows 8.1 PRO/Enterprise 64-bit or Microsoft® Windows 10 PRO/Enterprise 64-bit
Intel® Core™ 2 Duo 2.00 GHz (Intel® Core™ i5 or higher recommended)
2 GB RAM required (4 GB recommended)
250 MB free hard disk space
USB Port, multiple ports in the PC when using optional wireless adapter
Microsoft .NET Framework 2.0

Apple® Macbook® PRO
Operating Systems: MAC OS X v10.9 (or higher) running a supported Windows OS (as noted under Laptop/Notebook PC/Tablet PC section) using Boot Camp®
Intel®-based 2.2 GHz Core 2 Duo or higher
2 GB RAM required (4 GB recommended)
250 MB free hard disk space
USB Port, multiple ports in the PC when using optional wireless adapter
Microsoft .NET Framework 2.0

Optional Adapters and Antennas
Additional Wi-Fi Analysis AirMagnet Spectrum XT offers additional Wi-Fi analysis features in addition to the spectrum features supported by the AirMagnet Spectrum USB adapter. This does NOT remove the requirement for an AirMagnet Spectrum USB adapter, without which the Spectrum XT software will not work.
AirMagnet supports the following wireless adapters for additional analysis: Preferred adapters: Adapters that have been comprehensively tested by AirMagnet and are recommended for use with the AirMagnet products. For more information visit netally.com/products/airmagnet-spectrum-xt
Additional Bluetooth Analysis AirMagnet Spectrum XT offers enhanced Bluetooth interferer information using an optional Windows-compatible Bluetooth adapter. The enhanced information includes details on the name, ID, services, etc. for Bluetooth devices. Users can either use the Bluetooth adapter that is built into their PC or can use an external adapter.
AirMagnet Directional Antenna The AirMagnet Directional Antenna will enhance the RF detection and capabilities of AirMagnet Spectrum XT in a single direction helping narrow down the search pattern far more effectively. It is small, light and portable.

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DATA SHEET

AirMagnet® Survey PRO

Wireless Site Survey Software

Overview

AirMagnet Survey PRO enables network professionals to design, deploy, and validate 802.11 wireless LAN networks for optimal performance, security, and compliance. It also calculates the ideal quantity, placement, and configuration of APs for a successful wireless LAN deployment. This solution goes beyond simply verifying RF coverage by plotting actual end-user network performance in terms of connection speed, throughput, and packet statistics. Survey PRO helps you get Wi-Fi installations right the first time, preventing costly rework and user complaints.

- Plan and design WLAN networks without physically rolling out any APs
- Collect real-world data by performing true end-user experience measurements using any Wi-Fi adapter
- Generate heatmaps that provide full visibility of WLAN coverage, interference, throughput, data rates, retries, loss, Voice-over-Wi-Fi MOS, and more
- Save time by performing active, passive, and spectrum surveys in a single walk-through

Key Features

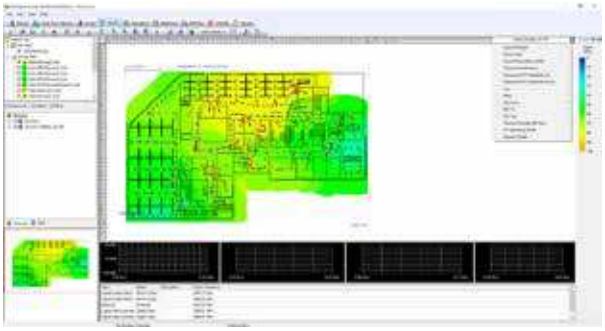
802.11 Site Surveys

AirMagnet Survey is a wireless network deployment solution that enables users to measure and assess the true end-user experience of a wireless network using any 802.11 adapter.

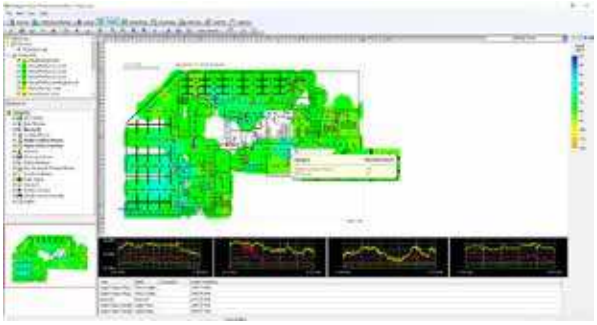
AirMagnet Survey goes beyond just verifying RF coverage and plots actual end-user network performance, in terms of throughput and PHY data rates, while taking MIMO and other environmental situations/network configurations into account.

This wireless site survey solution reveals the coverage of specific 802.11 parameters that impact performance, such as higher MCS schemes and wider channel, and intrusion of interference or legacy devices. Results are displayed as a complete Wi-Fi “weather map” of all critical RF and end-user performance metrics. The accountability of “real world” measurements allow IT staff to design and deploy WLAN accurately from the start.

Helping businesses save time and money, reducing end-user network complaints, and reducing costly redesigns of the network.



802.11 Heat Map

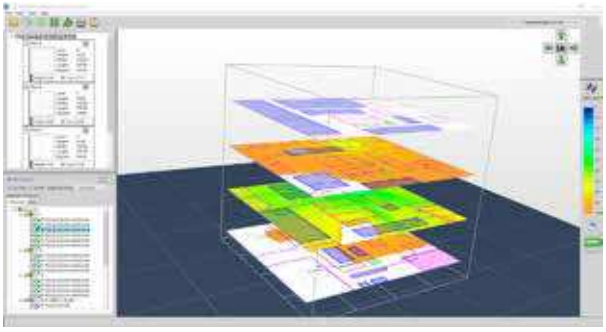


Interferer Power Heat Map

Integration with AirMagnet Planner

AirMagnet Planner is built into AirMagnet Survey PRO, providing a single, seamless application as one of the industry's most complete approaches to wireless LAN design, deployment, and ongoing optimization for 802.11a/b/g/n/ac networks. With this integrated solution, AirMagnet Planner can be used to accurately design WLANs by modeling building construction materials/obstructions, 802.11 APs, and visualizing coverage across multiple floors, then validating the results with real-world data in AirMagnet Survey PRO. Using active end-user performance metrics, users can further perfect their planning models over time.

Users also gain additional planning capabilities with the ability to test network plans against the AirWISE® engine for design requirements. AirMagnet Planner also integrates with AirMagnet Survey Express.



Automated WLAN Modeling using AirMagnet Planner

Outdoor Wireless Site Surveys

With GPS support and integration with Google® Earth, AirMagnet Survey PRO provides fully-automated outdoor wireless site surveys. Users can leverage NMEA-compliant GPS devices to automatically collect outdoor wireless data. Users also can import street maps of any city in the world, and have the option to analyze results within the AirMagnet Survey user interface or exported into Google Earth for a zoomed-in view to any street within the city.

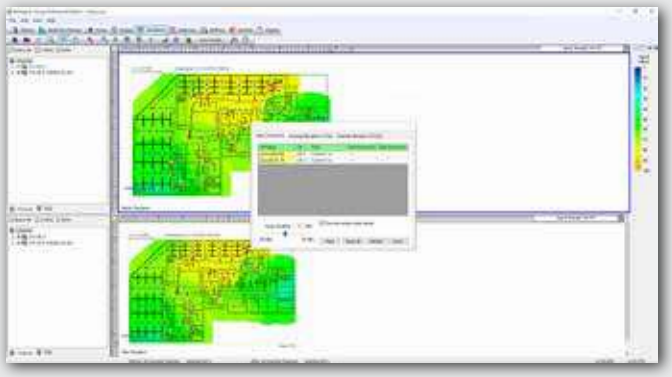
Google® Earth Integration for outdoor survey

"Real-world" Survey Data Collection and Solution of "What-If" Scenarios

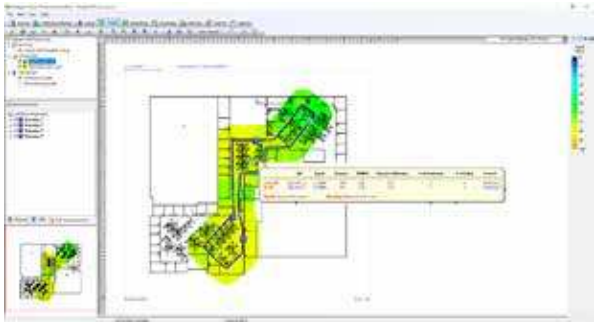
AirMagnet Survey's simultaneous wireless site surveying capability leverages multiple adapters plugged into the same PC to provide users with a solution that emulates real-world client behavior (using active and iPerf surveys). Having an accurate wireless emulator tool reduces site surveying time and efforts, cuts cost by half, and requires users to walk the floor only once to collect all required data.

With this wireless 802.11 site survey tool, users can create "what-if" scenarios to simulate a variety of changes to the network and preview the impacts. Options include changing AP transmit power, channel, SSID settings, and the addition of environmental noise. Users can also simulate moving APs to new locations and preview the effect of adding additional APs. AirMagnet Survey empowers users with the option of creating an automated channel plan for APs that avoids interference and over-allocation.

Real-World Data Collection



Simulate "What-if" Scenarios

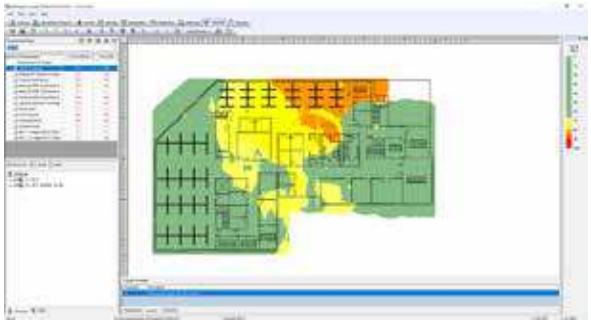


Voice-over-WLAN survey

RF Spectrum and Voice-over-WLAN Surveys

Before making any design and deployment decisions, users can account for RF interference from non-Wi-Fi devices. Users who own AirMagnet Spectrum XT can collect both Wi-Fi and spectrum analysis data in a single survey and integrate the data into AirMagnet Survey. With this integration, users can visualize the RF energy at any location and identify/display the presence of non-802.11 devices interfering with the WLAN.

AirMagnet Survey addresses the challenges faced by network installers and IT staff when deploying VoWLAN networks. With a built-in voice readiness verification system, AirMagnet Survey allows users to ensure that their network design is aligned with the recommendations of the phone vendor. This system also allows users to perform real-world voice surveys by validating and plotting phone call quality, capacity, and other voice specific parameters at every location on a floor map helping to identify and minimize issues.



AirWISE for Site Survey

Validate User and Application Requirements

The AirWISE® engine allows users to set wireless network design/application requirements, such as signal coverage, wireless network throughput, PHY data rates, 802.11 specific parameters, and more, to help identify any problem areas. Once set, users are alerted to the areas on the floor map that meet, or do not meet the requirement, enabling them to take the necessary action to solve the coverage, performance, or capacity problems.

AirWISE includes the option to create profiles based on real-world survey data or wireless network modeling data that can be used to verify WLAN deployment readiness for a variety of applications.

This single-click assessment of the WLAN network helps save time, effort, and money by avoiding costly re-designs of the WLAN network and minimize IT troubleshooting costs. Users can generate a Pass/Fail report that enables an efficient hand-over of results of the survey to the installer or the end-customer.

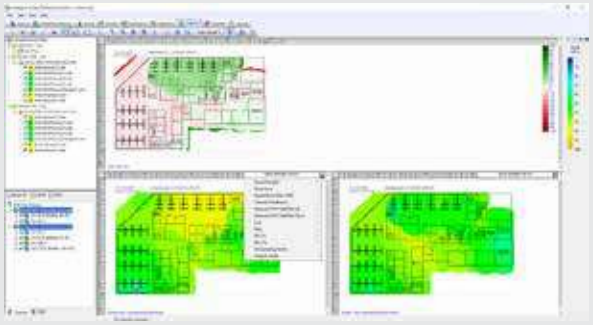
Customized Survey Reports

Professional Custom Reports

AirMagnet Survey PRO includes a completely integrated reporting module that instantly creates custom outputs of site surveys and simulations. Customized templates provide wireless 802.11 site survey users with flexibility by creating various reports based on project requirements. Users can customize reports further by including/excluding sections, adding in notes, and customizing logos, headers, and footers amongst many other customizable options. Reports can be saved in multiple formats, such as PDF, XML, HTML, Excel, or Word.

The reporting module includes report templates in the following languages: English, German, French, Arabic, Russian, and Japanese, along with the capability of allowing the user to create templates in any other language.

Visualize Coverage and Performance Differences Over Time

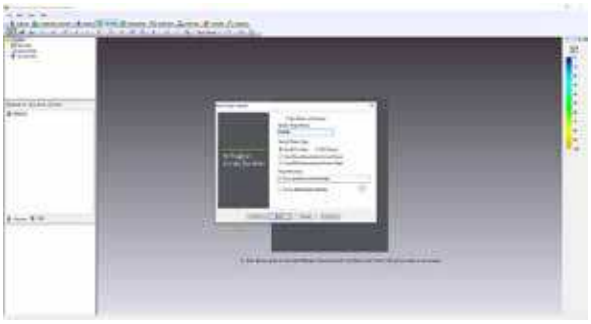


Coverage and Performance Differences

Wi-Fi environments are very dynamic and, to guarantee the best performance for end-users, it is important to be able to verify changes in coverage and performance in the network. AirMagnet Survey's Diff View feature allows side-by-side visualization of differences between two separate surveys.

The Diff View feature helps display how a site's wireless environment has changed over time. This view is a great tool for System Integrators to drive repeat business of validating the coverage and performance of the network on an on-going basis. Likewise, users can use this feature to quickly compare AirMagnet Planner results with actual site survey results. This information can then be used to fine-tune the db losses for the building and environmental conditions within Planner for more accurate planning.

Integration with WLAN Infrastructure Vendors



Integration with Infrastructure Vendors

AirMagnet Survey allows exporting of real-world survey data to Cisco Prime. This is critical for, not only calibrating Cisco's built-in planner modeling capabilities but also for specialized applications. For example, location services that mandate a calibration site survey for maximizing location accuracy for WLAN clients, or tags, and VoWLAN services that recommend the use of site surveys to validate real-world data versus the predictive capabilities of the infrastructure.

Take advantage of the planning capabilities built inside AirMagnet Survey PRO by creating and exporting planner projects directly into Cisco Prime. This integration eliminates the need to repeat these tasks within Cisco Prime, saving users time and resources needed, in setting up of maps, AP placement locations, and other WLAN deployment modeling activities.

Ordering Guide

Model Number/Name	Description
AM/A4018	AirMagnet Survey PRO (includes Planner)
AM/B4010	AirMagnet Survey Express
AM/A4016G	AirMagnet Survey Express to Survey PRO (upgrade model)
AM/B4070	AirMagnet Spectrum XT (optional)
AM/D1095	AirMagnet Multi-Adapter Kit for Survey (different versions available depending on regulatory domain)

Bundles

Model Number/Name	Description
AM/A1480	AirMagnet WLAN Design and Analysis Suite Bundle (Survey PRO/Planner, WiFi Analyzer PRO and Spectrum XT)
AM/A1481	AirMagnet WiFi Analyzer and Survey PRO/Planner
AM/A1490	AirMagnet WLAN Design and Analysis Suite Bundle with Multi Adapter Kit (Survey PRO/Planner, WiFi Analyzer PRO and Spectrum XT, and (3) NetAlly 11ac USB adapters). Available in US & Canada only.
AM/A1580	AirMagnet Survey PRO/Planner and Spectrum XT Bundle

Support

Model Number/Name	Description
AM/A4018G-1YS	1 year AllyCare Support for AirMagnet Survey PRO (includes Planner) - AM/A4018
AM/A4018G-3YS	3 year AllyCare Support for AirMagnet Survey PRO (includes Planner) AM/A4018
AM/B4010G-1YS	1 year AllyCare Support for AirMagnet Survey PRO - AM/B4010
AM/B4010G-3YS	3 year AllyCare Support for AirMagnet Survey PRO - AM/B4010
AM/A4016G-1YS	1 year AllyCare Support for AirMagnet Survey Express to Survey PRO - AM/A4016G
AM/A4016G-3YS	3 year AllyCare Support for AirMagnet Survey Express to Survey PRO - AM/A4016G
AM/B4070-1YS	1 year AllyCare Support for AirMagnet Spectrum XT - AM/B4070
AM/B4070-3YS	3 year AllyCare Support for AirMagnet Spectrum XT - AM/B4070
AM/A1480-1YS	1 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle - AM/A1480
AM/A1480-3YS	3 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle - AM/A1480
AM/A1481-1YS	1 year AllyCare Support for AirMagnet WiFi Analyzer and Survey PRO/Planner - AM/A1481
AM/A1481-3YS	3 year AllyCare Support for AirMagnet WiFi Analyzer and Survey PRO/Planner - AM/A1481
AM/A1490-1YS	1 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle - AM/A1490
AM/A1490-3YS	3 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle - AM/A1490
AM/A1580-1YS	1 year AllyCare Support for AirMagnet Survey PRO/Planner and Spectrum XT Bundle - AM/A1580
AM/A1580-3YS	3 year AllyCare Support for AirMagnet Survey PRO/Planner and Spectrum XT Bundle - AM/A1580

System Requirements

Laptop/Notebook PC/Tablet PC
Operating Systems: Microsoft Windows 8.1 Pro/Enterprise 64-bit, or Microsoft Windows 10 Pro/Enterprise 64-bit
Intel® Core™ 2 Duo 2.00 GHz (Intel® Core™ i5 or higher recommended)
4 GB or higher
800 MB free hard disk space
An ExpressCard slot or USB port, multiple ports in the PC when using multiple adapters. AirMagnet recommends the use of its MULTI-ADAPTER KIT.
AirMagnet-supported wireless network adapter(s)
Optional, AirMagnet Spectrum XT Adapter and license (required for viewing spectrum data and heat map; Survey PRO only)
A site map in a format supported by AirMagnet Survey (supported formats are: .bmp, .dib, .dwg, .dxf, .emf, .gif, vsd, .jpg, .wmf, .vdx or .png)
Google® Earth must be installed in order to export the GPS data for outdoor surveys to Google Earth (Survey PRO only)
Supported GPS device. Here is a list of GPS devices that have been approved for use with the AirMagnet Survey product. - Garmin eTrex LEGEND HCx - Garmin eTrex - Garmin eTrex Legend - Garmin GPS18X USB - Garmin GPS 18 Deluxe - Microsoft GPS-500 SIRF III - DeLorme Earthmate GPS LT-20 - Magellan eXplorist 500 - Pharos iGPS-180 - US GlobalSat BU-353-S4 (Recommended)

System Requirements

Apple® Macbook® PRO
Operating Systems: MAC OS X v10.5 (Leopard™) or higher running a supported Windows OS (as noted under Laptop/Notebook PC/Tablet PC section) using Boot Camp®
Intel®-based CPU 1.6 GHz or higher
4 GB or higher
800 MB free hard disk space
USB Port, multiple ports when using multiple adapters. AirMagnet recommends the use of its MULTI-ADAPTER KIT.
AirMagnet-supported wireless network adapter(s)
Optional, AirMagnet Spectrum XT Adapter and license (required for viewing spectrum data and heat map; Survey PRO only)
A site map in a format supported by AirMagnet Survey (supported formats are: .bmp, .dib, .dwg, .dxf, .emf, .gif, vsd, .jpg, .wmf, .vdx or .png)
Google® Earth must be installed in order to export the GPS data for outdoor surveys to Google Earth (Survey PRO only)
Supported GPS device. Here is a list of GPS devices that have been approved for use with the AirMagnet Survey product. - Garmin eTrex LEGEND HCx, Garmin eTrex, Garmin eTrex Legend, Garmin GPS 18 Deluxe - Garmin GPS18X USB - Microsoft GPS-500 SIRF III - Garmin GPSMap 60 - DeLorme Earthmate GPS LT-2, DeLorme Earthmate GPS LT-40 - Magellan eXplorist 500 - Pharos iGPS-180 - US GlobalSat BU-353-S4 (Recommended)
Supported Adapters
AirMagnet Survey supports two categories of wireless adapters: - **Preferred Adapters:** These adapters have been comprehensively tested by AirMagnet and are recommended for use with AirMagnet Survey PRO. Drivers have been customized for extended feature support. Visit netally.com/products/airmagnet-survey-pro - **Other Adapters:** These adapters can be used with AirMagnet Survey PRO but have not been tested by AirMagnet. Drivers have not been customized, will provide limited features, and could provide inaccurate data
Note: NetAlly is not responsible for the quality of the test results collected using Wi-Fi adapters not included on the Preferred category. Authentications supported by various adapters could be limited by their own capabilities, Windows wireless zero configurations and various other reasons.

netally.com/products/airmagnet-survey-pro

netAlly

DATA SHEET

AirMagnet® WiFi Analyzer PRO

Wi-Fi Analysis and Monitoring Software

Overview

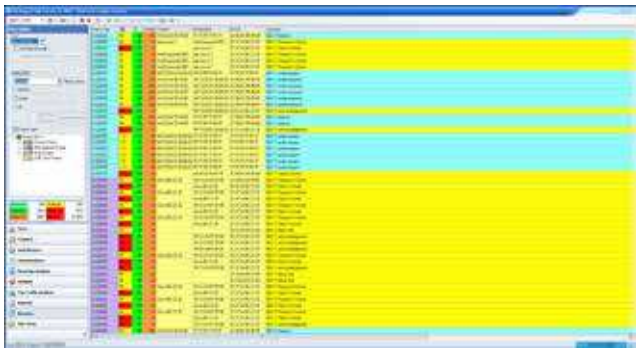
AirMagnet® WiFi Analyzer PRO automatically detects and diagnoses dozens of common Wi-Fi network performance problems, security threats and wireless network vulnerabilities, enabling IT staff to quickly solve end-user issues. This tool detects throughput issues, Wi-Fi connectivity problems, device conflicts, signal multipath issues and much more – and features a full compliance reporting engine, including wireless PCI, SOX, and ISO.

- Provides details on wireless network connectivity, Wi-Fi coverage, performance, roaming, interference, and network security issues
- Performs testing from the client perspective, independent of network infrastructure, with no access point downtime
- Delivers a complete inventory of devices that are operating in the environment
- Highlights top issues that need immediate attention with a live snapshot into the overall health of the wireless network

Key Features

Never Miss Any Wi-Fi Traffic

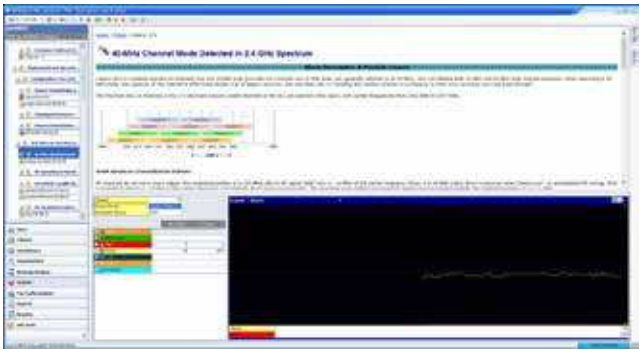
AirMagnet WiFi Analyzer gives you the ability to capture any Wi-Fi traffic for 802.11 networks, including 3x3 802.11ac traffic. As a result, you can solve any Wi-Fi network troubleshooting problems right the first time without costly rework or escalations.



Wi-Fi Packet Capture

Built-In Wireless Expertise

The AirWISE® engine automatically detects the root cause of wireless network issues across the spectrum. AirWISE eliminates the need for users to manually interpret complex packet decodes and wireless data by automating the identification and explanation of more than hundreds of threats and performance variables before they impact the Wi-Fi network. The user-friendly AirWISE interface displays network alarms in easy-to-understand details. AirWISE also provides access to additional diagnostic data and offers advice on corrective actions.



Built-in AirWISE Intelligence

Portable Wi-Fi Troubleshooting Solution With No AP Downtime

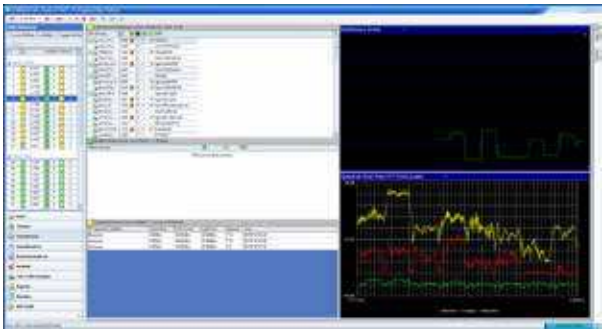
Not all wireless network troubleshooting solutions or software tools are created equal. Freeware apps or the ones that cost a few dollars, provide little more than a list of Wi-Fi networks and their properties, and do nothing to solve real-world problems. They don't match the capabilities of a true wireless network analyzer like AirMagnet WiFi Analyzer Pro that can monitor and solve any Wi-Fi troubleshooting problem.

Many AP solutions claim built-inside troubleshooting with partial scanning or full-time scanning options. Both have severe limitations. Part-time scanning leads to slower detection of problems in the network and could even miss the issue altogether. With full-time scanning, you are limited by diverting the AP from its core purpose which is providing data services. Moreover, APs are fixed on the ceiling and cannot travel to the source of the problem. AirMagnet WiFi Analyzer overcomes these limitations with full-featured, dedicated, on-site Wi-Fi troubleshooting with zero AP downtime.

Portable Wi-Fi Troubleshooting Solution

Complete Wi-Fi Interference Detection & Wi-Fi Analysis

AirMagnet WiFi Analyzer PRO features an interference status indicator that reveals overall interference statuses for each Wi-Fi channel. Users can obtain a list of hidden nodes and non-Wi-Fi devices (non-Wi-Fi detection requires AirMagnet Wi-Fi Analyzer PRO and AirMagnet Spectrum XT to be installed on the same machine) operating on the channel. AirMagnet Wi-Fi Analyzer's in-depth analysis helps businesses easily plan future Wi-Fi deployments, or modify their existing ones,in turn minimizing interference and improving network performance.



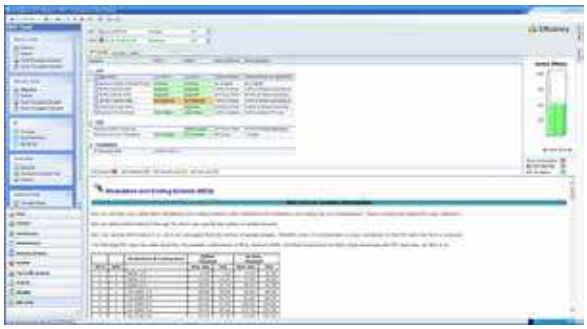
Wi-Fi and non-Wi-Fi interference analysis

WLAN Client Roaming Analysis

AirMagnet Wi-Fi Analyzer PRO provides advanced details on all roaming transactions for any WLAN client. AirMagnet Wi-Fi Analyzer also supports multiple WLAN adapters plugged into the computer to troubleshoot client roaming issues. With AirWISE® expertise users can get detailed explanations for roaming events taking place, device and channel parameters that influence roaming, and visibility into whether the roaming test was successful or not.

For VoWLAN phones, users can monitor voice delays and other statistics as the phone roams from one AP to another in the middle of a conversation. The application provides VoFi-specific data (such as WiMOS, Signal Strength, etc.) leading up to the attempt, and packet transmission rates for the conversation.

Roaming Analysis



802.11 analysis and troubleshooting

802.11 Analysis and Troubleshooting

AirMagnet WiFi Analyzer also plays a critical role in helping users optimize the migration path from legacy technologies with its unique 802.11 Toolkit which provides clear direction and details on how to leverage new 802.11 options to maximize throughput and performance. This toolkit includes:

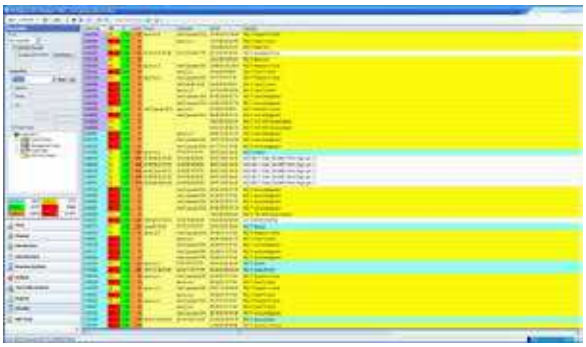
- **WLAN Throughput Simulator tool:** calculates network throughput, utilization and overhead under user-specified conditions by simulating the existing network or simulating the addition of new APs or stations in the network.
- **Throughput/iPerf tool:** allows users to run a performance test on any AP in the environment and measure the maximum WLAN bandwidth at a particular location; find the optimum configuration for maximizing WLAN throughput and test devices under various traffic stress scenarios.
- **Efficiency tool**: analyzes conversations between 802.11 APs and stations, and indicates if the network is using its full potential with simple color legends. The tool provides guidance on what option is not being well-used and how to better use it along with independent visibility into the uplink and downlink performance.
- **Analysis tool:** provides detailed statistics for any AP Station conversation helping the user to pinpoint low throughput problems. These include 20/40/80/160 MHz channel usage, use of SGI, 802.11ac MCS index, PHY Data Rates & A-MPDU (802.11n only).
- **Device Calculator tool:** allows users to simply enter AP specifications and calculate the expected network performance taking into account the capabilities of the clients that would connect to it.

Network Health Summary Dashboard

Wireless Network Health Summary

AirMagnet Wi-Fi Analyzer includes a dashboard that provides a live snapshot into the overall health of the wireless network allowing users to focus on top issues to ensure maximum wireless network security and performance. The Wi-Fi Analyzer dashboard features a variety of charts, including ones for channel utilization, top talkers in the network, wireless network interference levels, mismatched configurations, overloaded APs, security and performance problems, and more. From there, users can drill down deeper by investigating the WLAN statistics for every device, channel, and wireless frame. AirMagnet Wi-Fi Analyzer also provides users with a complete inventory of all the devices operating in the environment, such as APs, clients, and smart devices. Within each listed device, users can view detailed configuration information and traffic statistics.

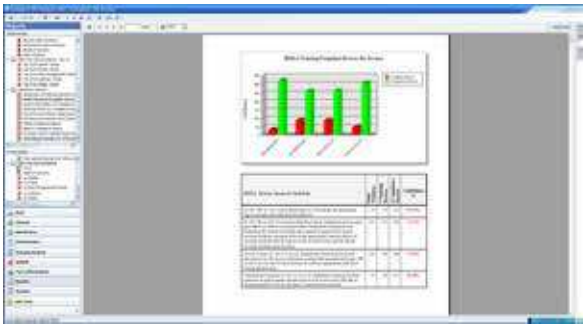
Trending graphs for detailed analysis



Packet Decode and Analysis

Wireless Network Troubleshooting

Along with the unique capability of providing instant answers with AirWISE, AirMagnet WiFi Analyzer users are provided with in-depth frame statistics for every channel and device operating in the spectrum. With the channel utilization and throughput trending graphs, users can troubleshoot many of the issues that lower the overall performance of the wireless network. AirMagnet WiFi Analyzer users can view trending graphs for signal strength, noise, frames, errors, retries, bandwidth and many more for every wireless network channel and device. These valuable network monitoring graphs provide critical pointers to troubleshooting issues that are influencing the wireless network performance. For example, graphs for packet retry and error rates reveal areas where wireless network communications are failing. On AirMagnet WiFi Analyzer's Decode Screen, users can view and analyze a list of real-time packets including 3x3 802.11ac packets, and also includes support for monitoring upper-layer protocols. AirMagnet WiFi Analyzer gives users the option to apply a filter in order to isolate particular packets of interest, based on a specific channel, SSID, node, IP address, or type of frame. WPA-PSK and WPA2-PSK encrypted packets can be decrypted too. With the multi-adapter support in AirMagnet WiFi Analyzer PRO, users can monitor multiple channels simultaneously using individual adapters inserted into the same PC.



Integrated Reporting

Integrated Reporting

AirMagnet-WiFi Analyzer PRO's integrated report module makes it easy to turn Wi-Fi analysis sessions into professional customized Wi-Fi network monitoring reports. Choose from a library of pre-built reports or generate targeted reports by selecting specific items of interest from the user interface. Wi-Fi network monitoring reports cover all areas of management, such as RF statistics, channel, device, security/performance issues, and auditor-ready compliance to verify a variety of regulatory standards including HIPAA, PCI, SOX, DoD 8100.2, FISMA, and many more. Compliance reports features a a step-by-step pass/fail assessment of each section of the standard, along with details on the devices that are in/out of compliance.

WLAN Security Alerts

Instant Alerts to WLAN Security Issues

Wi-Fi Analyzer automatically detects and alerts the user of any wireless intrusions, penetration attempts, and Wi-Fi hacking strategies, including rogue devices, "stumbler tools", devices sending unencrypted data, and a host of potentially damaging wireless security configurations. These proactive measures enable IT to take corrective action before a problem occurs. AirMagnet Wi-Fi Analyzer additionally detects sophisticated wireless attacks against the network. The Find tool that locks onto any rogue, policy-violating APs, or stations and guides the user to the device's physical location

Ordering Guide

Model Number/Name	Description
AM/A1150	AirMagnet WiFi Analyzer PRO
AM/B4070	AirMagnet Spectrum XT (optional)
AM/D1090	AirMagnet Multi-adapter kit for WiFi Analyzer (different versions available depending on regulatory domain)

Bundles

Model Number/Name	Description
AM/A1480	AirMagnet WLAN Design & Analysis Suite Bundle (Survey PRO/Planner, WiFi Analyzer PRO, and Spectrum XT)
AM/A1481	AirMagnet WiFi Analyzer and Survey PRO/Planner
AM/A1490	AirMagnet WLAN Design and Analysis Suite Bundle with Multi Adapter Kit (Survey PRO/Planner, WiFi Analyzer PRO, and Spectrum XT, and (3) NetAlly 11ac USB adapters). Available in US & Canada only.

Support

Model Number/Name	Description
AM/A1150G-1YS	1 year AllyCare Support for AirMagnet WiFi Analyzer PRO - AM/A1150
AM/A1150G-3YS	3 year AllyCare Support for AirMagnet WiFi Analyzer PRO - AM/A1150
AM/B4070-1YS	1 year AllyCare Support for AirMagnet Spectrum XT - AM/B4070
AM/B4070-3YS	3 year AllyCare Support for AirMagnet Spectrum XT - AM/B4070
AM/A1480-1YS	1 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle - AM/A1480
AM/A1480-3YS	3 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle - AM/A1480
AM/A1481-1YS	1 year AllyCare Support for AirMagnet WiFi Analyzer and Survey PRO/Planner - AM/A1481
AM/A1481-3YS	3 year AllyCare Support for AirMagnet WiFi Analyzer and Survey PRO/Planner - AM/A1481
AM/A1490-1YS	1 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle with Multi Adapter Kit with Multi Adapter Kit - AM/A1490
AM/A1490-3YS	3 year AllyCare Support for AirMagnet WLAN Design and Analysis Suite Bundle with Multi Adapter Kit with Multi Adapter Kit - AM/A1490

System Requirements

Laptop/Notebook/PC/Tablet PC
Application Operating Systems: Microsoft Windows 8.1 PRO/Enterprise 64-bit or Microsoft Windows 10 PRO/Enterprise 64-bit
Intel® Core™ 2 Duo 2.00 GHz (Intel® Core™ i5 or higher recommended)
4 GB memory or higher
800 MB free hard disk space
An ExpressCard slot or USB port, multiple ports in the PC when using multiple adapters. AirMagnet recommends the use of its MULTI-ADAPTER KIT.
AirMagnet-supported wireless network adapter(s) Optional spectrum adapter and license (required for viewing spectrum data and non-Wi-Fi devices; AirMagnet WiFi Analyzer Pro only). Integration supported with AirMagnet Spectrum XT *Note: AirMagnet Spectrum XT adapter is in the USB form factor*

System Requirements

Apple® Macbook® PRO
Operating Systems: MAC OS X v10.9 (or higher) running a supported Windows OS (as noted under Laptop/Notebook PC/Tablet PC section) using Boot Camp®
Intel®-based CPU 2.0 GHz or higher
4 GB memory or higher
800 MB free hard disk space
USB Port, multiple ports when using multiple adapters. AirMagnet recommends the use of its MULTI-ADAPTER KIT
AirMagnet-supported wireless network adapter(s) Optional spectrum adapter and license (required for viewing spectrum data and non-Wi-Fi devices; AirMagnet WiFi Analyzer Pro only). Integration supported with AirMagnet Spectrum XT *Note: AirMagnet Spectrum XT adapter is in the USB form factor*
Supported Adapters
AirMagnet WiFi Analyzer supports the following wireless adapters: Preferred adapters: Adapters that have been comprehensively tested by AirMagnet and are recommended for use with the AirMagnet PRO products. *Note: Authentications supported by various adapters could be limited by their own capabilities, Windows wireless zero configurations and various other reasons*

netally.com/products/airmagnet-wifi-analyzer