

# 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.

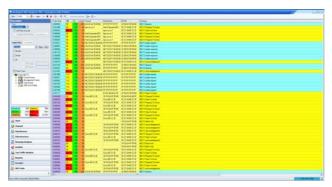
- Provides details on wireless network connectivity, Wi-Fi coverage, performance, roaming, interference, and network security issues
- Performs testing from the client perspective, independent of network infrastructure, with no access point downtime
- Delivers a complete inventory of devices that are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

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#### **Key Features**

## Never Miss Any Wi-Fi Traffic

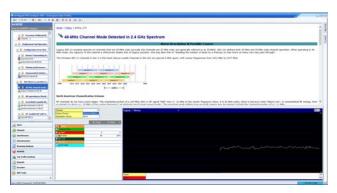
AirMagnet WiFi Analyzer gives you the ability to capture any Wi-Fi traffic for 802.11 networks, including 3x3 802.11ac traffic. As a result, you can solve any Wi-Fi network troubleshooting problems right the first time without costly rework or escalations.



Wi-Fi Packet Capture

### **② 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.

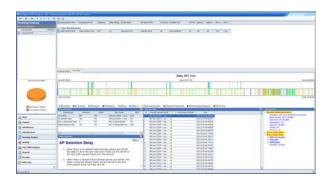


Wi-Fi and non-Wi-Fi interference analysis

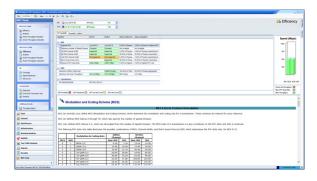
#### ( WLAN Client Roaming Analysis

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

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Network Health Summary Dashboard

#### **802.11 Analysis & 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:

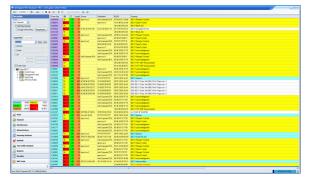
- WLAN Throughput Simulator tool: calculates network throughput, utilization and overhead under user-specified conditions by simulating the existing network or simulating the addition of new APs or stations in the network.
- Throughput/iPerf tool: allows users to run a performance test on any AP in the 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.

#### **Wireless Network Health Summary**

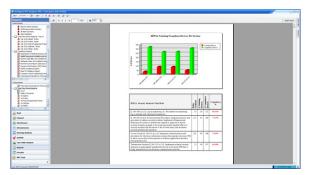
AirMagnet Wi-Fi Analyzer includes a dashboard that provides a live snapshot into the overall health of the wireless network allowing users to focus on top issues to ensure maximum wireless network security and performance. The Wi-Fi Analyzer dashboard features a variety of charts, including ones for 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



Integrated Reporting

#### **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**

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/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/A1481	AirMagnet WiFi Analyzer and Survey PRO/Planner

#### **Support**

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

### **System Requirements**

#### Laptop/Notebook/PC/Tablet PC

Operating Systems: Microsoft Windows 8 Pro/Enterprise 64-bit, Microsoft Windows 8.1 Pro/Enterprise 64-bit, Microsoft Windows 10 Pro/Enterprise 64-bit, or Microsoft Windows 11 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

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## **Premium Customer Services**



AllyCare is a comprehensive support and maintenance service for NetAlly's Network Tools and AirMagnet® software that offers significant value over standard warranty. Membership of AllyCare can be purchased as either a 1-year membership or the value-added 3-year membership rate.

support.netally.com



netally.com/products/airmagnet-wifi-analyzer

