

# The AIRMAGNET

## Wireless Laptop Analyzer

### The Wireless Market

802.11-based Wireless LANs (WLANs) have quickly emerged as one of the most important assets in the enterprise technology landscape. Low costs of ownership and the need to extend existing networks to a mobile user base has steadily fueled the adoption of Wi-Fi across all industries.

However, much like the evolution of Ethernet before it, the rate of 802.11 implementations have outpaced the adoption of the professional tools and practices needed to properly manage these networks. This has left security and network professionals to combat a new breed of network threats with outdated tools that were originally designed for a wired infrastructure.

Unlike their wired counterparts, WLANs are in constant flux, and are unbound by physical barriers. Each station in the network represents a potential point of weakness if not properly configured and monitored. As a result, professionals need tools tailored to the demands of Wi-Fi, that can alert them to problems as they develop and help resolve them quickly.

This is the unique domain of AirMagnet's Wireless Laptop Analyzer. Designed to make Wi-Fi as secure and reliable as its Ethernet predecessors, the AirMagnet Laptop provides a single solution to manage the security, performance, and connectivity of 802.11 networks in a single mobile application.

A complete set of tools in a single, highly usable application with the power and flexibility of a Laptop

### The AirMagnet Laptop Solution

The AirMagnet Laptop brings together the industry's most advanced tools and intelligence in a solution that can go anywhere and is easy to use.

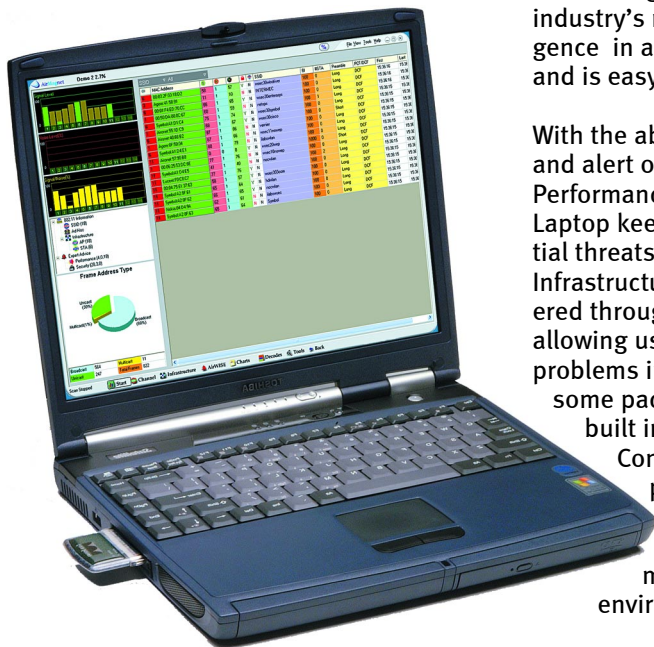
With the ability to automatically detect and alert on over 50 wireless Security and Performance conditions, the AirMagnet Laptop keeps networkers on top of potential threats as they develop. Channel, Infrastructure, and Packet Data are delivered through an intuitive user interface - allowing users to spend their time solving problems instead of interpreting cumbersome packet decodes. Additionally, with built in tools for Site-Surveying, Connection Troubleshooting, support for GPS, and all 14 channels used world-wide, the AirMagnet Laptop offers the most complete solution for any environment.

The end result is the industry's best Wi-Fi management tool with a unique combination of superior functionality and usability.

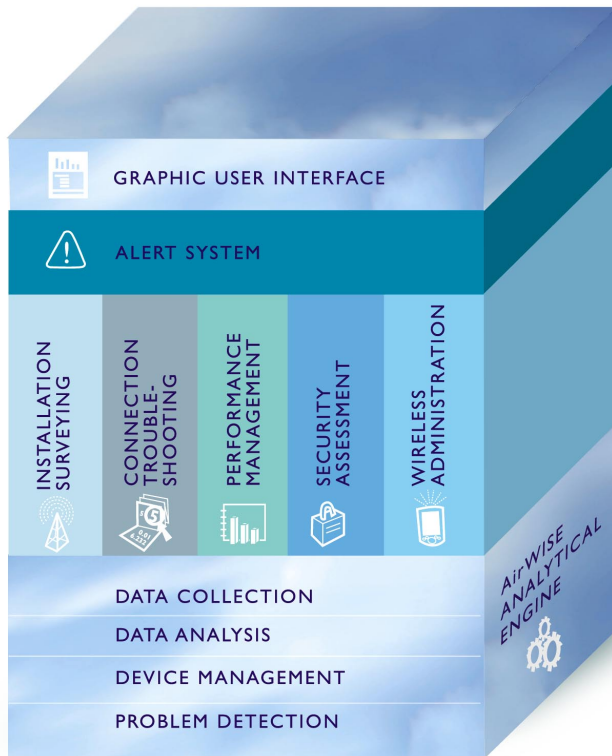
The AirMagnet Laptop product suite includes administration tools in the areas of:

- Security Management
- Performance Management
- Installation Surveying
- Connection Troubleshooting
- Wireless Administration

AirMagnet makes it easy to go where the network is



## AirMagnet Laptop Architecture



### Intelligent Analytical Engine

The AirMagnet Laptop Analyzer is powered by AirWISE, the company's patent pending intelligent analytical engine that helps network professionals stay on top of changes in the network before they lead to problems.

AirWISE runs continuously in the background automatically collecting network performance statistics, identifying and tracking wireless devices and their distinguishing characteristics, monitoring and analyzing the health of a WLAN, pinpointing WLAN problems, and suggesting potential solutions to network problems.

### Improved Wireless Administration

The 2.5 Release of the AirMagnet Laptop introduces scores of improvements to the industry's leading Wi-Fi management tool - making it easier for networkers to stay on top of any wireless environment.

**19 New Security and Performance Alarms** keep users on the cutting edge of wireless administration, automatically detecting network events that could lead to problems.

**GPS Support** allows users to collect longitude and latitude information when monitoring their network infrastructure - opening the door for outdoor site-surveys, and device location sensing.

**Network Profile Tools** help administrators keep track of multiple WLAN environments, through Configuration Profiles and Address Books for logical name mapping.

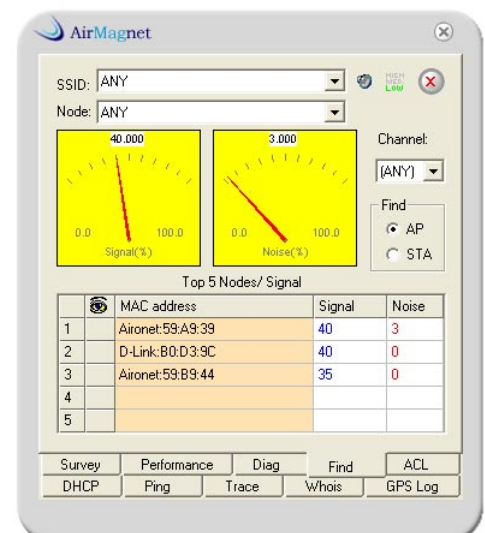
**Object Oriented Traces** - In addition to capturing packets, users can now capture and replay object information such as channel statistics, all detected devices, and any alarms that were generated during a scan.

**World-Mode** allow users to monitor all 14 channels in the 802.11b spectrum, allowing users to detect problems occurring in "unauthorized" bands.

**Configurable Alarms** allow users to set alarm thresholds to their environment ensuring that alerts are tuned to the needs of the user.

**Save and Replay Sniffer and Ethereal File Formats** - Provides interoperability between AirMagnet and other popular wireless tools.

**Press and Hold Actions** allow users to quickly perform actions such as Find, Survey, Performance, Diagnostics, Ping, and Trace on any device shown in the UI.



**AirMagnet Find Tool**

# A comprehensive suite of security tools

## Security Management

Wireless LANs have considerably changed the way organizations approach network security. Each station must adhere to established policies or risk compromising the entire network.

AirMagnet provides the tool to insure that security professionals are always aware of every station in the network and their impact on security. In addition, the latest release more than doubles the number of security alarms - alerting users to a total of 30 wireless threat conditions including:

### Rogue AP and Client Detection

Know if an unauthorized device is installed on the network. AirMagnet includes a Find Tool to track down rogue devices once they are identified.

### Wireless Denial of Service Detection

Know when intruders attempt to deny network access, by saturating channels or flooding AP Association Tables. Multiple alarms cover emerging attacks such as 802.1x DoS attacks, RF Jamming, and Association and Authentication DoS attacks.

### AP Impersonation Detection

Indicates an intruder attempting to invade the network by emulating (or spoofing) a registered MAC address

### Unconfigured Access Point

Alerts to Access Points configured with the default SSID.

### 802.1x/TKIP/MIC Security Validation

WLANs can be made far more secure by leveraging new stronger security protocols. AirMagnet supports these protocols and allows users to identify wireless devices that are unprotected.

### WEP Alarms

Discover stations operating with WEP disabled, using crackable WEP IV keys, and more.

### GPS Logging

Detect exactly how far RF signals extend beyond your physical location.

## Performance Management

The AirMagnet Laptop helps network professionals stay on top of the performance curve, with an Expert Performance Analysis Tool that monitors 802.11 networks and identifies the potential source of performance problems as they are happening.

**Network Summary View** provides a simultaneous view of all 14 802.11b channels, with the ability to drill down into detail on any node in the network.

**Performance Alarms** monitor the WLAN environment and alarms against more than 20 wireless conditions that can cause performance problems. Alarms include high packet error rates, Hidden Node Problems, AP Interference, low transmission rates, and many others.

### Channel Bandwidth Monitor

tracks channel interference, multicast/broadcast storms, poor RF signals, bridge loops and low transmission rates. RF signals can be displayed in dBm or %.

**Channel Interference Monitor** monitors channel throughput and alerts when a channel is overloaded with Access Points or Stations.

**Channel Noise Monitor** provides an alert if a channel is experiencing interference from an unidentified source.

## Connection Troubleshooting

Without intelligent tools, the process of troubleshooting a problem connection can be an incredible drain on time and resources. To expedite the resolution of these issues, the AirMagnet Laptop leverages an Intelligent Connection Diagnostics Utility.

**Connection Mismatch Tool** identifies any mismatch of SSIDs, WEP keys, transmission rates, or RF channels—a major source of connection problems.

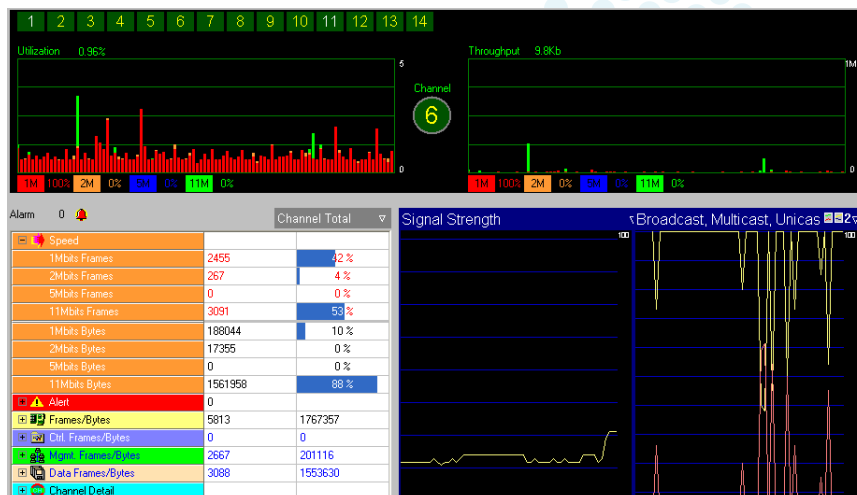
**Failure Analysis Tool** helps isolate the source of a transmission failure, including authentication, re-association, speed mismatch and hardware failures.

**Real-Time Packet Capture and Decode Function** captures and decodes data packets and displays them in real time.

**Trace File Playback** replays previously captured network packets, device information, and alarms in a time-stamped, sequenced trace file - allowing network administrators to identify and pinpoint transient or intermittent network problems.

### Basic LAN Troubleshooting Tools

help isolate connectivity problems selectively to and from a specific Access Point; including DHCP Renew, Ping, Traceroute, Whois, and DNS Lookup.



Channel View

## Installation Surveying

When a WLAN is not designed and installed properly, the consequences can be chronic user complaints ranging from dead spots and low transmission rates to connectivity issues and increased network latency. The AirMagnet Laptop gives network professionals the necessary tools to plan and install their 802.11 infrastructure:

**Comprehensive Drilldown Functions** allow the detailed investigation of a single Access Point or Station, to evaluate signal quality and various configuration options—with the flexibility to drill down to the level of information required by the task.

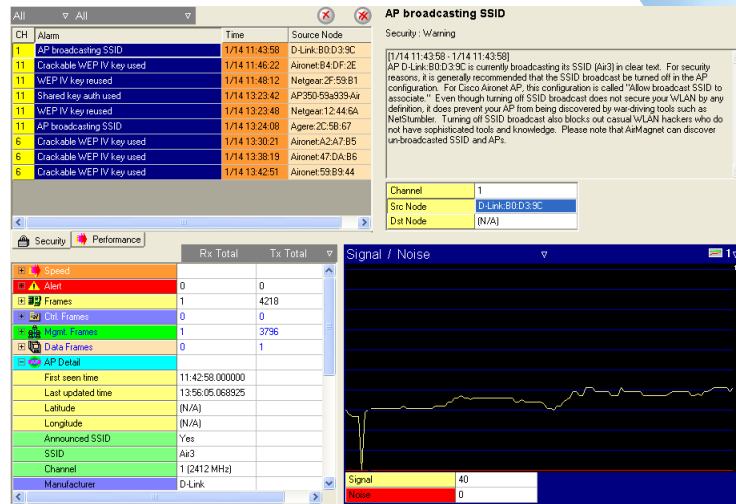
**Channel Signal Strength/Quality Tools** help identify and isolate co-channel interference from unknown Access Points and other potential sources, which help prevent potential conflicts or performance issues.

**Auto Discovery Tools** catalogue all SSIDs, Access Points and Stations on a network—both authorized and unauthorized—to give installers an accurate picture of the WLAN infrastructure.

**Network Site Survey Tool** eases the collection of RF signals and performance data, so network nodes can be placed for maximum functionality.

**Export Function** allows survey data to be exported for management reporting.

**Antenna Signal Alignment Meter** provides fast response time signal tracking to achieve the optimal signal reception in line-of-sight bridge-to-bridge alignment.



AirWISE

## The Comprehensive Solution

The AirMagnet Laptop gives network and security professionals the right tools to deploy and manage their WLANs, on a platform that lets them go where the network is. With functionality designed for wireless, AirMagnet offers users the control they need to deliver reliable and secure WLAN performance.

### AirMagnet Laptop

- AirMagnet Laptop Software CD
- Cisco Aironet AIR-PCM352 802.11b PC card
- Notebook PC sold separately

### AirMagnet Combo

Dual Support for Pocket PC 2002 and Windows Platforms

- AirMagnet Laptop Software CD
- AirMagnet Handheld Software CD
- Cisco Aironet AIR-PCM352 802.11b PC Card
- Pocket PC sold separately

## Contact AirMagnet

To order the AirMagnet Laptop, or for more information about the company, contact us at 650-694-6754 or at [info@AirMagnet.com](mailto:info@AirMagnet.com).

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AirMagnet offers the control administrators need to deliver reliable and secure WLAN performance