# AirMagnet® Survey PRO
## Wireless Design & Site Survey Software

## Overview

AirMagnet Survey PRO enables network professionals to design, deploy, and validate Wi-Fi 6 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. AirMagnet Survey PRO goes beyond simply verifying RF coverage by plotting actual end-user network performance in terms of connection speed, throughput, and packet statistics by allowing you to use any Wi-Fi adapter or AirMapper™ Site Survey on the AirCheck G2 and EtherScope nXG. Survey PRO helps you get Wi-Fi installations right the first time, preventing costly rework and user complaints.

- Plan and design Wi-Fi networks without physically rolling out any APs
- Collect real-world data by performing true end-user experience measurements using any Wi-Fi adapter or AirMapper™ Site Survey on the AirCheck G2 and EtherScope nXG
- Generate heatmaps that provide full visibility of WLAN coverage, noise, SNR, 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

### 🖥 Wi-Fi 6 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 or AirMapper™ Site Survey on the AirCheck G2 and EtherScope nXG.

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 MU-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.
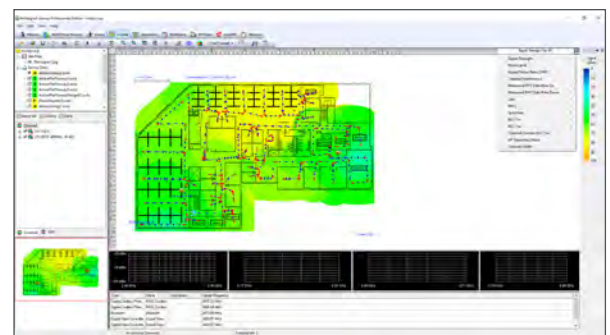

*802.11 Heat Map*
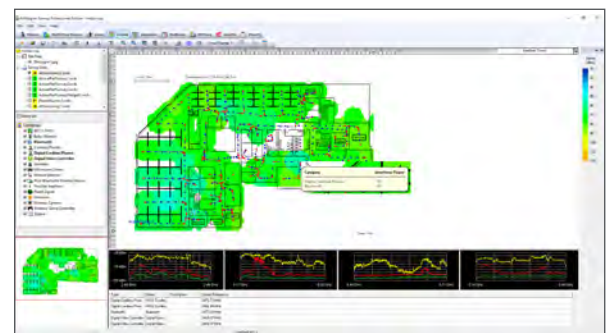

*Interferer Power Heat Map*

## 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 Wi-Fi 6 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.
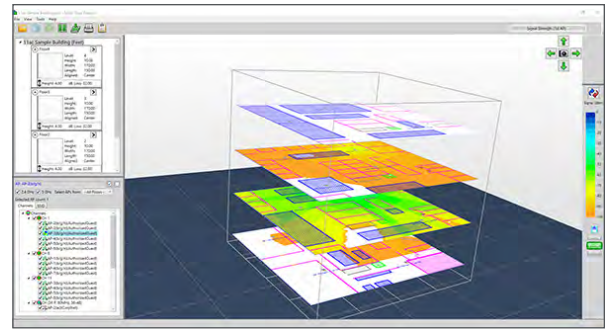


*Automated WLAN Modeling using AirMagnet Planner*

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

With the AirMapper app on the AirCheck G2 or EtherScope nXG users can quickly and easily gather location-based Wi-Fi measurements and create visual heat maps of key performance metrics in AirMagnet Survey PRO. Simple to use, the AirMapper app is ideal for quick site surveys of new deployments, change validation, and performance verification.

• Complete faster and easier Wi-Fi site surveys with an entirely mobile platform

• Perform enterprise-grade surveys without the need of a dongle or tethered device

• Collaborate—easily visualize and share survey data through Link-Live Cloud Service or AirMagnet Survey PRO

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.
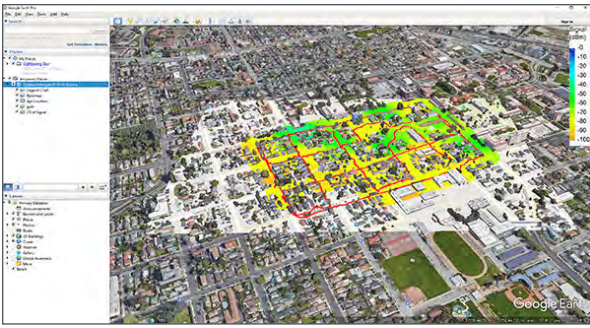


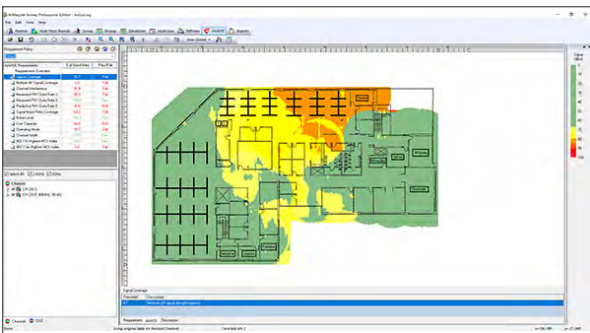*Real-World Data Collection Using AirMapper™*
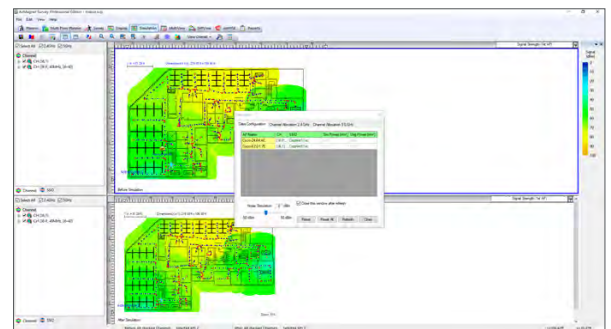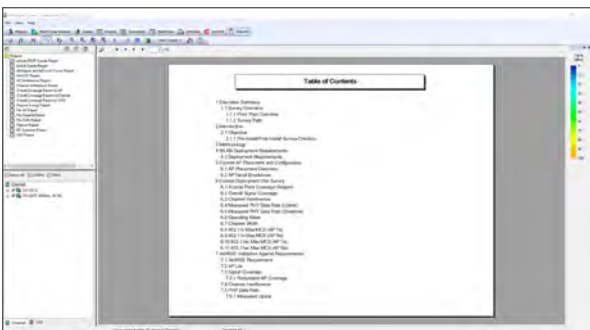


*Simulate "What-if" Scenarios*

*Google® Earth Integration for outdoor survey*


*Voice-over-WLAN survey*


*AirWISE for Site Survey*


*Customized Survey Reports*

## 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.

## 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.

## 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.

## 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.

## Visualize Coverage and Performance Differences Over Time

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.
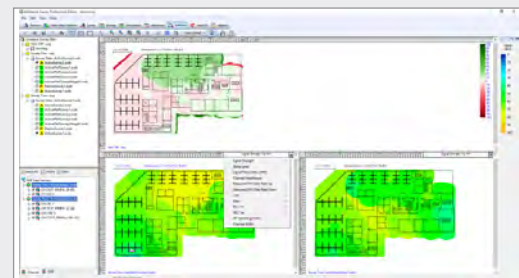

*Coverage and Performance Differences*

## Integration with WLAN 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.
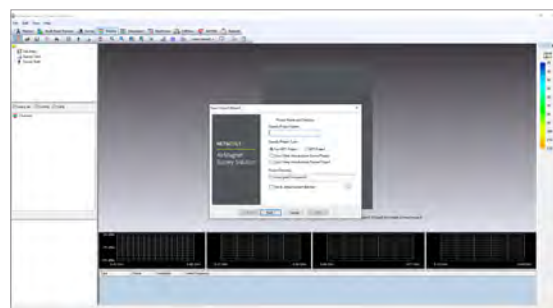

*Integration with Infrastructure Vendors*

## Ordering Guide

| Model Number/Name | Description |
| --- | --- |
| AM/A4018G | AirMagnet Survey PRO (includes Planner) |
| AM/A4010G | 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) |
| AIRCHECK G2 | AirCheck G2 with AirMapper™, small soft carrying case, AC charger, and USB cable |
| TEST-ACC | Test Accessory Pocket iPerf Server, for use with AirCheck G2 and AirMagnet Survey (can be used independently) |

## 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/A4018G |
| AM/A4018G-3YS | 3 year AllyCare Support for AirMagnet Survey PRO (includes Planner) - AM/A4018G |
| AM/B4010G-1YS | 1 year AllyCare Support for AirMagnet Survey PRO - AM/B4010G |
| AM/B4010G-3YS | 3 year AllyCare Support for AirMagnet Survey PRO - AM/B4010G |
| 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 |
| AIRCHECK-G2-1YS | 1 year AllyCare Support for AIRCHECK G2 |
| AIRCHECK-G2-3YS | 3 year AllyCare Support for AIRCHECK G2 |
| **PLESAE NOTE:** The first year of AllyCare support is required for all AirMagnet products. | |

## 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™ i5 2.00 GHz (Intel® Core™ i7 or higher recommended) |
| 4 GB (8 GB or higher recommended) |
| 800 MB free hard disk space |
| USB port or multiple ports in the PC when using multiple adapters. |
| AirMagnet-supported wireless network adapter(s) or Aircheck G2/EtherScope nXG with AirMapper™ *(recommended)* |
| 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.<br>- Garmin eTrex LEGEND HCx<br>- Garmin eTrex<br>- Garmin eTrex Legend<br>- Garmin GPS18X USB<br>- Garmin GPS 18 Deluxe<br>- Microsoft GPS-500 SIRF III<br>- DeLorme Earthmate GPS LT-20<br>- Magellan eXplorist 500<br>- Pharos iGPS-180<br>- US GlobalSat BU-353-S4 (Recommended) |

| 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® Core™ i5 2.00 GHz (Intel® Core™ i7 or higher recommended) |
| 4 GB (8 GB or higher recommended) |
| 800 MB free hard disk space |
| USB Port or multiple ports when using multiple adapters |
| AirMagnet-supported wireless network adapter(s) or Aircheck G2/EtherScope nXG with AirMapper™ *(recommended)* |
| 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. <br><br> - 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, and 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.*

AMS-DS-22-V2

---

**eudisa GmbH**
Maria-Merian-Strasse 8
85521 Ottobrunn b. München

Telefon:    +49 89 9041011-12
E-Mail:    info@eudisa.com
Website:    www.eudisa.com

*test & measurement*

BERATUNG  |  SCHULUNG  |  SERVICE  |  WISSEN