FLUKE networks

AnalyzeAir™

Wi-Fi Spectrum Analyzer

AnalyzeAir software provides IT professionals with vision into the hidden world of RF, and lets them see the spectrum in a visible and intelligent format. AnalyzeAir software lets you see, monitor, analyze, and manage all the RF sources and wireless devices that influence your Wi-Fi network's performance and security – even if those devices are unauthorized or transient.

Are you receiving end user complaints about WLAN performance? Take AnalyzeAir to the problem location and quickly solve physical layer RF problems that prevent optimum wireless connectivity. AnalyzeAir's Device Finder function will lead you to the offending device, allowing you to quickly locate troublesome or unauthorized devices.

Are you preparing for a new wireless deployment or expansion of an existing wireless network? Knowing what is in your RF spectrum ahead of time will help prevent performance problems later on. Find out what may cause interference so it can be removed or shielded before the users start complaining.

AnalyzeAir software takes the cost and complexity out of spectrum analysis. Unlike single-function RF analyzers or expensive tools that provide RF information without device identification and location, AnalyzeAir provides an easy-to-understand, fast-start solution, allowing users to quickly resolve RF problems that prevent WLAN connectivity and impact performance.

AnalyzeAir software includes the following powerful features:

- RF spectrum analysis for troubleshooting and optimizing 802.11a/b/g WLANs
- Real-time device detection and identification
- Device Finder that pinpoints the location of interfering devices
- Designed for IT network professionals who need answers, not just data
- Affordable, portable solution for use on the OptiView™ Integrated Network Analyzer or on a laptop/tablet PC
- Real-time spectrum analysis wherever you need it

Physical layer (RF) visibility

AnalyzeAir Wi-Fi Spectrum Analyzer provides clear visibility of the unlicensed 2.4 GHz and 5 GHz frequencies used by 802.11b/g and 802.11a WLANs. You don't have to be an RF engineer to quickly locate and solve problems on your wireless network. AnalyzeAir software wraps the tools RF experts use in an easy-to-use interface, putting the power of automated RF analysis into your hands.

AnalyzeAir makes finding interference in 802.11 WLANS simpler by listing all active devices in the spectrum, both network devices and interfering devices. AnalyzeAir software wraps the tools RF experts use in an easy-to-use interface, putting the power of automated RF analysis into your hands.

Detect, identify, and locate RF Interference in 802.11 WLANs

With AnalyzeAir, software you have the ability to determine what could be causing connectivity problems on the network by identifying them by type and location. It helps you solve plaguing performance problems caused by interference by looking at the RF spectrum in real-time. When the interference occurs, you can quickly identify the offending devices and determine their physical locations.

Device listing

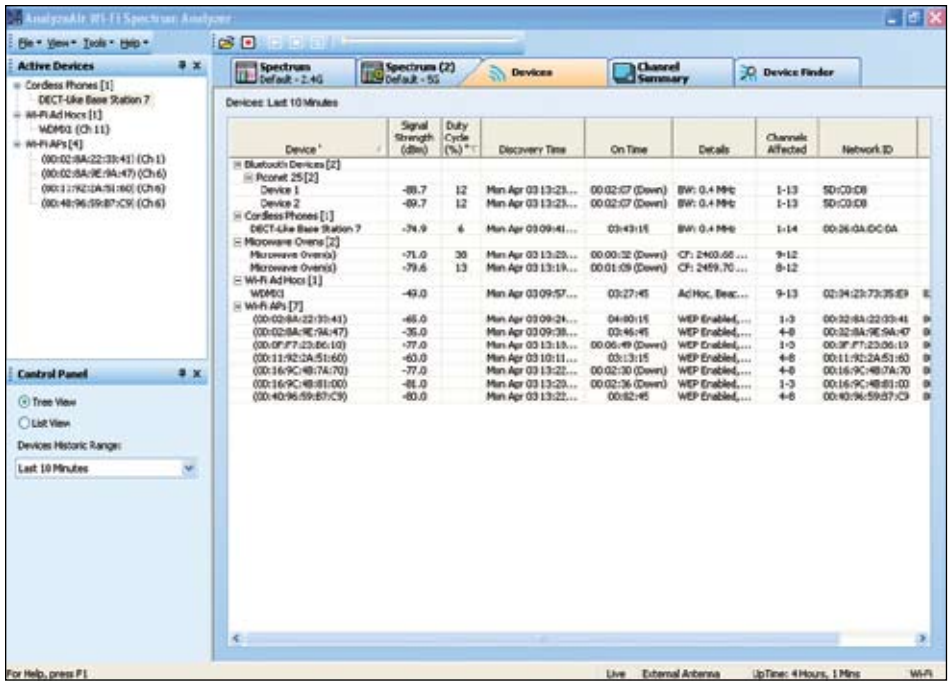
AnalyzeAir software interprets the RF energy in the spectrum or channel and lists the devices that are transmitting – associating real devices on the energy pulses. With AnalyzeAir software, you know what the problem is immediately and can quickly identify it. To find out more information about a device, simply click on it. AnalyzeAir software's user-friendly interface puts valuable information at your fingertips, so you can troubleshoot your network quickly. AnalyzeAir automatically identifies Bluetooth devices, cordless phones, microwave ovens, analog video cameras, and RF jammers.

Device Finder

Device Finder makes it easy to locate troublesome or unauthorized devices. Just click on the offending device and Device Finder will tell you its signal strength. As you move closer or farther away from the device, Device Finder's signal strength will change. Using this dynamically changing signal, you can quickly narrow in on the offending device and determine its exact location.

Save spectrum information for later analysis

Capture and save spectrum information for later analysis, similar to protocol analyzers. Technicians can record events in the field, save them to a file and take the results back to the central network operations center. Need to track your spectrum behavior? Use AnalyzeAir software to create a baseline and periodically log new events to track changes across your network.



The Devices View shows detailed statistics for each device, including both currently active devices and historical devices. Devices listed here include both 802.11 network devices and interferers. Quickly determine what channels are being impacted by interference by looking at the current interfering signal strength in dBm in regards to the impacted channels.

Easily locate interference in 802.11 WLANs with Device Finder. Simply click on the offending device and Device Finder will tell you its signal strength. As you move closer or farther away from the device, Device Finder's signal strength will change, allowing you to quickly narrow in on the offending device and determine its exact location.

Device impact statistics

AnalyzeAir software lists the devices using your RF spectrum and shows the impact of each device on your network. How much is a microwave oven affecting your network? Which channels is it degrading? AnalyzeAir Wi-Fi Spectrum Analyzer will show you.

Device and security alerts

AnalyzeAir provides color coded flags to identify interfering devices that are impacting your network or possible security risks. Easily customize AnalyzeAir's alerts and their levels to fit your needs.

View multiple charts and plots

You can create custom diagnostic view configurations, choosing from 10 available plots and charts. Each plot or chart may be customized to display only the specific data you require. Available graphs include:

Plots:

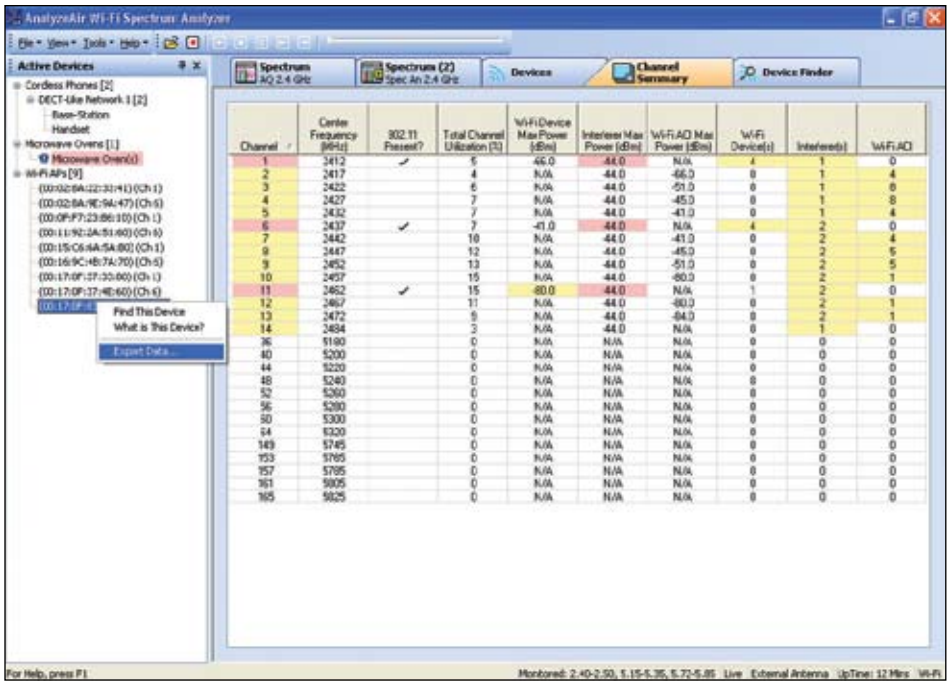
- Real Time FFT
- FFT Duty Cycle
- Swept Spectrogram
- Power vs. Freq
- Power vs. Time

Charts:

- Active Devices
- Devices vs. Channel
- Devices vs. Time
- Channel Utilization
- Channel Utilization vs. Time
- Interference Power

Security management

Do you have unauthorized wireless devices transmitting? Use AnalyzeAir software to track and label all types of unlicensed band transmissions to help you eliminate back-doors and quickly stop physical denial-of-service attacks.



Quickly determine which channels contain 802.11 network devices, the number of interfering devices on those channels and the channel's current max power in dBm. With this information, you can quickly determine which of your channels are being impacted by interference.

OptiView™ Series II Integrated Network Analyzer – complete wired and wireless analysis

OptiView analyzer's available CardBus slot allows you to easily run AnalyzeAir software in real-time. Now you can increase OptiView analyzer's power to provide you with real-time spectrum analysis in addition to its wired-side network analysis and monitoring capabilities to give you complete network vision in one power-packed portable tool.

In addition to AnalyzeAir, you can equip your OptiView analyzer with the Wireless Network Option, letting you analyze your airwaves like you analyze your wires. See your WLAN networks, including the results of seven layer protocol analysis, active discovery, SNMP device analysis, RMON2 traffic analysis and physical layer testing.

The wireless option extends the OptiView analyzer's capabilities: monitoring all 802.11a/b/g channels to capture and decode data packets, identify rejected association requests and pinpoint access-point conflicts.

Form factor

AnalyzeAir software leverages your existing OptiView analyzer or laptop (with an available CardBus slot) so you don't have to carry additional devices. Its small size and weight allow you to carry it all the time, and data capture is limited only by the amount of storage space on your OptiView or laptop. You can troubleshoot wireless problems faster since AnalyzeAir software is with you. You no longer have to track down a spectrum analyzer and an RF engineer to interpret the data.

System requirements

- OptiView™ Series II Integrated Network Analyzer ***or*** laptop computer with Pentium® series processor running at 1 GHz or faster
- Windows® 2000 SP4 or Windows® XP SP1 or SP2
- 512 MB RAM
- Display resolution of 800 x 600 or higher (1024 x 768 recommended)
- 30 MB of available hard disk space
- Available CardBus slot
- 802.11 capability (recommended)
- CD or DVD drive

Network SuperVision Gold Support

Sign up for our Gold Support plan and you'll enjoy outstanding privileges to support and value to your investment in Fluke Networks products. These include unlimited tech assistance seven days a week, 24 hours a day via phone or at our web site support center. Free software upgrades. Unlimited web based training and discounted pricing on instructor-led and custom on-site training programs. Access to our extensive Knowledge Base library of operation and application related technical articles. And Gold "Members Only" special prices and promotions. Some benefits are not available in all countries.

See **www.flukenetworks.com/goldsupport** for more information.

Technical specifications

Device classifiers	Wi-Fi protocols, Bluetooth devices, cordless phones, analog video, microwave ovens
Frequency range	2.4-2.5 GHz (802.11b/g or ISM band) and 4.9-5.9 GHz (Public Safety, 802.11a)
Operating temperature	32°F to 131°F (0°C to 55°C)
Storage temperature	-4°F to 149°F (-20°C to 65°C)
Certifications	FCC Part 15 Class B EN61326-1 CE, ICES-0003
Accessories	2.4/5 GHz Omni Antenna with 2.5 dBi gain (2.4 GHz), and 3.4 dBi gain (5 GHz) 2.4/5 GHz Directional Antenna with 5.0 dBi gain (2.4 & 5 GHz); Azimuth beamwidth (V pol) 75° min, 90° typ, 120° max, Elevation beamwidth (V-pol) 55° min, 65° typ, 75° max Antenna mounting base

Ordering information

ANALYZEAIR	AnalyzeAir PC card Omni and Directional Antennas AnalyzeAir CD includes application software and users manual
IA-AA	Wireless Software Suite including: InterpretAir™ WLAN Survey software and AnalyzeAir Wi-Fi Spectrum Analyzer
ES2-PRO-IA-AA	EtherScope™ Pro Series II Network Assistant with InterpretAir™ and AnalyzeAir
OPVS2-IA-AA	OptiView WLAN Software Suite: InterpretAir and AnalyzeAir, OptiView edition
OPVS2-WLESS	OptiView WLAN Suite, WLAN Analyzer with InterpretAir and AnalyzeAir
GLD-ANALYZEAIR	Gold support

Free trial

Download a copy of AnalyzeAir software and discover its rich feature set via a set of saved spectrum files. Replay the data and experience the visibility that AnalyzeAir Wi-Fi Spectrum Analyzer provides. Download your copy from Fluke Networks' web site at: **www.flukenetworks.com/analyzeair**

NETWORKSUPERVISION

Fluke Networks
P.O. Box 777, Everett, WA USA 98206-0777

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