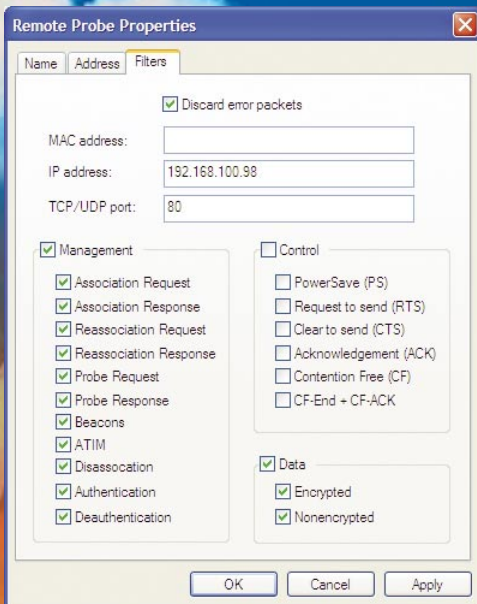


# RFGrabber™

distributed WLAN analysis probe



**RFGrabber's on-probe filtering allows for the selection of only the necessary traffic to find and fix the specific issue on a remote wireless network.**

## Use RFGrabber to remotely

- Check signal strength
- Scan for rogue access points
- Troubleshoot applications on a WLAN
- Verify security policy adherence
- Monitor client connectivity
- Gauge usage

## RFGrabber Solution consists of

- RFGrabber Probe
- AiroPeek NX

## Product Overview

WildPackets' RFGrabber solution fundamentally changes wireless network management by allowing IT Professionals to remotely analyze WLAN segments.

RFGrabber is a combination hardware/software solution, consisting of the RFGrabber Probe and AiroPeek NX. With the RFGrabber Solution, networking professionals can now use AiroPeek NX to analyze wireless segments at the edges of the network from the convenience of their desktop. Traveling to physically remote locations to monitor, analyze, and troubleshoot your wireless LAN is a thing of the past.

## Wireless LAN Growth

The explosive growth of wireless networks has dramatically changed the nature of network management. In deploying WLANs, network managers are freed from running wires throughout

their physical plant, allowing for broader and more widespread networking infrastructures. The additional capabilities delivered by wireless network access have given birth to new applications in many vertical markets, most notably manufacturing and health care. The demand for universal wireless access has also created a large and growing need for WISP Hot Spots (a Wireless Internet Service Provider's point of service).

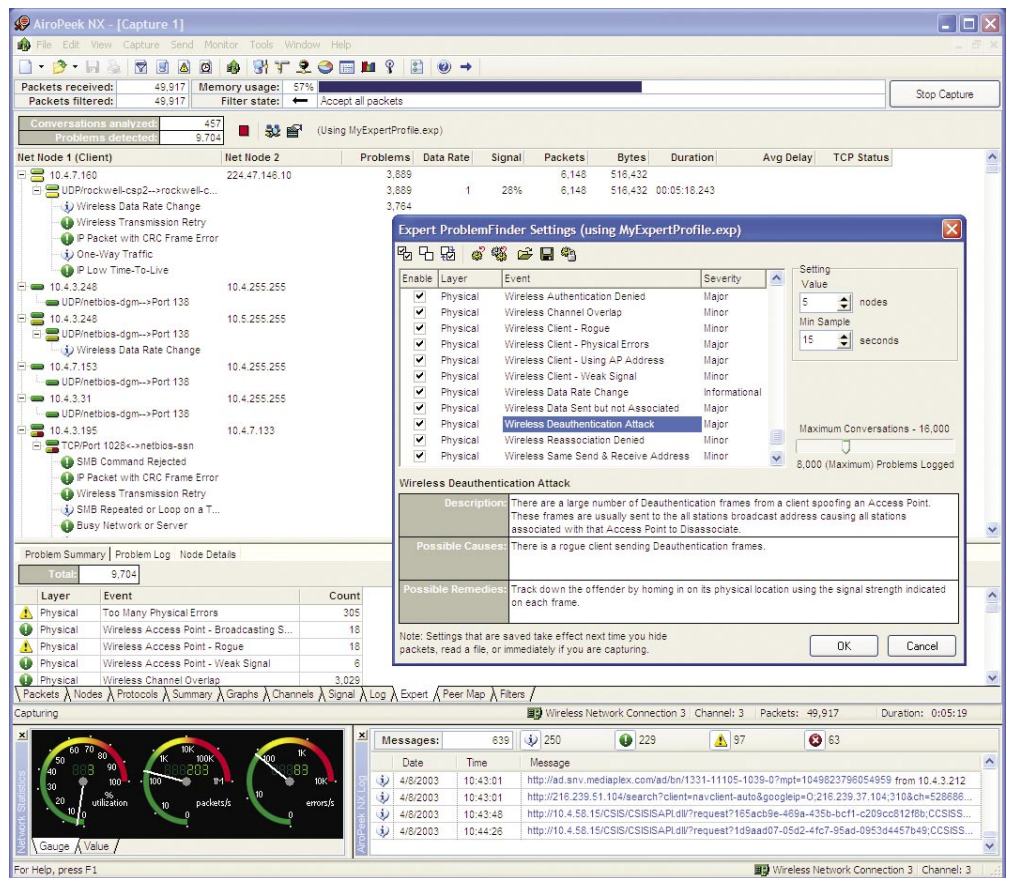
Rapid advances in WLAN deployment accelerate requirements for effective, intelligent network management. The remote nature of many of these burgeoning wireless networks presents new challenges for the network manager. With no technician at these remote sites, a new approach is required. Now, with the RFGrabber solution, network managers are empowered to troubleshoot and monitor their wireless networks from the convenience of a central location.



WildPackets' RFGrabber solution fundamentally changes wireless network management by allowing IT professionals to remotely analyze WLAN segments.

Whether it's on another floor of the building or across the country, having a remote analysis device standing ready to capture a problem situation or to simply monitor statistical trends at a remote site saves time and money.

RFGrabber's on-probe filtering ensures that the traffic gathered is only that traffic necessary for efficient identification and remedy of wireless network problems.



AiroPeek NX ProblemFinder provides descriptions, causes and remedies for each of the problem conditions the expert system encounters. Equipped with an RFGrabber probe, expert analysis can be extended to remote networks.

### Using RFGrabber with AiroPeek NX

The RFGrabber Probe, which can be deployed within each remote WLAN, gathers network traffic. This traffic can then be received by AiroPeek NX in order to analyze, in real-time, the conditions on that remote segment. AiroPeek NX takes advantage of WildPackets' superior interface to configure the remote RFGrabber Probes with ease. It is recommended that a separate, dedicated management network be used so that communication between the probe and AiroPeek NX will not interfere with the normal functioning of the network. Alternatively, the connection between the RFGrabber Probe and AiroPeek NX can be the same network infrastructure that connects the various access points to the rest of the network.

The RFGrabber Probe is placed into RF Monitor mode in order to collect all of the 802.11 traffic in the environment (control, management and data). Those frames are then streamed in real-time to AiroPeek NX for analysis. The probe supports a set of filters in order to ensure that the traffic that is returned to AiroPeek NX is only what the network administrator needs.

### On-Probe Filtering

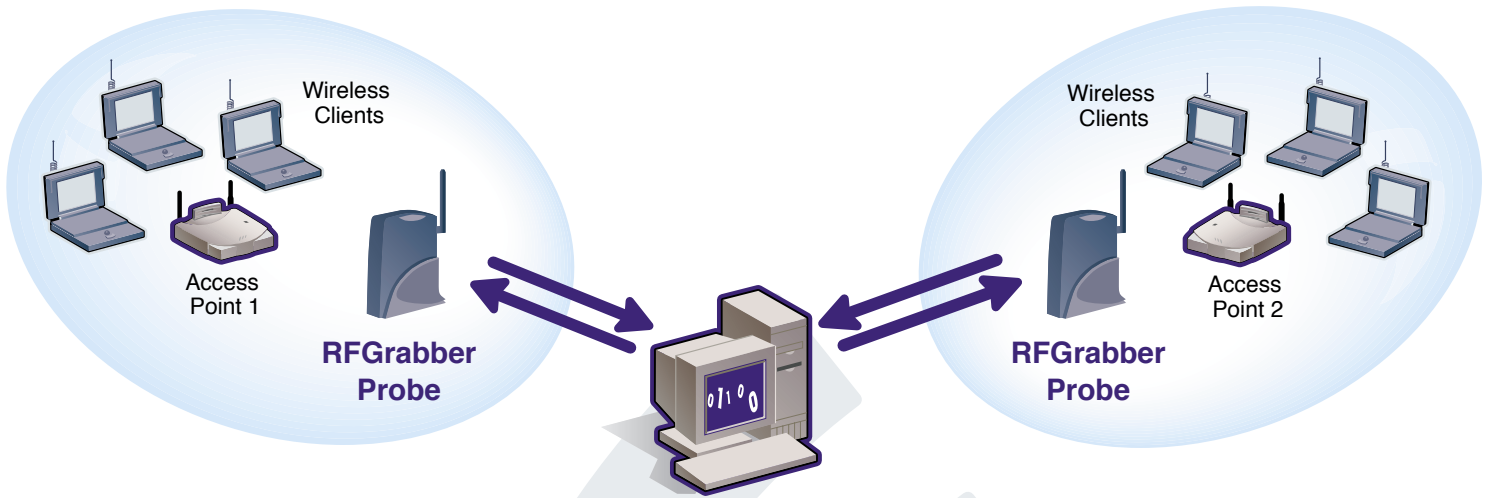
Flexible filtering capabilities are built into RFGrabber. These filtering capabilities ensure that the traffic that is gathered is the traffic that is necessary for efficient identification and remedy of wireless network problems. RFGrabber contains filters for management, control, and data traffic.

### AiroPeek NX

AiroPeek NX combines expert analysis capabilities with WildPackets' proven wireless LAN analysis technology. This combination allows network managers to monitor their wireless networks with powerful problem detection heuristics and 802.11-specific diagnostic capabilities. AiroPeek NX expert technology includes robust troubleshooting tools such as latency and throughput analysis, a graphical host and conversations map, and dozens of wireless specific network problem diagnoses. This industry-leading expert technology delivers the most precise and comprehensive analysis of wireless networks available today. AiroPeek NX also contains extensive filters which refine the focus on certain network traffic, as well as powerful alarms which alert to potentially problematic conditions on the remote wireless segment. For more comprehensive information on AiroPeek NX, please visit

[www.wildpackets.com/products/airopeek\\_nx](http://www.wildpackets.com/products/airopeek_nx)





The RFGripper Probe captures the same traffic seen by nearby Access Points and streams it via a conventional IP network to the network engineer running AiroPeek NX.

Network Administrator with AiroPeek NX



Channel	Total	Data	Mgmt	Ctrl	WEP	Cur. Signal dBm
1	5,563	2,769	1,956	445	2,752	-70
2	1,094	15	461	32	12	-63
3	946	9	392	48	7	-64
4	1,134	0	584	45	0	-69
5	790	3	315	24	0	-77
6	1,013	0	562	40	0	-78
7	1,049	0	356	3	0	-78
8	3,420	808	486	160	805	-72
9	2,530	300	402	107	299	-67
10	2,385	296	458	122	295	-68
11	20,416	9,210	2,513	6,060	9,173	-65
12	-	-	-	-	-	-
13	-	-	-	-	-	-
14	-	-	-	-	-	-

Equipped with an RFGripper probe, AiroPeek NX can monitor signal strength in remote wireless networks.

Channel	Total	Data	Mgmt	Ctrl	Sta-to-Sta an...	From AP
1	6,496	0	5,749	0	5,749	0
2	8,321	751	6,003	126	6,129	0
3	10,063	3,002	4,370	1,820	6,190	0
4	8,172	1,066	5,230	626	5,856	0
5	106,546	2,868	4,636	28,321	33,083	0
6	1,084,380	71,083	23,804	361,907	385,711	502
7	164,941	3,066	21,076	38,089	59,165	0
8	39,260	691	26,149	1,699	27,848	0
9	35,374	3,756	25,041	2,072	27,113	0
10	33,791	1,627	26,596	1,196	27,792	0
11	35,907	3,377	31,339	126	31,465	3,251
12	-	-	-	-	-	-
13	-	-	-	-	-	-
14	-	-	-	-	-	-



## RFGrabber Probe Specifications

The RFGrabber Probe is designed to be available 24x7x365 and to be fault tolerant and fail-safe. If the power should be interrupted for any reason, the device is designed to auto-recover and return to its previous operating state before the interruption. The probes are also field-upgradeable. Firmware updates can be deployed without having to take the probe out of the field, ensuring a minimum of downtime.

### Operating Range

Indoors: Up to 50 m (164 ft.) @ 11 Mbps

Up to 80 m (263 ft.) @ 5.5 Mbps or lower

Outdoors: Up to 150 m (492 ft.) @ 11 Mbps

Up to 300 m (984 ft.) @ 5.5 Mbps or lower

### Hardware Specifications

- Height: 135mm
- Depth: 103mm
- Width: 29mm at top, 60mm at base
- Unit Weight 7.1 oz. (0.2 kg)
- Requires a 5V, 1A, DC power supply (US power supply included)
- 4 LEDs: "PWR", "LAN", "WLAN", "DIAG"
- Certifications FCC Class B, CE Mark
- Operating Temp. 32°F to 122°F (0°C to 50°C)
- Storage Temp. -13°F to 158°F (-25°C to 70°C)
- Operating Humidity 10% to 90% Non-Condensing
- Storage Humidity 10% to 90% Non-Condensing

### Channels

11 Channels (US, Canada)

13 Channels (Europe)

14 Channels (Japan)

### Hardware Features

- Captures from IEEE 802.11b (DSSS) 2.4GHz-Compliant Equipment
- No Additional Drivers Are Needed
- Supports 802.11b data rates of 11, 5.5, 2, and 1Mbps
- Low Interference and Low Susceptibility Provide Reliable Performance
- Equipped with One Standard 10Base-T Interface for Connection with Any Ethernet-Ready Networked Resource
- Capable of up to 128-Bit WEP Decryption
- Easy and Quick Setup

## Technical White Papers

Visit [www.wildpackets.com/resources](http://www.wildpackets.com/resources) to get copies of our "Remote Analysis of a Wireless LAN Environment," "AiroPeek NX and Wireless Security" and "Expert Packet Analysis" papers.

### WildPackets Academy

WildPackets Academy offers comprehensive network analysis training, meeting the professional requirements of network managers at all levels. All course offerings are available in public venues and as customizable on-site programs. For complete course outlines and schedules, visit [www.wildpackets.com/academy](http://www.wildpackets.com/academy)

### Network Analysis Expert (NAX™) and Certified Wireless Network Expert (CWNE™) Certification

A properly qualified networking professional is the best person to support today's complex computer communication infrastructures.

The NAX Certification Program, with information available at [www.nax2000.com](http://www.nax2000.com), is positioned as an industry-standard and vendor-neutral method for demonstrating protocol analysis expertise. The CWNE Certification Program, with information available at [www.cwne.com](http://www.cwne.com), is designed specifically for wireless networking expertise and has been endorsed by the Wireless LAN Association ([www.wlana.org](http://www.wlana.org)), and by NACSE ([www.nacse.com](http://www.nacse.com)).

### Ordering Information

WildPackets products are available from our Channel Partners, directly from WildPackets, or from our electronic purchase area at:

[www.wildpackets.com/purchase](http://www.wildpackets.com/purchase)

## WildPackets, Inc.

Since 1990, WildPackets has been developing powerful, affordable tools designed to simplify the complex tasks associated with designing, maintaining, troubleshooting and optimizing computer networks.

### Solution Suites

Our solution suites perform a variety of network management tasks, including: performance management, fault management, throughput analysis, trend analysis and more. They are available for purchase in various configurations: single license, site license and bundles.

Our representative solution suites include:

Wireless Analysis  
Remote Analysis  
Gigabit Ethernet  
Training Bundles

For more information, visit  
[www.wildpackets.com/products](http://www.wildpackets.com/products)

## WildPackets

1340 Treat Blvd, Suite 500  
Walnut Creek, CA 94597  
(925)937-3200  
fax (925)937-3211

[www.wildpackets.com](http://www.wildpackets.com)

