

# Comparative Full-Time Wireless Intrusion Detection and Prevention System (WIPS) Costs by Vendor



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Some people believe strongly in deploying full-time, dedicated wireless intrusion detection and prevention systems (WIPS), because part-time scanning performed by Wi-Fi APs leaves wireless LAN channels vulnerable for much of the time. Others feel that using a single AP for part-time transmission and part-time scanning – a so-called “time-sliced” setup that comes free of charge in most WLAN systems – is “good enough.”

Others reckon that if they are on top of their wired security, the wired network should be able to block any intrusions coming from the wireless side. However, this thinking doesn’t account for intrusions into the hard drives of internal wireless devices themselves, the potential for an outsider to piggyback onto user over-the-air connections, or for authorized clients associating to unauthorized and potentially dangerous APs.

Still others feel that dedicated WIPS is simply too expensive.

To this last point, this document looks under the hood at the comparative capex/installation costs of full-time WIPS systems from the following vendors: AirMagnet, AirTight Networks, Aruba, Cisco, and Motorola. Some of these systems are integrated into a WLAN transmission system; some are offered as a vendor-neutral third-party overlay; still others are offered as a third-party overlay by companies that also offer WLAN transmission systems.

The comparative costs make the following presumptions:

- An 802.11a/b/g/n environment with all channels continually scanned
- A 50-sensor deployment (covering an installation of 200 to 250 APs)
- Total cost includes any necessary appliance or server hardware, appliance or server software, software licenses, sensor licenses, and cabling/installation fees, as shown, broken down in the following charts in alphabetical order by vendor.
- Costs are based on MSRP

What follows is not a fully comprehensive comparison of all vendors. Wi-Fi vendors that were not included do not offer full-time WIPS for 802.11a/b/g/n environments beyond a reference sell from a third-party WIPS overlay specialist (such as AirMagnet or AirTight Networks, included in this comparison). Qualitative components, such as the accuracy of the systems and the types of devices they can detect, were not taken into consideration here and should be explored with each vendor. The general conclusion of this research is that enterprises interested in a full-time, 50-sensor WIPS environment should budget about \$100,000 for the capability.

## Doing the Math for WIPS Capex Costs by Vendor

### 1. AirMagnet Enterprise (Overlay)

Product Type/ Brand	No. Needed	MSRP (USD)	TOTAL (USD)
AirMagnet Enterprise starter kit (server software, HA backup software, unlimited console licenses and four sensors)	1	8,995	8,995
Additional AirMagnet WIPS sensors	46	750	34,500
Sensor installation	50	500	25,000
Standard PC server hardware for WIPS processing software	1	2,000	2,000
<b>TOTAL FULL-TIME WIPS COST</b>			<b>70,495</b>

### 2. AirTight Networks SpectraGuard (Overlay)

Product Type/ Brand	No. Needed	MSRP (USD)	TOTAL (USD)
AirTight SpectraGuard WIPS Appliance with 50-sensor license	1	9,995	9,995
AirTight WIPS sensors	50	1,195	59,750
Sensor installation	50	500	25,000
<b>TOTAL FULL-TIME WIPS COST</b>			<b>94,745</b>

### ***3. Aruba Networks WIPS (Integrated; Controller Based)***

<b>Product Type/ Brand</b>	<b>No. Needed</b>	<b>MSRP (USD)</b>	<b>TOTAL (USD)</b>
Aruba MMC-3400 WLAN controller with 56 sensor support	1	11,795	11,795
Aruba AP-121 AP in air monitor mode	50	995	49,750
56-sensor WIP license for 3400 controller	1	2,890	2,890
Sensor installation	50	500	25,000
<b>TOTAL FULL-TIME WIPS COST</b>			<b>89,435</b>

### ***4. Aruba Networks RF Protect Distributed (Overlay; Server Based)***

<b>Product Type/ Brand</b>	<b>No. Needed</b>	<b>MSRP (USD)</b>	<b>TOTAL (USD)</b>
RFprotect Distributed WIPS Software with 10 sensor support	1	6,495	6,495
Standard PC server hardware for running RFprotect Distributed Software	1	2,000	2,000
Aruba AP-121 AP in air monitor mode	50	995	49,750
RFprotect Distributed WIPS Software 10 sensor license	4	1,780	7,120
Sensor installation	50	500	25,000
<b>TOTAL FULL-TIME WIPS COST</b>			<b>90,365</b>

### 5. Cisco Adaptive wIPS

Product Type/ Brand	No. Needed	MSRP (USD)	TOTAL (USD)
Cisco 3310 Mobility Services Engine (MSE)	1	6,995	6,995
Cisco Aironet 1140 APs deployed in WIPS sensor mode	50	1,295	64,750
Sensor licenses	2 (25 sensors each)	5,795	11,590
Sensor installation	50	500	25,000
Cisco 4402-50 Wireless LAN Controller (WLC) for managing 50 sensors	1	11,590	19,995
<b>TOTAL FULL-TIME WIPS COST</b>			<b>128,330*</b>
* Does not include the cost of a Cisco Wireless Control System (WCS) or Catalyst 6500 Wireless Services Module (WiSM), one of which is required for Cisco Adaptive wIPS. WCS or WiSM are assumed to be already present in a Cisco WLAN environment with more than two controllers.			

### 6. Motorola AirDefense WIPS

Product Type/ Brand	No. Needed	MSRP (USD)	TOTAL (USD)
Motorola AirDefense WIPS 1250 Appliance	1	5,995	5,995
Dedicated Motorola AP7131 Remote 11n Sensor with full WIPS license	50	1,500	75,000
Sensor installation	50	500	25,000
<b>TOTAL FULL-TIME WIPS COST</b>			<b>105,995</b>

### Summary

AirMagnet Enterprise	AirTight SpectraGuard	Aruba WIPS (Controller-based)	Aruba RFprotect (Server-based)	Cisco Adaptive wIPS	Motorola AirDefense WIPS
\$ 70,495	\$ 94,745	\$ 89,435	\$ 90,365	\$128,330	\$105,995

## About Joanie Wexler

Joanie Wexler has spent 20 years writing about computer networking technologies, their business potential and implementation considerations. Among her areas of specialty are mobile/wireless communications and emerging wide-area networks.

Ms. Wexler is an analyst and editor who contributes both bylined and ghost-authored articles and reports to prominent industry publications. For example, she authors the “Wireless Alert” electronic newsletter published by *Network World* twice weekly. She also regularly writes research reports for the editorial division of Webtorials ([www.webtorials.com](http://www.webtorials.com)) and pens the new “Wireless Pulse” monthly e-zine ([www.thewirelesspulse.com](http://www.thewirelesspulse.com)) for *The Voice Report*, a print newsletter for telecommunications managers published by CCMI. She also occasionally contributes feature-length articles to *Computerworld* and *Network World* and was a frequent contributor to the former *Business Communications Review*. She can be reached at [joanie@jwexler.com](mailto:joanie@jwexler.com).

