

# AIRDEFENSE ENTERPRISE APPLIANCES FOR BROCADE MOBILITY

## CAMPUS NETWORK

## Rack-Mount Appliances for Advanced Enterprise WLAN Security

### HIGHLIGHTS

- Provides comprehensive detection of wireless intrusion attempts
- Responds dynamically to wireless threats
- Identifies and automatically disables rogue devices
- Enables definition, monitoring, and enforcement of Wireless LAN (WLAN) policies
- Helps ensure timely and efficient analysis of security incidents
- Utilizes innovative add-on modules to provide advanced security capabilities

AirDefense® Enterprise Appliances for Brocade® Mobility solutions provide the most powerful wireless Intrusion Prevention System (IPS) available. Scaling to meet the needs of the largest global organizations, these appliances provide complete protection against wireless threats, policy compliance monitoring, robust performance monitoring and troubleshooting, and location tracking capabilities.

This innovative platform combines collaborative intelligence with secure sensors that work in tandem with purpose-built server appliances to monitor all 802.11 (a/b/g) wireless traffic in real time for the highest levels of security, rogue mitigation, and policy enforcement. Three models are available:

- **AirDefense 1250 Appliance for Brocade Mobility:** Packaged in a rack-optimized 1U chassis, the AirDefense 1250 provides

250 GB of storage for small WLAN deployments. It accommodates an Intel Pentium 4 3.4 GHz Processor and 1 GB of Error-Correcting Code DDR2 memory support.

- **AirDefense 3650 Appliance for Brocade Mobility:** Packaged in a rack-optimized 1U chassis, the AirDefense 3650 provides 250 GB of storage in RAID 1 configurations for medium-size to large WLAN deployments. It accommodates an Intel Core Duo 2.13 GHz Processor and 4 GB of Error-Correcting Code DDR2 memory support.
- **AirDefense 4250 Appliance for Brocade Mobility:** Packaged in a 2U chassis, the AirDefense 4250 provides 500 GB of storage in RAID 1 configurations and a redundant power supply for large to very large WLAN deployments. It accommodates an Intel 2.33 GHz Xeon 5140 Dual-Core Processor and 8 GB of fully buffered DDR2 memory support.



# BROCADE

## **COMPREHENSIVE INTRUSION DETECTION**

AirDefense Enterprise Appliances provide the industry's most comprehensive detection of wireless intrusion attempts. By analyzing existing and day-zero threats in real time against historical data, they can accurately detect all wireless attacks and anomalous behavior. With context-aware detection, correlation, and multidimensional detection engines, they detect only meaningful security events and maintain the lowest rate of false-positive alarms. Moreover, this next-generation wireless protection platform offers the industry's most extensive event library, with more than 200 security and performance events.

These appliances can mitigate wireless threats via the air by disabling wireless connections between intruders and authorized devices—extreme precision ensures that only the offending device is prohibited from operating. In addition, the appliances can identify the wired switch port to which offending devices are connected, turning it off to prevent the rogue device from accessing the wired network.

## **AUTOMATED PROTECTION**

AirDefense Enterprise Appliances respond automatically to wireless threats by stopping the suspect device before it can damage the network. By responding on both wireless and wired networks, these appliances provide the industry's most secure wireless intrusion prevention solution. To help ensure that only the correct intruders and rogue devices are disconnected, the appliances perform highly targeted terminations. They also maintain a record of termination actions to enable a reliable audit trail. In addition, the appliances comply with FCC regulations and help eliminate the liability that could be associated with stopping a device in a wireless manner.

## **STOP ROGUE DEVICES FROM CONNECTING TO THE NETWORK**

Rogue devices are a serious threat to enterprise security, and a single rogue access point can allow an attacker to gain full access to the internal network. To

prevent this from happening, AirDefense Enterprise Appliances can identify any rogue devices and disable them automatically if they are connected to the internal network.

By analyzing wireless traffic, they can determine the level of threat that a potential rogue device poses to the organization. This approach enables organizations to ignore neighboring devices and focus only on the rogues that present a serious threat. This advanced level of accuracy is essential, because less-sophisticated wireless IPS systems can easily disable a neighboring access point by mistake—exposing organizations to unwanted liability.

## **COMPLY WITH ENTERPRISE AND REGULATORY POLICIES**

Using AirDefense Enterprise Appliances, organizations can define, monitor, and enforce WLAN policies in the areas of security, performance, usage, and vendor types. In addition, they can minimize vulnerability by ensuring that wireless devices are using the proper security protocols. When a device is found to be non-compliant, the system notifies administrators about the specific discrepancy.

This flexible platform includes a variety of regulatory compliance reports for retail establishments, healthcare organizations, financial service providers, and government agencies. There are specific compliance reports for the Payment Card Industry (PCI) standard, Sarbanes-Oxley (SOX), HIPAA, GLBA, and the Department of Defense 8100.2 Directive. Organizations can simply print the applicable reports to demonstrate the wireless network's compliance.

## **INVESTIGATE INCIDENTS WITH FORENSIC DATA**

AirDefense Enterprise Appliances provide forensic data that helps organizations retrace any device's steps down to the minute. With forensic research, investigating an event takes minutes instead of potentially hours. Moreover, cases that normally would have required administrators to physically visit sites can now be investigated remotely.

Organizations can review minute-by-minute records of connectivity and communication with the network. By storing more than 325 data points per wireless device, per connection, per minute, AirDefense Enterprise Appliances enable organizations to view months of historical data on any wireless device that was discovered to be suspicious. The appliances store important information such as channel activity, signal characteristics, device activity, and traffic flow—and they can display time of attack/breach, entry point used, length of exposure, transfers of data, and systems compromised.

## **TROUBLESHOOT NETWORK PERFORMANCE**

With a real-time view of all WLAN traffic, AirDefense Enterprise Appliances enable organizations to remotely troubleshoot problems, identify and respond to network misconfiguration, and monitor network availability. The appliances analyze traffic flow to interpret WLAN performance and identify valuable information such as usage characteristics, interference from neighboring WLANs, channel overlap, and performance degradation.

In addition, the appliances can help measure network usage and performance by determining over-utilized access points and channels, pinpointing network congestion, and analyzing utilization and congestion trends. Organizations can drill down into a live streaming view of devices, BSSIDs, and channels to review items such as:

- Remote frame captures
- Authentication errors
- Access point configuration issues
- Network interference

## **LOCATION TRACKING**

Powerful location tracking technology enables organizations to minimize the amount of time required to find specific devices. After importing images of a floor plan and specifying the characteristics of the building, organizations can consistently locate devices within four cubicles.

## OPTIONAL ADVANCED SECURITY PLUG-INS

A wide range of add-on modules are available for AirDefense Enterprise Appliances, providing capabilities for enforcing wireless policy for remote users, advanced troubleshooting, WEP cloaking, spectrum analysis, and management of multiple appliances from a centralized console.

## SERVICES FOR AN END-TO-END SOLUTION

Brocade Global Services offers comprehensive customer support for Brocade enterprise wireless LAN products, including hardware and 24x7 software support, along with software updates and new releases.

## MAXIMIZING INVESTMENTS

To help optimize technology investments, Brocade and its partners offer complete solutions that include education, support, and services. For more information, contact a Brocade sales partner or visit [www.brocade.com](http://www.brocade.com).

## AIRDEFENSE 1250 SPECIFICATIONS

Processor	<ul style="list-style-type: none"><li>Intel Pentium4 3.4 GHz Processor</li><li>2 MB shared L2 cache and 800 MHz FSB</li></ul>
Memory	<ul style="list-style-type: none"><li>1 GB RAM</li><li>Error Correcting Code DDR2</li></ul>
Hard drives	<ul style="list-style-type: none"><li>One 250 GB 7200 RPM Serial ATA hard drive</li><li>High-reliability Seagate SV35 Series with 1,000,000 hour MTBF</li></ul>
Communication ports	<ul style="list-style-type: none"><li>Stacked PS/2 ports for keyboard and mouse</li><li>RJ45 NIC connector for 10/100/1000 Mb connections</li><li>Video connector</li></ul>
Bays	Slim Line DVD/CD-ROM
Certifications	UL, cUL, CE, RoHS 5/6
Power	<ul style="list-style-type: none"><li>250 W PFC auto-ranging power supply<ul style="list-style-type: none"><li>Full range: 100 to 240 VAC at 47 to 63 Hz</li></ul></li><li>Steady-state current:<ul style="list-style-type: none"><li>6 A max. at 115 V</li><li>3 A max. at 230 V</li></ul></li><li>Inrush current (at 25°C/77°F ambient cold start):<ul style="list-style-type: none"><li>65 A max. at 110 V</li><li>130 A max. at 220 V</li></ul></li></ul>
Dimensions	<ul style="list-style-type: none"><li>Server appliance dimensions<ul style="list-style-type: none"><li>45 mm H × 419 mm W × 401 mm D (1.8 in. × 16.5 in. × 15.8 in.)</li></ul></li><li>Sliding rail kit: 660 mm (26 in.)</li><li>With packaging:<ul style="list-style-type: none"><li>254 mm H × 572 mm W × 737 mm D (10.0 in. × 22.5 in. × 29.0 in.)</li></ul></li></ul>
Weight	<ul style="list-style-type: none"><li>Without packaging: 18 kg (40 lbs.)</li><li>With packaging: 20 kg (45 lbs.)</li></ul>
Environmental	<ul style="list-style-type: none"><li>Operating temperature: 10°C to 35°C (50°F to 95°F) with maximum rate of change not to exceed 10°C (50°F) per hour</li><li>Non-operating temperature: -20°C to 70°C (-4°F to 158°F)</li><li>Relative humidity, non-operating: 95% non-condensing at 35°C (95°F)</li><li>System cooling requirements: 1660 BTU/hour max.</li></ul>

## AIRDEFENSE 3650 SPECIFICATIONS

Processor	<ul style="list-style-type: none"><li>Intel 2.13 GHz Core2 Duo Processor</li><li>2 MB shared L2 cache and 1066 MHz FSB</li></ul>
Memory	<ul style="list-style-type: none"><li>4 GB RAM</li><li>Error Correcting Code DDR2</li></ul>
Hard drives	<ul style="list-style-type: none"><li>Two 250 GB 7200 RPM Serial ATA hard drives</li><li>High-reliability Seagate SV35 Series with 1,000,000 hour MTBF</li><li>RAID 1 configuration</li></ul>
Communication ports	<ul style="list-style-type: none"><li>Stacked PS/2 ports for keyboard and mouse</li><li>RJ45 NIC connector for 10/100/1000 Mb connections</li><li>Video connector</li></ul>
Bays	Slim Line DVD/CD-ROM
Certifications	UL, cUL, CE, RoHS 5/6
Power	<ul style="list-style-type: none"><li>250 W PFC auto-ranging power supply<ul style="list-style-type: none"><li>Full range: 100 to 240 VAC at 47 to 63 Hz</li></ul></li><li>Steady-state current:<ul style="list-style-type: none"><li>6 A max. at 115 V</li><li>3 A max. at 230 V</li></ul></li><li>Inrush current (at 25°C/77°F ambient cold start):<ul style="list-style-type: none"><li>65 A max. at 110 V</li><li>130 A max. at 220 V</li></ul></li></ul>
Dimensions	<ul style="list-style-type: none"><li>Server appliance dimensions<ul style="list-style-type: none"><li>45 mm H × 419 mm W × 401 mm D (1.8 in. × 16.5 in. × 15.8 in.)</li></ul></li><li>Sliding rail kit: 660 mm (26 in.)</li><li>With packaging:<ul style="list-style-type: none"><li>254 mm H × 572 mm W × 737 mm D (10.0 in. × 22.5 in. × 29.0 in.)</li></ul></li></ul>
Weight	<ul style="list-style-type: none"><li>Without packaging: 18 kg (40 lbs.)</li><li>With packaging: 20 kg (45 lbs.)</li></ul>
Environmental	<ul style="list-style-type: none"><li>Operating temperature: 10°C to 35°C (50°F to 95°F) with maximum rate of change not to exceed 10°C (50°F) per hour</li><li>Non-operating temperature: -20°C to 70°C (-4°F to 158°F)</li><li>Relative humidity, non-operating: 95% non-condensing at 35°C (95°F)</li><li>System cooling requirements: 1660 BTU/hour max.</li></ul>

**AIRDEFENSE 4250 SPECIFICATIONS**

Processor	<ul style="list-style-type: none"> <li>Intel 2.33 GHz Xeon 5140 Dual-Core Processor</li> <li>4 MB shared L2 cache and 1333 MHz FSB</li> <li>Total dissipated power 65 W</li> </ul>
Memory	<ul style="list-style-type: none"> <li>8 GB RAM</li> <li>Error Correcting Code Fully Buffered DDR2</li> </ul>
Hard drives	<ul style="list-style-type: none"> <li>Two 500 GB 7200 RPM Serial ATA hard drives</li> <li>High-reliability Seagate SV35 Series with 1,000,000 hour MTBF</li> <li>RAID 1 configuration</li> </ul>
Communication ports	<ul style="list-style-type: none"> <li>Stacked PS/2 ports for keyboard and mouse</li> <li>Two RJ45 NIC connectors for 10/100/1000 Mb connections</li> <li>Video connector</li> </ul>
Bays	Slim Line DVD/CD-ROM
Certifications	UL, cUL, CE, RoHS 5/6
Power	<ul style="list-style-type: none"> <li>1 + 1 redundant power system</li> <li>500 W PFC auto-ranging power supply <ul style="list-style-type: none"> <li>Full range: 100 to 240 VAC at 50 to 60 Hz</li> </ul> </li> <li>Steady-state current: <ul style="list-style-type: none"> <li>8 A max. at 115 V</li> <li>4 A max. at 230 V</li> </ul> </li> <li>Inrush current (at 25°C/77°F ambient cold start for each power unit): <ul style="list-style-type: none"> <li>60 A max. at 115 V</li> <li>100 A max. at 230 V</li> </ul> </li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>Server appliance dimensions: <ul style="list-style-type: none"> <li>89 mm H × 419 mm W × 546 mm D (3.5 in. × 16.5 in. × 21.5 in.)</li> </ul> </li> <li>Sliding rail kit: 660 mm (26 in.)</li> <li>With packaging: <ul style="list-style-type: none"> <li>254 mm H × 572 mm W × 737 mm D (10.0 in. × 22.5 in. × 29.0 in.)</li> </ul> </li> </ul>
Weight	<ul style="list-style-type: none"> <li>Without packaging: 24 kg (55 lbs.)</li> <li>With packaging: 29 kg (65 lbs.)</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>Operating temperature: 0°C to 40°C (32°F to 104°F) with maximum rate of change not to exceed 10°C (50°F) per hour</li> <li>Non-operating temperature: -20°C to 70°C (-4°F to 158°F)</li> <li>Relative humidity, non-operating: 90% non-condensing at 35°C (95°F)</li> <li>System cooling requirements: 2700 BTU/hour max.</li> </ul>

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