

# AeroGuard™

## MIMO Wireless Mesh Solution

The first available wireless Mesh solution based on True MIMO™ technology that offers a new paradigm in WLAN performance for scalable *all-wireless* business networks.

SOHware introduces AeroGuard™ MIMO, a multi-mode WLAN solution that is unprecedented in design and function, offering industry leading performance that enables the wireless network to support today's business applications as effectively as wired Ethernet. The result is a wireless Mesh solution that means greater investment returns for business owners and a competitive edge to VARs who service them.

AeroGuard™ is the first wireless Mesh solution that supports the enhanced range and capacity benefits of True MIMO™ technology. AeroGuard™ supports up to 108Mbps over a single 20 MHz channel, offering typically 2x to 4x range improvement over conventional wireless LAN solutions. These wire speed mesh connections are supported in either 2.4GHz and 5GHz bands, with simultaneous AP coverage that is fully compatible with existing 802.11b, 11g or 11a clients.

### Wireless Mesh Networks

Dual radios in the AeroGuard™ MIMO Access Point support *all-wireless* networks by enabling AP coverage and simultaneous wireless mesh links between APs. Built-in intelligence automates the discovery, configuring and monitoring of AeroGuard networks, including dynamic data path routing that self heals in response to Class-of-Service requirements.

### Hierarchical Management

AeroGuard™ offers unprecedented scalability and reliability with built-in security and administrative intelligence that supports local and remote management of one or multiple distributed wireless LAN installations. Embedded domain management features in each AP provide breakthrough control and management at the domain level, enabling the VAR to cost effectively deploy WLANs without the addition of separate WLAN controllers.

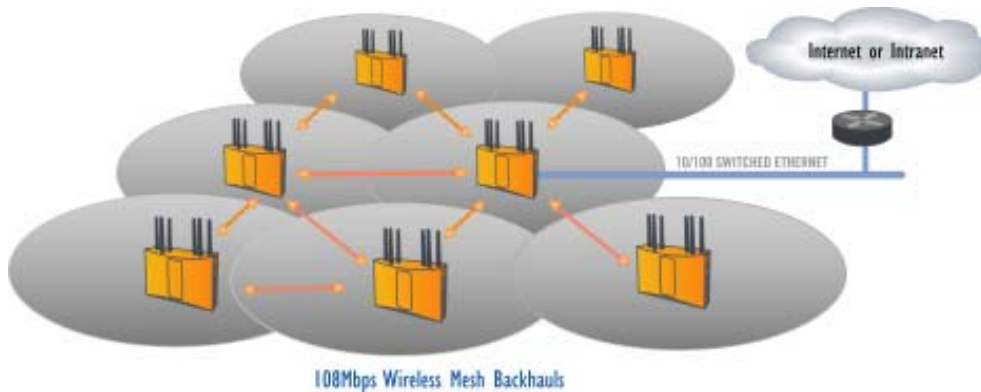
### Voice over Wi-Fi Ready

AeroGuard™ can support voice, video and other streaming data like no other WLAN solution with 802.1e compliant QoS that further enhances MIMO's superior range and reliability. AeroGuard™ is the wireless LAN solution of choice for businesses who deploy next generation mobile user applications.



# Enabling All-Wireless Mesh Networks

AeroGuard™ MIMO wireless Mesh solutions are purpose-built to support wireless LANs without the use of Ethernet cables; ideal for rapid deployment with minimal capital investment where wiring is either impractical or cost prohibitive.



## AeroGuard™

### Dual Radio Design

- 802.11b/g (2.4GHz)
- 802.11a (5.8GHz)

### MIMO Wireless Mesh

- 108Mbps Backhaul
- P2P and Multi-hop
- Dynamic path routing

### Embedded Intelligence

- Auto discovery
- AP Enrollment Control
- Auto Configuration
- Auto Policy Distribution
- CoS and Load Balancing

## The True MIMO™ Difference

AeroGuard™ MIMO is like no other wireless LAN solution. The first MIMO based wireless Mesh system available today, RF performance is actually enhanced by the obstacles found in typical environments that would otherwise attenuate a conventional Access Point's range and performance.

### Multiple Input - Multiple Output (MIMO)

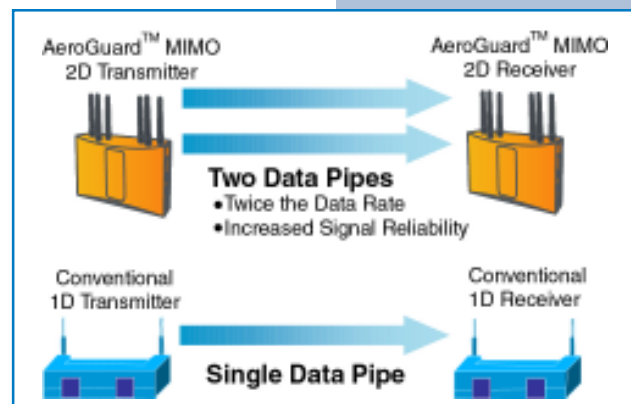
The unique multiple antenna design of MIMO creates multiple data pipes on a single 20 MHz channel for a more robust and reliable RF solution than is possible with conventional Wi-Fi solutions.

### MIMO Excels Where Obstacles Occur

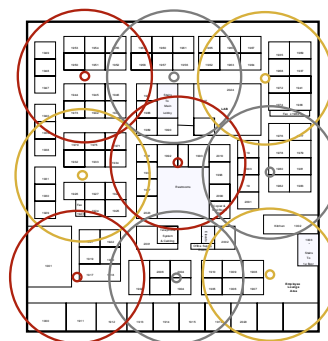
The multiple antenna technology of MIMO is actually enhanced by walls, ceilings, partitions, furniture and other objects. AeroGuard™ is a more effective Wi-Fi solution for real-life conditions.

### MIMO reduces infrastructure complexity

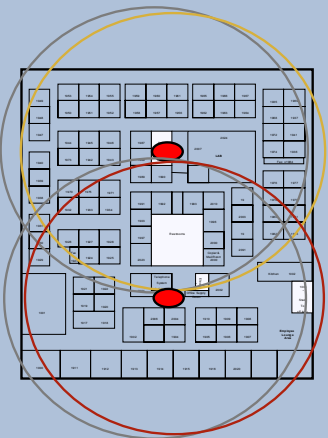
AeroGuard™ MIMO APs do the job of 2, 4 or even 6 conventional Wi-Fi APs, reducing deployment time, cost and complexity and making AeroGuard™ a superior solution for lowering the total cost of ownership.



### Conventional APs



### AeroGuard™ MIMO APs



### An Office Application Scenario

The floor plan depicts a real office environment consisting of cubicles and permanent offices and conference rooms. With conventional Wi-Fi Access Point technology a site survey was conducted which requires 9 APs would register complete coverage with only 2 AeroGuard™ MIMO APs.



## Streaming Support with L3 Roaming

AeroGuard™ includes the most advanced Quality of Service features available in wireless LAN technology. The MIMO AP supports both 802.11e wireless QoS and 802.1p packet tagging that sustain Class-of-Service assignments even for mobile users who roam across multiple subnets. AeroGuard™ is the solution of choice for businesses and institutions that need to assure seamless service connectivity for mission critical voice and streaming applications, such as medical personnel mobile communications and real-time video surveillance.

### Upstream - Downstream QoS Identifiers

- 802.1p classification
- Per VLAN and per Station tagging
- Robust QoS priority mapping

### Four Class-of-Service (CoS) Levels

- Enables differentiated treatment per user group
- Packet type rules prioritize streaming applications
- 802.11e prioritized (eDCA) and scheduled (HCCA)

### More Useable Bandwidth

- Enables differentiated treatment per user group
- Packet type rules prioritize streaming applications
- 802.11e prioritized (eDCA) and scheduled (HCCA)



## Interoperability

AeroGuard™ MIMO solutions integrate seamlessly with existing WLAN infrastructure and offer enhanced performance results, even in a mixed conventional and MIMO technology environment.

## The AeroGuard™ Solution

### AGN1200 Series MIMO Access Points

- 108Mbps MIMO range and performance
- Multi-mode support - 802.11a and 802.11b/g
- Wireless mesh backhaul functionality
- 802.11i ready security
- Embedded Security and Management Portal software
- Fully compliant with conventional Wi-Fi clients



### AGN1023PC MIMO CardBus Adapter

- 108Mbps MIMO range and performance to a MIMO AP
- Multi-mode support - 802.11a and 802.11b/g
- 802.11i ready security
- Standard PCMCIA interface for mobile PCs
- Fully compliant with conventional Wi-Fi APs



### AeroGuard NMS - Management Appliance

- IPC platform with 1GHz Celeron processor
- Intuitive Web interface
- Single station viewing of multiple AeroGuard sites
- Complete SNMPv3 monitoring, alarms and scheduling



(c) 2004-2005, SOHware, Inc. All rights reserved (v2.0).  
Product image and specifications are subject to change without prior notice.  
AeroGuard is a trademark of SOHware, Inc.