



## XS-3500 Overview

- > Embedded Wi-Fi Controller/Switch
- > 4 802.11a /b/g Integrated Access Points
- > Multi-sector Antenna System
- > Gigabit Ethernet Switch
- > Dedicated Wi-Fi Threat Sensor
- > Wi-Fi Firewall

.....All in a Single Device.

## Value Delivered

- > Wi-Fi Bandwidth: Up to 216Mbps
- > Typical Coverage: 125,000sqft
- > 75% Fewer Devices to Deploy & Manage
- > Integrated Intrusion Detection & Prevention

Rounding out Xirrus' family of Wi-Fi Arrays, the XS-3500 combines a Wi-Fi Controller/Switch, 4 802.11a/b/g Integrated Access Points and high-gain Multi-sector Antenna System delivering 216Mbps of Wi-Fi™ bandwidth over an extended coverage area.

Utilizing a small, sleek form factor, the XS-3500 supports a variety of deployment options and is ideally suited for providing service in smaller, branch office locations or to supplement other Wi-Fi Arrays in larger networks.

The XS-3500 features 4 software programmable 802.11a/b/g Integrated Access Points – one of which can be used as a dedicated Monitor to continually scan the RF environment for rogue access points and other security threats. The Integrated Access Points are co-located in a circular configuration using a high gain, Multi-sector Antenna System delivering increased directional transmit and receive gain in all directions. This unique approach increases rate and range in all directions and reduces the number of devices needed in the Wi-Fi network – greatly simplifying and reducing the cost of deployment.

### High Performance Wi-Fi for Data | Voice | Video

- 216Mbps of Wi-Fi bandwidth
- 3X the throughput of a typical Access Point
- Low latency Wi-Fi with end-to-end QoS

### Long Range Wi-Fi means Fewer Devices to Deploy

- 2X the range = 4X more coverage
- 75% fewer Access Points, cabling, and switch ports
- Simplified site planning

### High Density Wi-Fi to Support Hundreds of Users

- Supports over 200 simultaneous users
- Up to 162Mbps of self-healing Array-to-Array wireless backhaul
- Support for Fast Ethernet speed Wi-Fi "Campus Mesh"

### Structured Wi-Fi™ to Bring Order to Wireless

- "Perfect Fit" coverage with per sector control of transmit power & receiver sensitivity
- Optimizes transmit power, channel and receiver sensitivity
- Load balances clients between Integrated Access Points

### Highly Secure Wi-Fi to Detect & Protect Against Threats

- 24x7 embedded Intrusion Detection & Prevention
- Latest encryption and authentication support
- Integrated Wi-Fi Firewall and Filtering

### Highly Resilient Wi-Fi for Peace of Mind

- Overlapping radios prevent dropped sessions and calls
- Self-healing Wi-Fi backhaul to ensure sustained throughput
- "Hot Standby" mode provides complete Array-to-Array failover

### Lower Cost than Previous Generations

- One Array typically covers the same area as 4 competitive Access Points

- Requires no additional closet equipment as the Wi-Fi Controller/Switch is built-in
- Every Array includes a dedicated & integrated Wi-Fi Threat Sensor



## Specifications

### Embedded Wi-Fi Controller/Switch

- 1Gbps switching fabric
- 256MB RAM expandable
- 128MB system FLASH expandable
- Xirrus PCI-X Expansion Slot for future options
- Line speed performance of Encryption Engines

### Radio Interfaces

- 4 802.11a/b/g, one of which can be a dedicated Wi-Fi Threat Sensor

### RF Bandwidth

- 216Mbps aggregate

### Wireless Standards

- 802.11a, 802.11b/g and 802.11g-only modes
- 802.11d, 802.11e, 802.11h, 802.11i
- Upgradeable to 802.11n

### Sectored Antennas

- 4 internal 3dBi 180° 802.11a/b/g sectored antennas
- 1 internal 2dBi 360° Omni-directional antenna
- 1 RP-TNC connector for an external antenna

### Frequency Bands 802.11a/b/g

- 11b/g: 2.412-2.462 GHz (FCC)
- 11b/g: 2.412-2.472 GHz (ETSI)
- 11b/g: 2.412-2.484 GHz (TELEC)
- 11a: 4.940-4.990 (Safety)
- 11a: 5.15-5.25 GHz (UNII I)
- 11a: 5.15-5.25 GHz (TELEC)
- 11a: 5.25-5.35 GHz (UNII II)
- 11a: 5.470-5.725 (ETSI)
- 11a: 5.725-5.825 GHz (UNII III)

### Coverage Pattern

- Typical office environment is 125,000sqft
- Each RF Sector individually configurable

### Security

- WPA-TKIP: WPA-PSK-TKIP, WPA-AES, WPA-PSK-AES
- WPA2-802.11i: WPA2-AES, WPA2-PSK-AES, WPA2-TKIP, WPA2-PSK-TKIP
- WEP 40bit/128bit encryption
- Integrated Firewall & Filtering
- Supports multiple security settings
- Station to Station blocking
- Define access by time of day

### Multiple SSID Support

- Allows up to 16 separate SSIDs to be defined
- Map Security, VLAN, QoS and Guest Access settings to each SSID
- Set SSIDs by frequency band
- Set bandwidth limits per SSID
- Tie specific DHCP pools per SSID

### User and System Authentication

- WPA Pre-shared Key authentication
- Web Page Redirect (Captive Portal)
- Built-in RADIUS Server – Supports up to 1,024 users
- 802.1X EAP-TLS
- 802.1X EAP-TTLS
- 802.1X PEAP (MS-CHAPv2)
- LEAP pass-through
- MAC Access Control Lists

### Intrusion Detection and Prevention

- Continuous RF monitoring across all 220 802.11 channels
- GUI console presents real-time view of wireless network health
- Detection & prevention (wired & wireless) of Rogue Access Points
- Packet level sniffing and decoding
- Notification of alerts & alarms
- Detailed compliance reporting

### Ethernet Interfaces

- One Gigabit (10/100/1000) interface

### Serial Interface

- One RS232 with RJ45 connector

### Users Supported

- Supports up to 64 associated users per Integrated Access Point
- Recommended provisioning of 20 users per Integrated Access Point

### Resiliency

- 100% overlap between RF sectors
- Dual Gigabit uplinks offer failover
- Complete Array to Array failover

### Wireless Backhaul

- Up to 3 Integrated Access Points Bonded – Max 162Mbps per link
- Up to 4 Wireless Backhauls per Array
- WDS links offer automatic failover

### Channel Selection

- Manual, Automatic

### Client Load Balancing

- Automatic between Integrated Access Points

### Roaming

- Caches Pairwise Master Keys (PMK) between Arrays for fast L2 & L3 roaming

### Quality of Service (handled at the Array)

- 802.1p wired traffic prioritization
- 802.11e wireless prioritization
- MAP COS to TCID
- Fair Queuing of downstream traffic
- Spectralink Voice Priority (SVP)

### Status LEDs

- System Status LED
- Ethernet (1) and Radio (4) Status LEDs

### Networking Services

- DHCP Client, DHCP Server (Multiple Pools), NAT, NTP
- 802.1D Spanning Tree Protocol
- IGMP Snooping/Pruning

### VLAN Support

- 802.1Q compliant
- Supports up to 16 VLANs

### Management

- Web-based HTTPS, SNMPv1/v2c, CLI via SSHv2, FTP, TFTP and Xirrus MIB
- Syslog Reporting for alerts/alarms
- Integrated on-line help
- Centralized L3 management of multiple Arrays via the optional Xirrus Management System (XMS)

### Radio Approvals

- FCC (United States)
- ETSI (Europe)

### Environmental

- 0C to 50C
- 0-90% humidity (non-condensing)

### Safety and EMI Compliance

- FCC Class A
- UL/cUL EN60950
- EN60601

### Dimensions

- Diameter 12.58in (31.95cm)
- Height 2.58in (6.55cm)
- Weight 3lbs 8 oz (1.59kg)

### Input Power Requirements

- 12 volts @ 5A or 48VDC @ 1.25A
- Offers both AC or DC power options
- Offers input power failover for redundancy

### Warranty

- One Year Hardware
- 90 days Software

### Wi-Fi Array Model Number:

XS-3500-4

### Model Description

- 1Gbps embedded Wi-Fi Controller/Switch
- 4 802.11a/b/g Integrated Access Points
- Includes ceiling mounting kit

### Ordering Part Numbers

XS-3500-4, NA

### 802.11n Upgradeable

- Pre-architected to support 802.11n
- Modular, replaceable radios
- 802.11n Upgrade Program available



Xirrus, Inc.  
www.xirrus.com | sales@xirrus.com  
370 North Westlake Blvd. Suite 200  
Westlake Village, California 91362  
805.497.0955 Corporate Office  
800.947.7871 Sales  
805.449.1180 Fax