

# Alcatel-Lucent OmniAccess 4302

## WIRELESS LAN SWITCH

The Alcatel-Lucent OmniAccess 4302 (OAW-4302) Wireless LAN Switch aggregates up to six controlled access points (APs) and delivers integrated mobility, centralized control, convergence services and security for wireless deployments.

Designed for branch office, small business and retail store applications, the OmniAccess 4302 can be easily deployed as an overlay without any disruption to the existing network. In addition it can be centrally managed from the corporate headquarters or data center using the OmniVista Mobility Manager System.



### FEATURES

- Advanced mobility services such as Call Admission Control, voice-aware RF management, and strict over-the-air QoS
- Guest user support
- Advanced network services
- Secure branch office environment
- Site-to-site VPN can be integrated with leading VPN concentrators

### BENEFITS

- Mobile voice over IP capabilities that provide advanced identify-based security services with flexible user authentication, plus role-based access control and dynamic quarantine of unsafe endpoints.
- Guest users are able to easily access the Internet without being a security risk to the rest of the network.
- EAP offload and DHCP server enables branch office network operations to continue uninterrupted even when the WAN link fails.
- No additional VPN/firewall devices required to provide integrated site-to-site VPN, split tunneling, ICSA-compliant stateful firewall and NAT capabilities.
- Provides seamless integration into existing corporate VPNs.

The Alcatel-Lucent OmniAccess 4302 goes beyond high performance wireless switching by offering advanced mobility services. Convergence features, such as Call Admission Control (CAC), voice-aware RF management and strict over-the-air QoS allow the Alcatel-Lucent OmniAccess 4302 to deliver mobile VoIP capabilities. It also provides advanced identity-based security services with flexible user authentication, role-based access control and dynamic quarantine of unsafe endpoints.

Guest users can easily and safely be supported with the built-in captive portal server. Advanced network services, such as EAP offload and DHCP server, allowing branch office network operations to continue uninterrupted even when the WAN link fails. Features that allow the Alcatel-Lucent OmniAccess 4302 to create a secure branch office environment without requiring additional VPN/firewall

devices include integrated site-to-site VPN, split tunneling, ICSA-compliant stateful firewall and NAT capabilities. Site-to-site VPN can be integrated with leading VPN concentrators to provide seamless integration into existing corporate VPNs.

## TECHNICAL SPECIFICATIONS

### Wireless LAN Switch Performance and Capacity

Controlled APs 6

Users 100

MAC addresses 4096

Fast Ethernet ports (10/100) 1

Gigabit Ethernet ports (10/100/1000) 1

Active firewall sessions 32,000

Concurrent IPSEC tunnels 100

Firewall throughput 1Gbps

Encrypted throughput (3DES and AES-CCM) 200Mbps

### Wireless LAN Security and Control Features

- 802.11i security (WiFi Alliance certified WPA2 and WPA)
- 802.1X user and machine authentication
- EAP-PEAP, EAP-TLS, EAP-TTLS support
- Centralized AES-CCM, TKIP and WEP encryption
- 802.11i PMK caching for fast roaming applications
- EAP offload for AAA server scalability and survivability
- Stateful 802.1X authentication for standalone APs
- MAC address, SSID and location based authentication
- Multi-SSID support for operation of multiple WLANs
- SSID-based RADIUS server selection
- Secure AP control and management over IPSEC or GRE
- CAPWAP compatible and upgradeable
- Distributed WLAN mode for remote AP deployments
- Simultaneous centralized and distributed WLAN support

### Identity-Based Security Features

- Captive portal, 802.1X and MAC address authentication
- Username, IP address, MAC address and encryption key binding for strong network identity creation
- Per-packet identity verification to prevent impersonation

- Endpoint posture assessment, quarantine and remediation
- Role-based authorization for eliminating excess privilege
- Robust policy enforcement with stateful packet inspection
- Per-user session accounting for usage auditing
- Web-based guest account creation
- Configurable acceptable use policies for guest access
- XML-based API for external captive portal integration
- xSec option for authentication and encryption (802.1X authentication, 256-bit AES-CBC encryption)
- Microsoft NAP, Symantec SSE support
- RADIUS and LDAP based AAA server support
- Internal user database for AAA server failover protection

### Convergence Features

- Voice and data on a single SSID for converged devices
- Flow-based QoS using Voice Flow Classification™ (VFC)
- Alcatel-Lucent NOE, SIP, Spectralink SVP, Cisco SCCP and Vocera ALGs
- Strict priority queuing for over-the-air QoS
- 802.11e support – WMM, U-APSD and T-SPEC
- QoS policing for preventing network abuse via 802.11e
- DiffServ marking and 802.1p support for network QoS
- On-hook and off-hook VoIP client detection
- VoIP call admission control (CAC) using VFC
- Call reservation thresholds for mobile VoIP calls
- Voice-aware RF management for ensuring voice quality
- Fast roaming support for ensuring mobile voice quality
- SIP early media and ringing tone generation (RFC 3960)
- Per-user and per-role rate limits (bandwidth contracts)

### Adaptive Radio Management™ (ARM) Features

- Automatic channel and power settings for controlled APs
- Simultaneous air monitoring and end user services
- Self-healing coverage based on dynamic RF conditions
- Dense deployment options for capacity optimization
- AP load balancing based on number of users
- AP load balancing based on bandwidth utilization
- Coverage hole and RF interference detection
- 802.11h support for radar detection and avoidance
- Automated location detection for active RFID tags
- Built-in XML based Location API for RFID applications

### Wireless Intrusion Protection Features

- Integration with WLAN infrastructure
- Simultaneous or dedicated air monitoring capabilities
- Rogue AP detection and built-in location visualization
- Automatic rogue, interfering and valid AP classification
- Over-the-air and over-the-wire rogue AP containment
- Ad-hoc WLAN network detection and containment
- Windows client bridging and wireless bridge detection
- Denial of service attack protection for APs and stations
- Mis-configured standalone AP detection and containment
- 3rd party AP performance monitoring and troubleshooting
- Flexible attack signature creation for new WLAN attacks
- EAP handshake and sequence number analysis
- Valid AP impersonation detection
- Frame floods, fake AP and Airjack attack detection

# TECHNICAL SPECIFICATIONS

- ASLEAP, death broadcast, null probe response detection
- NetStumbler-based network probe detection

## Stateful Firewall Features

- Stateful packet inspection tied to user identity or ports
- Location and time-of-day aware policy definition
- 802.11 station awareness for WLAN firewalling
- Over-the-air policy enforcement and station blacklisting
- Session mirroring and per-packet logs for forensic analysis
- Detailed firewall traffic logs for usage auditing
- ICSA corporate firewall 4.1 compliance
- Application Layer Gateway (ALG) support for Alcatel-Lucent NOE, SIP, SCCP, RTSP, Vocera, FTP, TFTP, PPTP
- Source and destination network address translation (NAT)
- Dedicated flow processing hardware for high performance
- TCP, ICMP denial of service attack detection and protection
- Policy-based forwarding into GRE tunnels for guest traffic
- External service interface for 3rd party security integration for inline anti-virus, anti-spam and content filtering apps
- Health checking and load balancing for external services

## VPN Server Features

- Site-to-site VPN support for branch office deployments
- Site-to-site interoperability with 3rd party VPN servers
- VPN server emulation for easy integration into WLAN
- L2TP/IPSEC VPN termination for Windows VPN clients
- Mobile client shim for roaming with RSA Tokens
- XAUTH/IPSEC VPN termination for 3rd Party clients
- PPTP VPN termination for legacy VPN integration
- RADIUS and LDAP server support for VPN authentication
- PAP, CHAP, MS-CHAP and MS-CHAPv2 authentication
- Hardware encryption for DES, 3DES, AES, MPPE
- Secure point-to-point xSec tunnels for L2 VPNs

## Networking Features and Advanced Services

- L2 and L3 switching over-the-air and over-the-wire
- VLAN pooling for easy, scalable network designs
- VLAN mobility for seamless L2 roaming
- Proxy mobile IP and proxy DHCP for L3 roaming
- Built-in DHCP server and DHCP relay
- VRRP based N+1 Wireless LAN switch redundancy (L2)
- AP provisioning based N+1 Wireless LAN switch redundancy (L3)
- Ether channel support for link redundancy
- 802.1d Spanning Tree Protocol (STP)
- 802.1Q VLAN tags

## Wireless LAN Switch-Based Management Features

- RF Planning and AP Deployment Toolkit
- Centralized AP provisioning and image management
- Live coverage visualization with RF heat maps
- Detailed statistics visualization for monitoring
- Remote packet capture for RF troubleshooting
- Interoperable with Ethereal, Airokeek and AirMagnet analyzers
- Multi-wireless LAN switch configuration management
- Location visualization and device tracking
- System-wide event collection and reporting

## Administration Features

- Web-based user interface access over HTTP and HTTPS
- QuickStart screens for easy wireless LAN switch configuration
- CLI access using SSH, Telnet and console port
- Role-based access control for restricted admin access
- Authenticated access via RADIUS, LDAP or Internal DB
- SNMPv3 and SNMPv2 support for controller monitoring
- Standard MIBs and private enterprise MIBs
- Detailed message logs with syslog event notification

## Power Specifications

- Power consumption 12 Watts
- Input voltage 12V DC
- Input current 1A

## AC-DC Power Adapter Specifications

- AC input voltage 100 to 240VAC (auto-sensing)
- AC input current 1.1A RMS, maximum
- AC input frequency 47-63 Hz
- DC output voltage 12VDC
- DC output current 3A, maximum

## Operating Specifications and Dimensions

- Operating temperature range 0° to 40° C
- Storage temperature range 10° to 70° C
- Humidity, non-condensing 5 to 95%
- Height 1.1in (27.9 mm)
- Width 9.5 in (241 mm)
- Depth 6.7 in (171 mm)
- Weight 2 lbs. (unboxed)

## Regulatory and Safety Compliance

- FCC part 15 Class A CE
- Industry Canada Class A
- VCCI Class A (Japan)
- EN 55022 Class A (CISPR 22 Class A), EN 61000-3
- EN 61000-4-2, EN 61000-4-3, EN 61000-4-4,
- EN 61000-4-5, EN 61000-4-6, EN 61000-4-8,
- EN 61000-4-11, EN 55024, AS/NZS 3548
- UL 60950
- CAN/CSA 22.2 #60950
- CE mark
- PSE mark

## ORDERING INFORMATION

PART NUMBER	DESCRIPTION
OAW-4302	OmniAccess 4302 with adaptive RF management. Provides 1 x auto-sensing 10/100 (Uplink) and 1 x 10/100/1000 (LAN) interfaces. Supports up to 6 OmniAccess APxx access points. Operates with remotely connected access points through a layer-2 or layer-3 network. Supports one auto-sensing 110V/240V AC to 12V DC power adapter brick and includes one accessory kit (installation guide, console cable with adapter and full product documentation CD). 19" rack mount kit shall be ordered separately.
OAW-4308-PEF	Policy Enforcement Firewall Module for the OAW-4302 (6 AP License)
OAW-4308-VPN	VPN Server Module for the OAW-4302 (6 AP License)
OAW-4308-WIP	Wireless Intrusion Protection Module for the OAW-4302 (6 AP License)
OAW-4308-ESI	External Services Interface Module for the OAW-4302 (6 AP License)
OAW-4308-CIM	Client Integrity Module for the OAW-4302 (6 AP License)
OAW-4308-XSC	xSec Module for the OAW-4302 (6 AP License)
OAW-AP-RAP1	Remote access point software module (single access point license)
OAW-AP-RAP4	Remote access point software module (4 AP license)
OAW-AP-RAP6	Remote access point software module (6 AP license)
OAW-4302-RM-19	OAW-4302 Optional 19" Equipment Rack Mounting Kit
OAW-4302-AC-S	Spare power adapter brick for the OmniAccess 4302

To learn more, contact your dedicated Alcatel-Lucent representative, authorized reseller, or sales agent. You can also visit our Web site at [www.alcatel-lucent.com](http://www.alcatel-lucent.com).

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