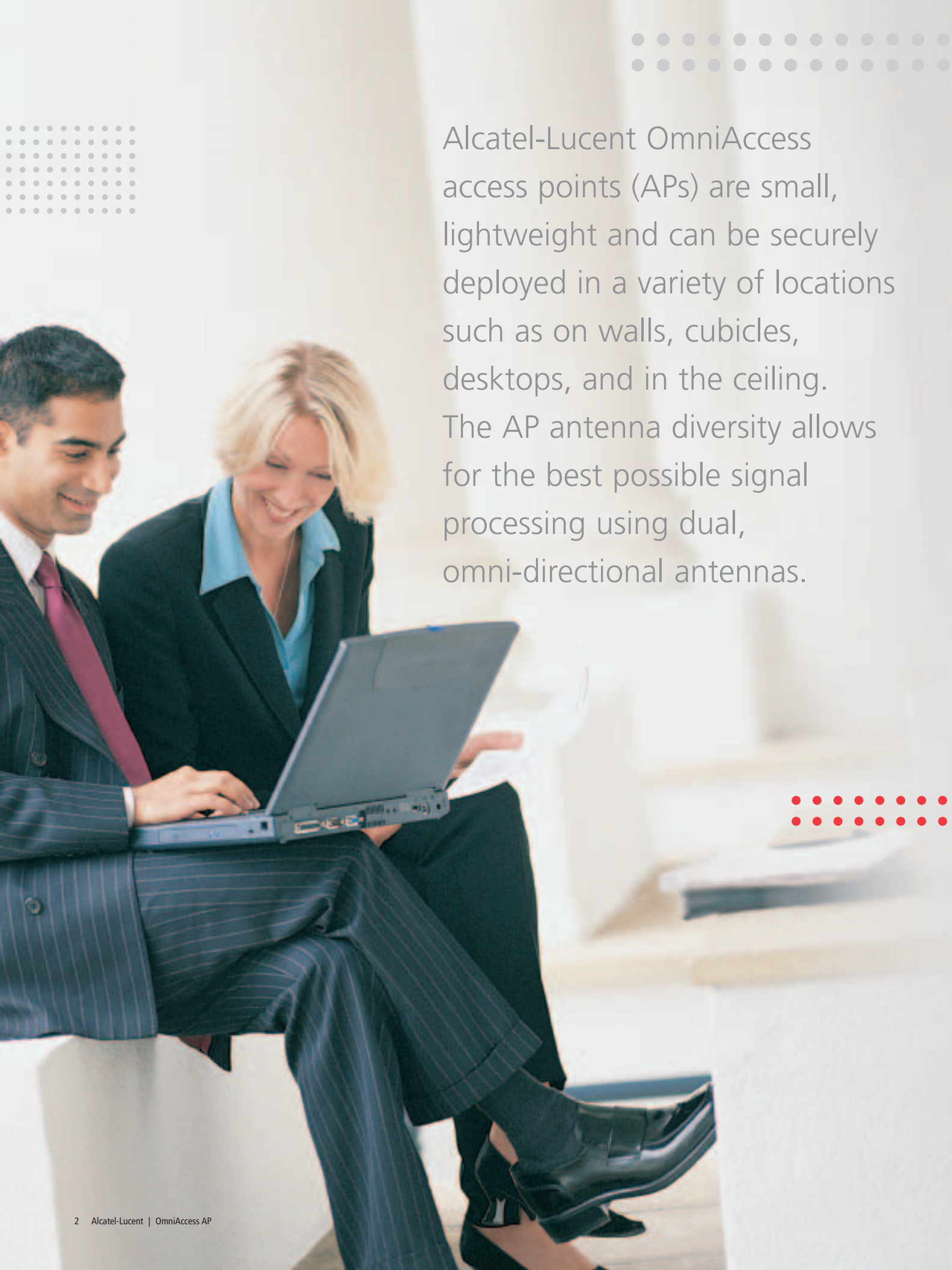
Alcatel-Lucent OmniAccess Wireless LAN Access Point Family

OAW-AP41, OAW-AP60, OAW-AP61, OAW-AP65, OAW-AP70, OAW-AP80



Alcatel-Lucent OmniAccess access points (APs) are small, lightweight and can be securely deployed in a variety of locations such as on walls, cubicles, desktops, and in the ceiling. The AP antenna diversity allows for the best possible signal processing using dual, omni-directional antennas.

Alcatel-Lucent OmniAccess access points (APs) are small, lightweight and can be securely deployed in a variety of locations such as on walls, cubicles, desktops, and in the ceiling. The AP antenna diversity allows for the best possible signal processing using dual, omni-directional antennas.

Alcatel-Lucent OmniAccess APs work with the Alcatel-Lucent OmniAccess 6000, OmniAccess 4324, OmniAccess 4308, and OmniAccess 4304 to provide a high performance, centrally managed, wireless mobility solution for enterprises. Alcatel-Lucent OmniAccess APs have an extended lifespan because they can automatically configure themselves across any L2/L3 network using a discovery protocol, allowing easy upgrades when new features, capabilities, or standards emerge.

Thin AP Architecture

Alcatel-Lucent OmniAccess APs function as "thin" APs which provide 802.11a/b/g user access, but are not overburdened with processing-intensive functions. These fuctions, such as wireless user authentication, link layer encryption, VPN termination, and upper layer MAC (media access control) services are better suited and handled by Alcatel-Lucent OmniAccess WLAN switches. This makes Alcatel-Lucent OmniAccess APs cost-effective and simple to deploy and manage. Alcatel-Lucent's APs can simultaneously service wireless users and act as wireless monitoring devices eliminating the need for a separate overlay of RF sensors to troubleshoot and optimize the wireless environment.

Moving these functions into a centrally-located Alcatel-Lucent OmniAccess WLAN system gives administrators greater control over the entire system including better scalability, higher performance, and easier system-wide changes as standards and security schemes change. Additional benefits include better support for roaming and low-latency (sub 5 millisecond) handoffs between APs – making the Alcatel-Lucent OmniAccess WLAN system ideal for handling delay-sensitive applications such as voice over wireless.

ADAPTIVE RF MANAGEMENT (ARM), RF PLANNING, DYNAMIC CALIBRATION, AND ADVANCED TROUBLESHOOTING

With previous generations of WLAN technology, AP deployment was an expensive proposition.

Corporations had to painstakingly undertake extensive RF planning, complete site surveys, climb into ceilings to run new cabling, and mount the APs. In turn, APs were deployed sparingly. Alcatel-Lucent OmniAccess APs change this deployment model through Adaptive Radio Management (ARM) technology that negates the need for detailed RF planning.

To ease implementation, the Alcatel-Lucent OmniAccess Wireless system combines online RF planning tools and ARM for fine-tuning, automated performance and capacity optimization. The Alcatel-Lucent OmniAccess RF planning gives administrators the power to quickly provision APs based on coverage, performance or resiliency requirements.

IT staff can import floor plans and automatically determine the placement of APs and air monitors. Once the network is deployed, administrators can use ARM to automatically perform system-wide calibration, determine the actual propagation characteristics of RF signals, and set AP transmit power and channel assignments to desired levels.

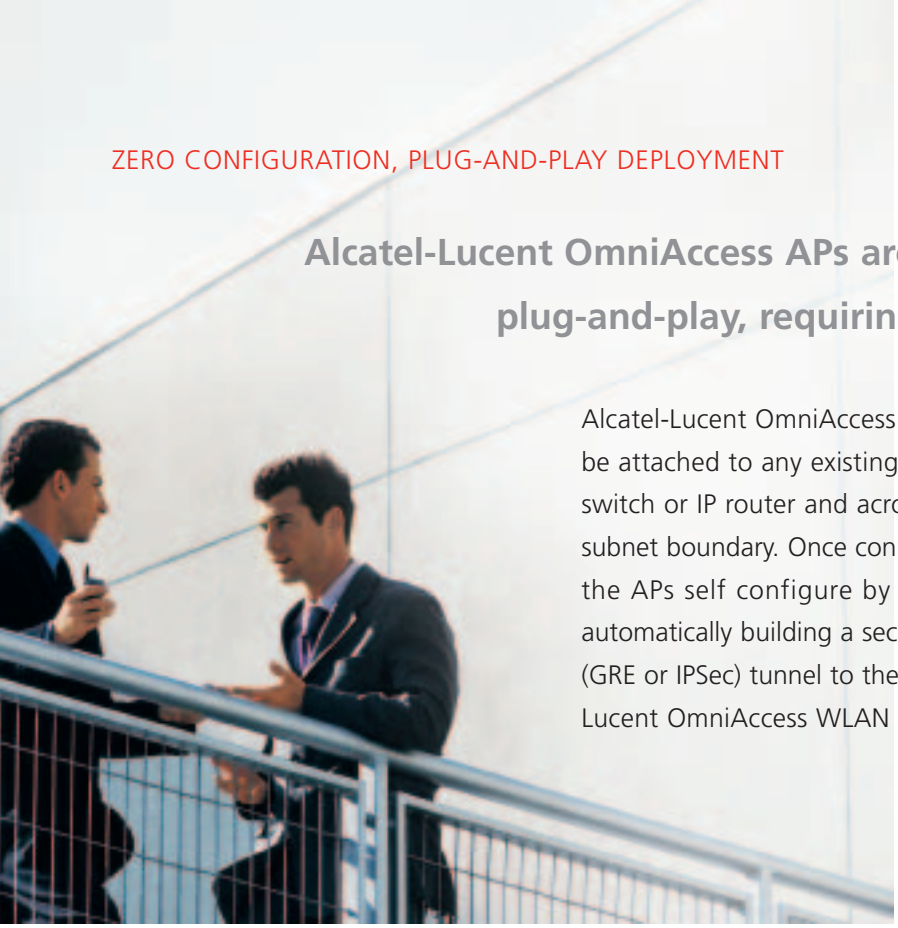
In addition, the Alcatel-Lucent OmniAccess Wireless system uniquely provides automatic tuning of the mobile environment through sophisticated system calibration and distributed, radio resource allocation technologies.

ARM and Alcatel-Lucent OmniAccess Aps constantly scan the ambient radio environment to determine coverage holes, interference, and congestion. If discovered, Alcatel-Lucent OmniAccess APs automatically change channel assignment or power transmit levels to ensure optimal operation and report these changes back to the WLAN switch. In the event of a failure, the OmniAccess WLAN system automatically alters adjacent AP settings to ensure no loss of WLAN service occurs.

For manual troubleshooting, Alcatel-Lucent OmniAccess APs support packet capture and provide wireless RMON capabilities, letting administrators quickly diagnose and resolve wireless problems.

ZERO CONFIGURATION, PLUG-AND-PLAY DEPLOYMENT

Alcatel-Lucent OmniAccess APs are completely plug-and-play, requiring no manual configuration.



Alcatel-Lucent OmniAccess APs can be attached to any existing Ethernet switch or IP router and across any subnet boundary. Once connected, the APs self configure by automatically building a secure IP (GRE or IPSec) tunnel to the Alcatel-Lucent OmniAccess WLAN switch.

The WLAN switch automatically configures each OmniAccess AP based on the policies and configurations set by the administrator. This automation dramatically simplifies operation and eliminates the need for reconfiguring the existing network.

UNPARALLELED SECURITY

Acting as an air monitor, the Alcatel-Lucent OmniAccess APs deliver 100 Mbps of intrusion analysis and relays alerts back to the OmniAccess WLAN switch. Alcatel-Lucent OmniAccess APs detect and thwart rogue APs and wireless intrusions such as DoS and man-in-the-middle attacks.

Since the OmniAccess WLAN switch manages Alcatel-Lucent's OmniAccess APs, no critical configuration information – such as passwords, encryption keys, or digital certificates – is stored on the APs. If APs are lost or stolen, no sensitive information can be obtained.

Conventional WLAN systems decrypt wireless traffic at the AP and store electronic keys derived from the requisite exchanges performed between the client and the authentication server of each AP. Local storage of this information poses serious security risks for large corporations if an access point is lost or stolen, or if a fake AP or man-in-the-middle attack is launched.

Remote office security policies are centrally defined and enforced. In addition, like all Alcatel-Lucent OmniAccess APs, secure remote APs simply appear as another AP on the system and have the same features and functions, which are centrally managed by Alcatel-Lucent OmniAccess WLAN switches.

SECURE REMOTE OFFICE DEPLOYMENT

Alcatel-Lucent OmniAccess APs can be securely deployed in a remote office, letting network managers easily extend their corporate 802.1X framework across the Internet.

Alcatel-Lucent OmniAccess APs use the industry standard IPSec protocol to create secure tunnels that connect APs to a central OmniAccess WLAN switch. Tunneling traffic inside IPSec prevents an attacker from intercepting messages between the switch and AP, allows APs to be deployed across an un-trusted network, and enables an AP to be deployed with a network address translation (NAT) device between the AP and switch.

ADVANCED WIRELESS CAPABILITIES

The Alcatel-Lucent OmniAccess WLAN system supports a host of advanced functionality to enable latency-sensitive applications.

For example, Alcatel-Lucent OmniAccess APs work in conjunction with the WLAN switches to support voice-aware scanning. When a voice session is detected, this feature ensures that the voice call is given priority service.

The Alcatel-Lucent OmniAccess WLAN system offers many other unique capabilities for optimizing the wireless environment such as setting user thresholds per AP, defining and enforcing bandwidth contracts per user or user group, and the ability to broadcast up to eight discrete SSIDs per radio. Granular controls over the APs let administrators enable AP and client DoS protection, set channel scan times and frequencies and control beacon periods, RTS thresholds, SSID availability, DTIM periods, and maximum client levels.

The Alcatel-Lucent OmniAccess AP Family

ALCATEL-LUCENT OMNIACCESS AP41

The Alcatel-Lucent OmniAccess AP41 is a single radio, multi-band (802.11 a/b/g) thin access point.

The OmniAccess AP41 has an internal antenna and can be deployed via wall jacks in the user space. It is powered by standards compliant PoE (power-over-Ethernet). The OmniAccess AP41 is designed for cost-sensitive applications below the ceiling and is ideal for dense deployments in user space serving a mix of 802.11 a, b and g clients. The OmniAccess AP41 is also well suited for WiFi deployments in the home, retail, and branch office.

OmniAccess AP41

ALCATEL-LUCENT OMNIACCESS AP60 AND AP61

The Alcatel-Lucent OmniAccess AP60 and AP61 (OAW-AP60 and OAW-AP61) are single radio, 802.11a or b/g access points (APs) designed for dense wireless deployments.

The Alcatel-Lucent OAW-AP60 and OAW-AP61 deliver superior capacity, performance, and coverage.

Controlled by Alcatel-Lucent OmniAccess WLAN switches, the software-programmable OAWAP60 and OAW-AP61 are able to act as wireless access devices, RF monitors, or both simultaneously. The OAW-AP60 and OAW-AP61 eliminate the primary obstacle to dense deployments – the high cost of installing and managing APs in the ceiling. The OAW-AP60 and OAW-AP61 can be connected to existing network ports and wall or desk mounted. With significantly lower cost-to-deploy APs, more companies can implement a performance-based enterprise WLAN.

OmniAccess AP60

OmniAccess AP61

ALCATEL-LUCENT OMNIACCESS AP65

The Alcatel-Lucent OmniAccess AP65 (OAW-AP65) is Alcatel-Lucent's smallest, dual-radio thin architecture access point that provides concurrent operation of 802.11a and 802.11b/g services.

OmniAccess AP65

Designed for use exclusively with OmniAccess WLAN switches, with its rear mounted Ethernet interface and integrated ceiling tile rail mounting point, the OAW-AP65 self contained, low-profile design is ideally suited for discrete deployment applications. The OAW-AP65 is a multi-purpose device that functions both as an access point and as an RF monitor – either independently or concurrently – across the 2.4 GHz and 5 GHz spectrums. The OAW-AP65 supports an integral high-gain antenna for maximum multi-band coverage.

ALCATEL-LUCENT OMNIACCESS AP70

The Alcatel-Lucent OmniAccess AP70 (OAW-AP70) is a dual-radio access point that provides concurrent operation of 802.11a and 802.11b/g services.

OmniAccess AP70

The OAW-AP70 is a multi-purpose device that can function both as an access point and as an RF monitor – independently or concurrently – across the 2.4 GHz and 5 GHz spectrums. Ideally suited for workspace deployment, the OAW-AP70 can be securely wall or desk-mounted.

ALCATEL-LUCENT OMNIACCESS AP80M

The Alcatel-Lucent OmniAccess AP80M (OAW-AP80M) is the ideal wireless solution for harsh outdoor environments where conventional Wi-Fi access points cannot be deployed.

OmniAccess AP80M

The OAW-AP80M is a dual-radio 802.11a/b/g access point that also supports wireless air monitoring capability. Designed for extreme, all-weather deployment (such as extreme heat, cold, rain), the OAW-AP80M operates as a "thin" AP, fully controlled and managed an OmniAccess WLAN switch. The OAW-AP80M's flexible design supports a variety of attachable antennas and supports an integrated PPP over Ethernet client for remote deployments over service provider networks.

PRODUCT FEATURES AND BENEFITS

ALCATEL-LUCENT OMNIACCESS AP41

Remote AP for home office/low-cost deployments

- Supports 802.11a or b/g
- Configurable as AP, air monitor, or both simultaneously
- Internal omni-directional high-gain antennas with 180-degree rotation
- 802.3af-compliant power-over-Ethernet (PoE)

ALCATEL-LUCENT OMNIACCESS AP60 AND AP61

Indoor enterprise deployments with single radio usage requirements

- Supports 802.11a or b/g
- Two RP-SMA connectors for support of a wide variety of detachable antennas (OAW-AP60)
- Two integral tri-band omni-directional high-gain antennas with 90-degree movement (OAW-AP61)
- 802.3af-compliant power over Ethernet (PoE)
- Configurable as AP, air monitor, or both simultaneously
- Plenum rated
- Kensington lock interface
- Antenna diversity

PRODUCT FEATURES AND BENEFITS

ALCATEL-LUCENT OMNIACCESS AP65

Indoor enterprise deployments with aesthetic/discreetness requirements with multi-radios

- Supports 802.11a or b/g
- Two integral tri-band omni-directional high-gain antennas with 90-degree movement
- 802.3af-compliant power-over-Ethernet (PoE)
- Configurable as AP, air monitor, or both simultaneously
- Plenum rated
- Kensington lock interface
- Antenna diversity

ALCATEL-LUCENT OMNIACCESS AP70

Indoor enterprise deployments with flexibility and multi-radio usage requirements

- Concurrent support for 802.11a and 802.11b/g services
- Two integral omni-directional high-gain antennas with 180-degree rotation
- Four RP-SMA connectors (2 x 2.4 GHz, 2 x 5 GHz) for support of a wide variety of detachable antennas
- Additional USB port for future-proofed expandability and flexible service expansion
- 802.3af compliant power over Ethernet (PoE)
- Configurable as AP, RF monitor or both simultaneously
- Plenum rated
- Kensington lock interface

ALCATEL-LUCENT OMNIACCESS AP80

Harsh outdoor or industrial environments

- Concurrent support for 802.11a and 802.11b/g services
- External N-type connectors
- Additional USB port for future-proofed expandability and flexible service expansion
- External power injector
- Configurable as AP, RF monitor or both simultaneously
- Kensington lock interface

Technical Specifications

Antenna Specifications

OAW-AP41 INTEGRAL

- Single, integral, tri-band, omni-directional antenna with articulating movement.
- Non-detachable

Antenna Specifications

Gain:

- 2.4-2.5 GHz / 2.11 dBi
- 4.900 GHz ~ 5.850 GHz / 2.07 dBi

- VSWR 1.5:1

OAW-AP60 EXTERNAL

- Dual, diversity supporting reverse polarity SMA (RP-SMA) detachable antenna interfaces suitable for single or tri-band detachable antennas of various pattern types and gains.

OAW-AP61 INTEGRAL

- An integral, diversity-supporting dual, tri-band omni-directional high-gain antenna with 90° degrees movement.

OAW-AP61 Integral antenna gain:

- 2.4-2.5 GHz: 2.8dBi
- 5.150-5.350 GHz: 3.9dBi
- 5.6 GHz: 4 dBi

OAW-AP65 INTEGRAL

- Dual, integral, tri-band, high-gain, omni-directional antennas with 180 degrees rotational movement. Non-detachable.

Antenna Specifications

Gain:

- 2.4-2.5 GHz / 3.30 dBi
- 5.150 GHz / 2.50 dBi
- 5.350 GHz / 3.30 dBi

- VSWR 1.5:1
- Support for radio signal diversity

OAW-AP70 INTEGRAL

- An integral, diversity-supporting dual, tri-band omni-directional high-gain antenna with 180° degrees movement.

OAW-AP70 Integral antenna gain:

- 2.4-2.5 GHz: 4.46 dBi
- 5.150 GHz: 7.21 dBi
- 5.350 GHz: 6.49 dBi
- 5.850 GHz: 5.23 dBi

OAW-AP70 EXTERNAL

- Quad (2 x 2.4GHz and 2 x 5GHz), diversity supporting reverse polarity SMA (RP-SMA) antenna interfaces suitable for a wide array of detachable antennas of various pattern types and gains.

OAW-AP80

- None. External N-type antenna interfaces provided (see interfaces electrical)

Radio Specifications

802.11A

Frequency bands

- 5.150 ~ 5.250 GHz (lower band): 4 channels (for OAW-AP61 and OAW-AP70 only)
- 5.250 ~ 5.350 GHz (middle band): 4channels
- 5.500 ~ 5.700 GHz (ETSI band): 11 channels (for OAW-AP70 only)
- 5.725 ~ 5.825 GHz (higher band): 4 channels

Radio technology

- Orthogonal frequency division multiplexing (OFDM)

Modulation type

- BPSK
- QPSK
- 16-QAM
- 64-QAM

Transmit power

- Configurable by system administrator / professional installer

MAC

- CSMA/CA with ACK

Operating channels

- US and Canada: 8 external antenna / 12 internal antenna
- ETSI: up to19 for OAW-AP70, 13 for OAWAP60 and AP61
- Japan: 4 for OAW-AP70, 5 for OAW-AP61 (unavailable on OAW-AP60)

Data rates

- 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel

802.11b

Frequency bands

- 2.4 ~ 2.483 GHz (US, Canada and ETSI)
- 2.4 ~ 2.497 GHz (Japan)

Radio technology

- Direct sequence spread spectrum (DSSS)

Modulation type

- CCK, BPSK, QPSK

Transmit power

- Configurable by system administrator

MAC

- CSMA/CA with ACK

Operating channels

- US and Canada: 11
- ETSI: 13
- Japan: 14 (13 for OAW-AP60)

Data rates

- 1, 2, 5.5, 11 Mbps per channel

802.11g

Frequency bands
- 2.412 ~ 2.462 GHz (USA, Canada)
- 2.412 ~ 2.472 GHz (ETSI)
- 2.412 ~ 2.484 GHz (Japan)

Radio technology
- OFDM

Modulation type
- CCK, BPSK, QPSK, 16-QAM, 64-QAM

Transmit power
- Configurable by system administrator

MAC
- CSMA/CA with ACK

Operating channels
- US and Canada: 11
- ETSI: 13
- Japan: 14

Data rates

6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel

OAW-AP41

RADIO SPECS 5GHZ – IEEE 802.11A

Frequency Bands Supported
- 5.150 ~ 5.250 GHz (low band), country specific
- 5.250 ~ 5.350 GHz (mid band), country specific
- 5.470 ~ 5.725 GHz (Europe), country specific
- 5.725 ~ 5.825/5.850 GHz (high band), country specific

Radio technology
- Orthogonal frequency division multiplexing (OFDM)

Modulation type
- BPSK, QPSK, 16-QAM, 64-QAM

Transmit power
- Configurable by system administrator / professional installer

MAC
- CSMA/CA with ACK

Operating channels:
- US, Canada – 13
- ETSI – up to 19
- Japan – 8

Data rates
- 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel

Multi-mode radio band
- 802.11a or 802.11b/g selectable via software

RADIO SPECS 2.4GHZ - IEEE 802.11B

Frequency Bands Supported
- 2.400 ~ 2.4835/2.497 GHz (Global), channels country specific

Radio technology
- Direct sequence spread spectrum (DSSS)

Modulation type
- CCK, BPSK, QPSK

Transmit power
- Configurable by system administrator

MAC
- CSMA/CA with ACK

Operating channels
- US, Canada – 11
- ETSI – 13
- Japan – 13

Data rates
- 1, 2, 5.5, 11 Mbps per channel

Multi-mode radio band
- 802.11a or 802.11b/g selectable via software

RADIO SPECS 2.4GHZ - IEEE 802.11G

Frequency Bands Supported
- 2.400 ~ 2.4835 GHz (Global), channels country specific

Radio technology
- Orthogonal frequency division multiplexing (OFDM)

Modulation type
- BPSK, QPSK, 16-QAM, 64-QAM

Transmit power
- Configurable by system administrator

MAC
- CSMA/CA with ACK

Operating channels
- US, Canada – 11
- ETSI – up to 13
- Japan – 13

Data rates
- 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel

Multi-mode radio band
- 802.11a or 802.11b/g selectable via software

OAW-AP65

RADIO SPECS 5GHZ - IEEE 802.11A

Frequency Bands Supported
- 5.150 ~ 5.250GHz (low band), country specific
- 5.250 ~ 5.350GHz (mid band), country specific
- 5.470 ~ 5.725GHz (Europe), country specific
- 5.725 ~ 5.825GHz GHz (high band), country specific

Radio technology
- Orthogonal frequency division multiplexing (OFDM)

Modulation type
- BPSK, QPSK, 16-QAM, 64-QAM

Transmit power
- Configurable by system administrator / professional installer

MAC
- CSMA/CA with ACK

Operating channels
- US, Canada – 12
- ETSI – up to 19
- Japan – 4

Data rates
- 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel

Multi-mode radio band
- 802.11a or 802.11b/g selectable via software

RADIO SPECS 2.4GHZ - IEEE 802.11B

Frequency Bands Supported
- 2.400 ~ 2.4835GHz (Global), channels country specific

Radio technology
- Direct sequence spread spectrum (DSSS)

Modulation type
- CCK, BPSK, QPSK

Transmit power
- Configurable by system administrator

MAC
- CSMA/CA with ACK

Operating channels
- US, Canada – 11
- ETSI – 13
- Japan – 13

Data rates
- 1, 2, 5.5, 11 Mbps per channel
- Multi-mode radio band 802.11a or 802.11b/g selectable via software

RADIO SPECS 2.4GHZ - IEEE 802.11G

Frequency Bands Supported
- 2.400 ~ 2.4835GHz (Global), channels country specific

Radio technology
- Orthogonal frequency division multiplexing (OFDM)

Modulation type
- BPSK, QPSK, 16-QAM, 64-QAM

Transmit power
- Configurable by system administrator

MAC
- CSMA/CA with ACK

Operating channels
- US, Canada – 11
- ETSI – 13
- Japan – 13

Data rates
- 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel

Multi-mode radio band
- 802.11a or 802.11b/g selectable via software

OAW-AP80

RADIO SPECS - 5GHZ - IEEE 802.11A

Frequency Bands Supported
- 5.150 ~ 5.250 GHz (low band), country specific
- 5.250 ~ 5.350 GHz (mid band), country specific
- 5.470 ~ 5.725 GHz (Europe), country specific
- 5.725 ~ 5.825/5.850 GHz (high band), country specific

Radio technology
- Orthogonal frequency division multiplexing (OFDM)

Modulation type
- BPSK, QPSK, 16-QAM, 64-QAM

Transmit power
- Configurable by system administrator / professional installer

MAC
- CSMA/CA with ACK

Operating channels
- US, Canada – 13
- ETSI – up to 19
- Japan – Disabled

Data rates
- 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel

Radio band
- Selectable via software

Multi-mode radio band
- 802.11a or 802.11b/g selectable via software

RADIO SPECS – 2.4GHZ - IEEE 802.11B

Frequency Bands Supported
- 2.400 ~ 2.4835/2.497 GHz, channels country specific

Radio technology
- Direct sequence spread spectrum (DSSS)

Modulation type
- CCK, BPSK, QPSK

Transmit power
- Configurable by system administrator

MAC
- CSMA/CA with ACK

Operating channels
- US, Canada – 11
- ETSI – up to 13
- Japan – 14

Data rates
- 1, 2, 5.5, 11 Mbps per channel

Radio band
- Selectable via software

Multi-mode radio band
- 802.11a or 802.11b/g selectable via software

RADIO SPECS – 2.4GHZ – IEEE 802.11G

Frequency Bands Supported
- 2.400 ~ 2.4835 GHz, channels country specific

Radio technology
- Orthogonal frequency division multiplexing (OFDM)
- Modulation type – BPSK, QPSK, 16-QAM, 64-QAM

Transmit power
- Configurable by system administrator

MAC
- CSMA/CA with ACK

Operating channels
- US, Canada – 11
- ETSI – up to 13
- Japan – 13

Data rates
- 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel

Radio band
- Selectable via software

Multi-mode radio band
- 802.11a or 802.11b/g selectable via software

Dimensions

OAW-AP41
- Height: 4.21 in. (107 mm)
- Width: 7.24 in. (184 mm)
- Depth: 1.26 in. (32 mm)
- Weight: 15.88 oz. (450 g)

OAW-AP60
- Height: 6.26 in. (159 mm)
- Width: 3.90 in. (99 mm)
- Depth: 1.22 in. (31 mm)
- Weight: 12.2 oz. (198 g)

OAW-AP61
- Height: 8.50 in. (216 mm)
- Width: 3.90 in. (99 mm)
- Depth: 1.22 in. (31 mm)
- Weight: 13.6 oz. (255 g)

OAW-AP65
- Height: 3.94 in. (100 mm)
- Width: 3.94 in. (100 mm)
- Depth: 1.47 in. (37 mm)
- Need weight

OAW-AP70
- Height (antenna retracted): 6.57 in. (167 mm)
- Height (antenna extended): 11.54 in. (293 mm)
- Width: 7.48 in. (190 mm)
- Depth: 1.18 in. (30 mm)
- Weight: 18 oz. (510 g)

OAW-AP80
- Height: 7.80 in. (198 mm)
- Width: 7.80 in. (198 mm)
- Depth: 2.76 in. (70 mm)
- Weight: 56.84 oz. (1600 g)

Electrical Interfaces

OAW-AP41
- 1 x 10/100 Base-TX (RJ-45) auto-sensing Ethernet interface
- Auto-sensing MDI/MDX
- PoE 48VDC / 200mA power over Ethernet (802.3af compliant)
- 1 x Reset Button (restores to factory default configuration)

OAW-AP60 AND AP61
- 1 x 10/100BaseTX auto-sensing Ethernet RJ-45 interface
- Auto-sensing MDI/MDX
- Serial and power over Ethernet - 48V DC / 200mA power over Ethernet (802.3af compliant)
- 1 x 5V DC power interface

OAW-AP65
- 1 x 10/100 Base-TX (RJ-45) auto-sensing Ethernet interface
- Auto-sensing MDI/MDX
- PoE 48VDC / 220mA power over Ethernet (802.3af compliant)
- Supports Serial over Ethernet
- Rear Mounted
- 1 x 5V DC External Power Interface

OAW-AP70
- 2 x 10/100BaseTX RJ-45 auto-sensing Ethernet interfaces (Port 0)
- Auto-sensing MDI/MDX
- PoE 48V DC / 250mA power over Ethernet (802.3af compliant)
- Serial over Ethernet (Port 1)
- Auto-sensing MDX
- PoE 48V DC / 250mA power over Ethernet (802.3af compliant)
- Redundant Ethernet data link and power over Ethernet
- USB ver2.0 interface
- 1 x 5V DC power interface

OAW-AP80
- 1 x 10/100 Base-TX auto-sensing Ethernet interface (IP67 8-pin male (pole) M12 circular DIN connector (Au) contacts)
  - Auto-sensing MDI/MDX
  - PoE 48V DC / 1.2A (30W) power over Ethernet (non-standard 802.3af)
  - Integral lightning arrester
- 1 x 2.4 Ghz N-Type Female Antenna Interface
- 1 x 5 Ghz N-Type Female Antenna Interface
- 1 x Electrical Ground / Safety Terminal
- 1 x Integral ENET lightening arrester

Mechanical Interfaces

OAW-AP41 MECHANICAL INTERFACES
- Wall-mount lugs

OAW-AP60 AND AP61 AND OAW-AP70
- Standard Kensington MicroSaver security cable interface (not supplied)
- Optional wall and ceiling mount kit interface

OAW-AP65
- 1 x Integrated ceiling tile rail snap-in mount (for 15/16" diameter rails). Located on rear of device
- 1 x Kensington locking interface

OAW-AP80
- 4 x Mounting Bracket Points
- Ruggedized wall, pole or mast mount hardware provided (articulating in horizontal and vertical planes)

Visual Indicators (LEDs)

OAW-AP41
- (Ready) Power on/off/booting
- (ENET) Link status / activity
- (WLAN A) IEEE 802.11a status
- (WLAN G) IEEE 802.11b/g status

OAW-AP60 AND AP61 AND OAW-AP70
- (Ready) Power on/off
- (Ethernet) link status / activity
- (Radio mode) 802.11a and b/g AP /air monitor mode

OAW-AP65
- (Ready) Power on/off/booting
- (Ethernet 0) link status / activity
- 802.11a + b/g Wireless Access Point
- 802.11a + b/g Wireless Air Monitor

OAW-AP80
- (Ready) Power on/off (provided on Power injector)

Power Requirements

OAW-AP41
- 48V DC / 200mA power-over-Ethernet (802.3af compliant)

OAW-AP60
- External AC power or POE
- 5V DC / 2A supplied externally via optional country specific AC adapter kits
- 48V DC / 200mA power over Ethernet (802.3af compliant)

OAW-AP65
- External AC power or POE
- 5V DC / 2A supplied externally via optional country specific AC adapter kits
- 48V DC / 220mA Power-over-Ethernet (802.3af compliant)

OAW-AP70
- External AC power or POE
- 5V DC / 3A supplied externally via optional country specific AC adapter kits
- 48V DC / 250mA power over Ethernet (802.3af compliant)

OAW-AP80
- Access Point power draw - 48V DC / 1.2A (30W) Power-over-Ethernet (non-standard 802.3af)
- External Power Injector, auto-sensing 100-240V AC Input, 1.5A Output 48 VDC, 1.2A (30W) (provided)

Environmental Requirements

OAW-AP41, AP60, AP61, AP65 AND OAW-AP70

Temperature

- Operating: 0 to 50° C (32 to 122° F)
- Storage: 0 to 70° C (32 to 158° F)

Humidity

- 5% to 95% (non-condensing)

OAW-AP80

Temperature

- Operating: -30 to 55 °C (-22 to 131 °F)
- Storage: -40 to 80 °C (-40 to 176 °F)

Humidity

- 0% - 95% (non-condensing)

Survival Wind Speed

- 201 Km/hr / 125 mph

Standards

OAW-AP41 AND AP65

- Ethernet IEEE 802.3 / IEEE 802.3u
- Wireless IEEE 802.11a/b/g
- IEEE 802.3af

OAW-AP60 AND AP61 AND OAW-AP70

- Ethernet IEEE 802.3 / IEEE 802.3u
- Power over Ethernet IEEE 802.3af
- Wireless IEEE 802.11a/b/g
- USB 2.0 (OAW-AP70 only)

OAW-AP80

- Ethernet IEEE 802.3 / IEEE 802.3u
- Wireless IEEE 802.11a/b/g
- PPP over Ethernet RFC2516

Safety

OAW-AP41

- cULus listed
- IEC 60950 CB certificate and report
- UL Listed (UL60950)
- UL Listed (Canadian Electrical Code/CSA 22.2 No. 60950)
- EN60950 / IEC60950
- EN 60601-1-1 & EN 60601-1-2: (MD compliance)

OAW-AP60 AND AP61 AND AP70

- CSA/NTRL (CSA 22.2 No. 950 and UL1950)
- EN60950 (TÜV/GS), IEC60950 (CB)

OAW-AP65

- UL Listed (UL60950)
- UL Listed (Canadian Electrical Code/CSA 22.2 No. 60950)
- EN60950 / IEC60950
- UL Listed (UL2043)
- EN 60601-1-2: 2001 (MD compliance

OAW-AP70

- UL Listed (UL60950)
- UL Listed (Canadian Electrical Code/CSA 22.2 No. 60950)
- EN60950 / IEC60950
- National Electrical Code Section 300-22(C)
- Canadian Electrical Code, Part 1, CSA C22.1 Sections 2-128, 12-010(3), and 12-100
- UL2043 plenum rating

OAW-AP80

- cULus listed
- PSE Mark (AC Power Supply)
- IEC 60950 CB certificate and report
- UL Listed (UL60950)
- UL Listed (Canadian Electrical Code/CSA 22.2 No. 60950)
- EN60950 / IEC60950

Electromagnetic Compliance

OAW-AP60 AND AP61 AND AP70

- FCC Part 15 Class B – OAW-AP70 only
- FCC Part 15 Class A – OAW-AP60 and AP61
- FCC Part 15 Class C 15.207/15.247
- FCC Part 15 Class E 15.407
- ICES- 003 Class A
- RSS 210 (CAN)
- VCCI 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
- 73/23/EEC and 89/336/EEC
- EN 55022, EN55024 (89/336/EEC)
- ETS 300 328 (89/336/EEC), ETS 301 489 (89/336/EEC)
- AS/NZS 3548 Class A
- RFS 29 (NZ) (OAW-AP70 only)

Ordering information

OAW-AP41	OmniAccess AP41 access point with single Integral Tri-Band Antenna. Supports 802.11a or 802.11b/g (SW selectable). Supports one 10/100 Base-T (RJ-45) Ethernet Interface (Power over Ethernet capable) and Installation Guide.
OAW-AP60	OmniAccess AP60 access point with dual RP-SMA external antenna connectors (supports diversity). Supports 802.11a or 802.11b/g (SW selectable). Supports one 10/100BaseT (RJ-45) Ethernet Interface (Power and Serial over Ethernet capable) and Installation Guide. Antenna shall be ordered separately. When no Power over Ethernet is available, an external Power Adapter Kit shall be ordered separately.
OAW-AP61	OmniAccess AP61 access point with Integral Tri-Band Antenna (supports diversity). Supports 802.11a or 802.11b/g (SW selectable). Supports one 10/100BaseT (RJ-45) Ethernet Interface (power and serial over Ethernet capable) and Installation Guide. When nopower over Ethernet is available, an external Power Adapter Kit shall be ordered separately.
OAW-AP65	OmniAccess AP65 access point with Integral Antenna (2.4Ghz & 5Ghz Bands with Diversity). Supports 802.11a and 802.11b/g. Supports one 10/100 Base-T (RJ-45) Ethernet Interface (803.3af compliant and SoE capable). Includes an Installation Guide. When no Power over Ethernet is available, an external Power Adapter Kit shall be ordered separately.
OAW-AP70	OmniAccess AP70 access point with Integral Antenna and Quad RP-SMA external antenna connectors (2.4 GHz and 5 Ghz bands with Diversity). Supports 802.11a and 802.11b/g. Supports two 10/100BaseT (RJ-45) Ethernet Interface (one with power and serial over Ethernet and one with power over Ethernet capability) and one USB2.0 interface. Includes an Installation Guide. If required, an external antenna shall be ordered separately. When no power over Ethernet is available, an external Power Adapter Kit shall be ordered separately.
OAW-AP80	Alcatel-Lucent OAW-AP80M Outdoor Wireless Access Point. Includes one OAW-AP80M Outdoor Wireless Access Point (Simultaneous 802.11 'A'+'B/G') with Dual N-Type Detachable Antenna Interfaces (1 x 2.4Ghz Band and 1 x 5Ghz Band), 1 x 10/100 Base-T (8Pin DIN) Ethernet Interface (supports High Power over Ethernet, Integral Power Lightening Arrester and Ground Point), 1 x RSSI DC Alignment interface, Pole / Mast Mounting Hardware and Installation Guide. Also Includes: Indoor Use Only Auto-sensing 110/240VAC to 48VDC Power over Ethernet Injector suitable for use with the OAW-AP80M Wireless Access Points and 100 foot Outdoor Ethernet cable (8Pin DIN to 10/100Base-T RJ-45). External antennas and antenna lightning arrestor shall be purchased separately.
AP-60-MNT	OmniAccess AP60 and AP61 wall / ceiling mounting kit. Includes mounting cradle hardware, ceiling tile clips and security screws to mount the access point securely on wall or ceiling.
AP-65-MNT	OmniAccess AP65 wall, secure wall and desktop mounting kit.
AP-70-MNT	OmniAccess AP70 wall / ceiling mounting kit. Includes mounting cradle hardware, ceiling tile clips and security screws to mount the access point securely on wall or ceiling.
OAW-AP-AC	OmniAccess access point Power Adapter Kit. Should be ordered when Access Point cannot be powered with Power over Ethernet. Contains: Auto- sensing 110V/240V AC Power Brick complete with AC Power Cable (North America).
OAW-AP-LAR-1	Outdoor Antenna Lightning Arrestor. Lightning Surge Arrestor for the OAW-AP80 Access Point: Single, In-line lightening arrester with N-type Male to Ntype Female interface. Supports RF frequency pass through of 2Ghz – 6Ghz.
External Antenna	Alcatel-Lucent offers a wide variety of outdoor rated detachable antenna types certified for use with the OmniAccess AP80M. Please contact your local sales representative for details.

Alcatel-Lucent OmniAccess Wireless LAN Access Point Family
OAW-AP41, OAW-AP60, OAW-AP61, OAW-AP65, OAW-AP70, OAW-AP80

www.alcatel-lucent.com

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