

Alcatel-Lucent OmniAccess AP105

DUAL-RADIO 802.11N ACCESS POINT

The Alcatel-Lucent OmniAccess™ AP105 is a high-performance, multi-band (concurrent 802.11b/g/n and 802.11a/n) dual-radio indoor wireless access point capable of delivering wireless data rates of up to 300 Mb/s per radio. As a multi-function access point, it provides wireless LAN access, air monitoring, and wireless intrusion detection and prevention over the 2.4 GHz to 2.5 GHz and 5 GHz RF spectrum. This access point works in conjunction with Alcatel-Lucent OmniAccess WLAN switches to deliver high-speed, secure network services.

The OmniAccess AP105 delivers 802.11n speeds and high-end wireless services at a price close to that for the 802.11a/b/g access points. The access point also offers a limited lifetime warranty. With the IEEE 802.11n standard ratified, the OmniAccess AP105 makes the choice between a/b/g and a/b/g/n easy: a/b/g/n should be the technology of choice for new WLAN deployments.

The OmniAccess AP105 features one RJ-45 Gigabit Ethernet (100/1000) interface and operates from either a standard 802.3af Power over Ethernet (PoE) source or a 12 V DC power supply. The OmniAccess AP105 features four integrated, omni-directional antenna elements (supporting up to 2x2 MIMO with spatial diversity).



FEATURES	BENEFITS
IEEE 802.11n 2x2 MIMO (two spatial streams) access point	High-speed wireless with up to 300 Mb/s of throughput. Improved coverage compared with 802.11a/b/g technologies. Backward compatibility with 802.11a/b/g Wi-Fi® clients
802.3af PoE power sourcing	Operates with existing 802.3af-compliant PoE devices. Does not require an overhaul of the PoE infrastructure
Fully featured, enterprise-grade access point	Integral part of the OmniAccess Wireless product family to offer enterprise-wide high-speed wireless deployments, high-performance branch and small office deployments. Supports key enterprise-grade functions such as Adaptive Radio Management (ARM), air monitoring over 2.5 GHz and 5 GHz spectrum, wireless intrusion prevention, Call Admission Control (CAC), QoS, and battery life extension for portable phone equipment.

Technical specifications

Application

- High-performance 802.11n enterprise campus or branch office applications, indoor use, concurrent dual-band operation

Operating mode

- Multiservice concurrent 802.11a/n + b/g/n WLAN
- 802.11a/b/g/n air monitor
- Hybrid combination of WLAN/AM
- Remote AP
- Secure enterprise mesh
- Configurable to support 802.11n HT 20/40 channels or mixed-mode deployment 802.11a/b/g/n

Radios

- Dual-radio – software configurable to support 2.4 GHz to 2.5 GHz + 5 GHz
- Both radios 802.11n-capable, implementing 2x2 MIMO with two spatial streams, providing up to 300 Mb/s per radio

RF management

- Automatic transmit power and channel management control with auto-coverage hole correction via Adaptive Radio Management (ARM)

Advanced features

- Remote AP (RAP)-capable with addition of optional RAP license
- Integrated Trusted Platform Module (TPM) for secure storage of credentials and keys

Antenna

- 4 x integrated, omnidirectional antenna elements (supporting up to 2x2 MIMO with spatial diversity)
- Maximum antenna gain:
 - 2.4 GHz / 2.5 dBi
 - 5.150 GHz - 5.875 GHz / 4.0 dBi

Wireless radio specifications

- AP type: 2x2 MIMO
- Supported frequency bands (country-specific restrictions apply):
 - 2.400 GHz to 2.4835 GHz
 - 5.150 GHz to 5.250 GHz
 - 5.250 GHz to 5.350 GHz
 - 5.470 GHz to 5.725 GHz
 - 5.725 GHz to 5.850 GHz
- Available channels: WLAN switch-managed, dependent on configured regulatory domain
- Supported radio technologies:
 - 802.11b: Direct-Sequence Spread-Spectrum (DSSS)
 - 802.11a/g/n: Orthogonal Frequency Division Multiplexing (OFDM)
 - 802.11n: 2x2 MIMO with two spatial streams
- Supported modulation types:
 - 802.11b: BPSK, QPSK, CCK
 - 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM
- Transmit power: Configurable in increments of 0.5 dBm
- Maximum Ratio Combining (MRC) for improved receiver performance
- Association rates (Mb/s):
 - 802.11b: 1, 2, 5.5, 11
 - 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54
 - 802.11n: MCS0 to MCS15 (6.5 Mb/s to 300 Mb/s)
- 802.11n High-Throughput (HT) support: HT 20/40
- 802.11n Packet Aggregation: A-MPDU, A-MSDU

Interfaces

- Network: 1 x 100/1000Base-T Ethernet (RJ-45), auto-sensing link speed and MDI/MDX
- Power: 1 x DC power connector
- Other: 1 x RJ-45 console interface

Power

- 48 V DC 802.3af PoE
- 12 V DC for external AC-supplied power (adapter sold separately)
- Maximum power consumption: 12.5 W

Mounting

- Standard
 - Wall
 - Tool-less ceiling tile rail (15/16 in.)
- Optional mounting kit
 - Ceiling tile rail (15/16 in. and 9/16 in. recessed or non-recessed)

Mechanical

- Dimensions (unit): 5.2 in. x 5.3 in. x 1.8 in. (132 mm x 135 mm x 45 mm)
- Weight (unit): 10.56 oz (0.3 kg)
- Dimensions (shipping): 7.7 in. x 6.7 in. x 2.2 in. (195 mm x 170 mm x 55 mm)
- Weight (shipping): 15.52 oz (0.44 kg)

Environmental

- Operating:
 - Temperature range: 32°F to 122°F (0°C to 50°C)
 - Humidity: 5% to 95% non-condensing
- Storage and transportation temperature range: -40°F to +158°F (-40°C to +70°C)

Regulatory

- FCC/Industry Canada
- CE Marked
- R&TTE Directive 1995/5/EC
- Low Voltage Directive 72/23/EEC
- EN 300 328
- EN 301 489
- EN 301 893
- UL/IEC/EN 60950
- CB Scheme Safety, cTUVus
- Japan MIC/VCCI
- Korea KCC
- Brazil ANATEL
- Mexico NOM/COFETEL
- China SRRC/CCC
- UL2043

Certifications

- Wi-Fi certified 802.11a/b/g/n

Ordering Information

PART NUMBER	DESCRIPTION
OAW-AP105	OmniAccess AP105 wireless access point with dual concurrent 802.11an + 802.11bgn 2x2 MIMO operation, integrated antennas, 100/1000Base-T (RJ-45) Ethernet interface, Console Port, 12VDC power interface. Contains: OAW-AP105 and Installation Guide. AC power adapter kit sold separately.
OAW-AP105-MNTC	OmniAccess AP105 Ceiling Mounting Kit (rail adapters only)

www.alcatel-lucent.com Alcatel, Lucent, Alcatel-Lucent and the Alcatel-Lucent logo are trademarks of Alcatel-Lucent. All other trademarks are the property of their respective owners. The information presented is subject to change without notice. Alcatel-Lucent assumes no responsibility for inaccuracies contained herein. Copyright © 2011 Alcatel-Lucent. All rights reserved. EMG3105110201 (04)