

Alcatel-Lucent OmniAccess 370 Series Access Points

High performance 802.11ac Wave 2 for outdoor environments

Weatherproof and temperature hardened, OmniAccess 370 series access points deliver 802.11ac Wave 2 Gigabit Wi-Fi to outdoor and environmentally challenging locations. The 370 high-performance and high power series deliver maximum capacity and range. It delivers 4x4:4SS MU-MIMO capability, advanced ClientMatch.

Purpose-built to survive in the harshest outdoor environments, 370 Series APs can withstand exposure to extreme high and low temperatures, persistent moisture and precipitation, and are fully sealed to keep out airborne contaminants. All electrical interfaces include industrial strength surge protection.

With a maximum concurrent data rate of 1,733 Mb/s in the 5 GHz band and 300 Mb/s in the 2.4 GHz band (for an aggregate peak data rate of 2.0 Gb/s), the OmniAccess 370 Series Access Points can quickly add required capacities to your existing or new wireless networks.

The high performance and high density 802.11ac the 370 Series supports 160 MHz channel bandwidth (VHT160), multi-user MIMO (MU-MIMO) and 4 spatial streams (4SS).

Proactive and deterministic, ClientMatch dynamically optimizes Wi-Fi client performance as users roam and RF conditions change. If a mobile device moves away from an AP or RF interference impedes performance, ClientMatch automatically steers it to a better AP.

With ClientMatch, clients load web pages faster, deliver video streams with improved quality and support high densities of mobile devices. An 802.11ac network without ClientMatch performs no different than an 802.11n WLAN.

Unique benefits

- Dual Radio 802.11ac access point with Multi-User MIMO
 - Supports up to 1,733 Mb/s in the 5 GHz band (with 4SS/VHT80 or 2SS/VHT160 clients) and up to 300 Mb/s in the 2.4 GHz band (with 2SS/HT40 clients).
- Advanced Cellular Coexistence (ACC)
 - Minimizes interference from 3G/4G cellular networks, distributed antenna systems, and commercial small cell/femtocell equipment.
- Industrial design for harsh indoor and outdoor environments
 - Sealed connector interfaces to lock out dust and moisture
- Quality of service for unified communication apps
 - Supports priority handling and policy enforcement for unified communication apps, including Microsoft Skype for Business with encrypted videoconferencing, voice, chat, and desktop sharing
- Best-in-class RF management
 - Integrated AirMatch technology manages the 2.4-GHz and 5-GHz radio bands and actively optimizes the RF environment including channel width, channel selection and transmit power.
- Spectrum analysis
 - Capable of part-time or dedicated air monitoring, the spectrum analyzer remotely scans the 2.4-GHz and 5-GHz radio bands to identify sources of RF interference
- Wireless mesh
 - Wireless mesh connections are convenient where Ethernet drops are not available
- Intelligent app visibility and control
 - AppRF technology leverages deep packet inspection to classify and block, prioritize, or limit bandwidth for thousands of applications in a range of categories.

- Secure Core
 - Device assurance: Use of Trusted Platform Module (TPM) for secure storage of credentials and keys as well as secure boot
 - Integrated wireless intrusion protection offers threat protection and mitigation and eliminates the need for separate RF sensors and security appliances.
 - IP reputation and security services identify, classify, and block malicious files, URL and IPs, providing comprehensive protection against advanced online threats.
 - Encrypted IPsec VPN tunnels securely connect remote users to corporate network resources.

Choose your operating mode

As unified APs, the OmniAccess 370 Series can be deployed with or without a controller and can be readily switched to accommodate changing network needs.

- Controller mode: When managed by OmniAccess Mobility Controllers, OmniAccess 370 Series APs offer centralized configuration, data encryption, policy enforcement and network services, as well as distributed and centralized traffic forwarding or,
- Controllerless (Instant) mode: In OmniAccess Instant mode, a single AP automatically distributes the network configuration to other Instant APs in the WLAN. Simply power-up one Instant AP, configure it over the air, and plug in the other APs - Instant Network.

Other functional modes include:

- Remote AP (RAP) mode for branch deployments
- Air monitor (AM) for wireless IDS, rogue detection and containment
- Spectrum analyzer, dedicated or hybrid, for identifying sources of RF interference
- Secure enterprise mesh
- Hybrid AP serves Wi-Fi clients and provides wireless intrusion protection and spectrum analysis

OmniAccess 370 Series specifications

- OAW-AP374
 - 5 GHz 802.11ac 4x4 MU-MIMO (1,733 Mb/s max rate)
 - Four Nf connectors for external antenna operation
 - 2.4 GHz 802.11n 2x2 MIMO (300 Mb/s max rate) radios
 - Two Nf connectors for external antenna operation at 2.4 GHz
- OAW-AP375
 - 5 GHz 802.11ac 4x4 MU-MIMO (1,733 Mb/s max rate)
 - Internal Omni Antennas 4.6 dBi
 - 2.4 GHz 802.11n 2x2 MIMO (300 Mb/s max rate) radios
 - Internal Omni Antennas 4.0 dBi
- OAW-AP377
 - 5 GHz 802.11ac 4x4 MU-MIMO (1,733 Mb/s max rate)
 - Internal 80°H x 80°V Directional Antennas 6.3 dBi
 - 2.4 GHz 802.11n 2x2 MIMO (300 Mb/s max rate) radios
 - Internal 80°H x 80°V Directional Antennas 6.4 dBi

Wi-Fi radio specifications

- AP type: Outdoor hardened, dual radio, 5 GHz 802.11ac 4x4 MIMO and 2.4 GHz 802.11n 2x2 MIMO
- Software-configurable dual radio supports 5 GHz (Radio 0) and 2.4 GHz (Radio 1)
- 5 GHz: Four spatial stream Multi User (MU) MIMO for up to 1,733 Mb/s wireless data rate to up to three MU-MIMO capable client devices simultaneously
- 5 GHz: Four spatial stream Single User (SU) MIMO for up to 1,733 Mb/s wireless data rate to individual 4x4 VHT80 or 2x2 VHT160 client devices
- 2.4 GHz: Two spatial stream Single User (SU) MIMO for up to 300 Mb/s wireless data rate to individual 2x2 HT40 client devices
- Support for up to 256 associated client devices per radio, and up to 16 BSSIDs per radio

- Supported frequency bands (country-specific restrictions apply):
 - 2.400 to 2.4835 GHz
 - 5.150 to 5.250 GHz
 - 5.250 to 5.350 GHz
 - 5.470 to 5.725 GHz
 - 5.725 to 5.850 GHz
 - Available channels: Dependent on configured regulatory domain.
 - Dynamic frequency selection (DFS) maximizes the use of available RF spectrum.
 - Supported radio technologies:
 - 802.11b: Direct-sequence spread-spectrum (DSSS)
 - 802.11a/g/n/ac: Orthogonal frequency-division multiplexing (OFDM)
 - Supported modulation types:
 - 802.11b: BPSK, QPSK, CCK
 - 802.11a/g/n/ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
 - Transmit power: Configurable in increments of 0.5 dBm
 - Maximum (conducted) transmit power (limited by local regulatory requirements):
 - 2.4 GHz band: +22 dBm per chain, +25dBm aggregate (2x2)
 - 5 GHz band: +22 dBm per chain, +28dBm aggregate (4x4)
- Note: conducted transmit power levels exclude antenna gain.
- Maximum EIRP (limited by local regulatory requirements):
 - 2.4 GHz band:
 - 374: 25 + Antenna Gain
 - 375: 29 dBm EIRP
 - 377: 31.4 dBm EIRP
 - 5 GHz band:
 - 374: 28 + Antenna Gain + TxBF Gain
 - 375: 35.6 dBm EIRP
 - 377: 36 dBm EIRP
 - Advanced Cellular Coexistence (ACC) minimizes interference from cellular networks.
 - Maximum ratio combining (MRC) for improved receiver performance.
 - Cyclic delay/shift diversity (CDD/CSD) for improved downlink RF performance.
 - Short guard interval for 20-MHz, 40-MHz, 80-MHz and 160-MHz channels.
 - Space-time block coding (STBC) for increased range and improved reception.
 - Low-density parity check (LDPC) for high-efficiency error correction and increased throughput.
 - Transmit beam-forming (TxBF) for increased signal reliability and range.
 - Supported data rates (Mb/s):
 - 802.11b: 1, 2, 5.5, 11
 - 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54
 - 802.11n (2.4GHz): 6.5 to 300 (MCS0 to MCS15)
 - 802.11n (5GHz): 6.5 to 600 (MCS0 to MCS31)
 - 802.11ac: 6.5 to 1,733 (MCS0 to MCS9, NSS = 1 to 4 for VHT20/40/80, NSS = 1 to 2 for VHT160)
 - 802.11n high-throughput (HT) support: HT 20/40
 - 802.11ac very high throughput (VHT) support: VHT 20/40/80/160
 - 802.11n/ac packet aggregation: A-MPDU, A-MSDU

Power

- Worst-case power consumption from the AP: 23W
- Power sources sold separately
- Power over Ethernet (PoE+): 802.3at-compliant
- AC Power: 100-240 Volt 50/60Hz AC

Other interfaces

- One 10/100/1000BASE-T Ethernet network interfaces (RJ-45)
 - Auto-sensing link speed and MDI/MDX
 - 802.3az Energy Efficient Ethernet (EEE)
- One 1000BASE-X SFP Port
- Bluetooth Low Energy (BLE) radio
 - Up to 4 dBm transmit power (class 2) and -91 dBm receive sensitivity
- Visual indicator (multi-color LED): For system and radio status
- Reset button: Factory reset (during device power up)
- Micro USB console interface
- Kensington security slot

Mounting

- AP-270-MNT-V1
- AP-270-MNT-V2
- AP-270-MNT-H1
- AP-270-MNT-H2

Mechanical

OAW-AP374

Dimensions/weight (excluding mount):

- 23 cm (W) x 24 cm (D) x 19 cm (H) with aesthetic cover
- 9.0" (W) x 9.4" (D) x 7.5" (H)
- 2.7 kg/6 lbs
- 23 cm (W) x 24 cm (D) x 14 cm (H) without aesthetic cover
- 9.0" (W) x 9.4" (D) x 5.5" (H)
- 2.4 kg/5.3 lbs

OAW-AP375

Dimensions/weight (excluding mount):

- 23 cm (W) x 24 cm (D) x 27 cm (H)
- 9.0" (W) x 9.4" (D) x 10.6" (H)
- 2.4 kg/5.3 lbs

OAW-AP377

Dimensions/weight (excluding mount):

- 23 cm (W) x 22 cm (D) x 13 cm (H)
- 9.0" (W) x 8.7" (D) x 5.1" (H)
- 2.1 kg/4.6 lbs

Environmental

- Operating:
 - Temperature: -40° C to +65° C (-40° F to +149° F)
 - Humidity: 5% to 95% non-condensing
- Storage and transportation:
 - Temperature: -40° C to +70° C (-40° F to +158° F)
- Operating Altitude: 3,000 m
- Water and Dust
 - IP66/67
- Salt Tolerance
 - Tested to ASTM B117-07A Salt Spray 200hrs
- Wind Survival: Up to 165 Mph
- Shock and Vibration ETSI 300-19-2-4

Regulatory

- FCC/ISED
- CE Marked
- RED Directive 2014/53/EU
- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- UL/IEC/EN 60950
- EN 60601-1-1, EN60601-1-2

For more country-specific regulatory information and approvals, please see your ALE representative.

Regulatory model numbers

- OAW-AP374: APEX0374
- OAW-AP375: APEX0375
- OAW-AP377: APEX0377

Certifications

- CB Scheme Safety, cTUVus
- UL2043 plenum rating
- Wi-Fi Alliance certified 802.11a/b/g/n
- Wi-Fi CERTIFIED™ ac (with wave 2 features)

Warranty

- Limited lifetime warranty

Minimum operating system software

- AOS-W & InstantOS 8.3.0.0

RF performance table

	Maximum transmit power (dBm) per transmit chain	Receiver sensitivity (dBm) per receive chain
802.11b 2.4 GHz		
1 Mb/s	22	-95
2 Mb/s	22	-93
5.5 Mb/s	22	-90
11 Mb/s	22	-88
802.11g 2.4 GHz and 802.11a 5 GHz 2.4 GHz and 802.11a 5 GHz		
6 Mb/s	22	-93
54 Mb/s	19	-75
802.11n HT20 2.4 GHz and 5 GHz		
MCS0/8	22	-93
MCS7/15	18	-71
802.11n HT40 2.4 GHz and 5 GHz		
MCS0/8	22	-90
MCS7/15	18	-68
802.11ac VHT20 5 GHz		
MCS0	22	-93
MCS9	16	-68
802.11ac VHT40 5 GHz		
MCS0	22	-90
MCS9	15	-63
802.11ac VHT80 5 GHz		
MCS0	22	-87
MCS9	15	-61
802.11ac VHT160 5 GHz		
MCS0	22	-86
MCS9	15	-57

Maximum capability of the hardware provided (excluding antenna gain). Maximum transmit power is limited by local regulatory settings.

Ordering information

Part number	Description
OmniAccess 370 Series Unified Outdoor Access Points	
OAW-AP374-EG	OmniAccess AP374 (EG) Dual 2x2:2/4x4:4 Radio 6xNf Connectors Outdoor Unified AP. Restricted regulatory domain: Egypt
OAW-AP374-IS	OmniAccess AP374 (IS) Dual 2x2:2/4x4:4 Radio 6xNf Connectors Outdoor Unified AP. Restricted regulatory domain:Israel
OAW-AP374-JP	OmniAccess AP374 (JP) Dual 2x2:2/4x4:4 Radio 6xNf Connectors Outdoor Unified AP. Restricted regulatory domain: Japan
OAW-AP374-RW	OmniAccess AP374 (RW) Dual 2x2:2/4x4:4 Radio 6xNf Connectors Outdoor Unified AP. Restricted regulatory domain:Rest of the world
OAW-AP374-US	OmniAccess AP374 (US) Dual 2x2:2/4x4:4 Radio 6xNf Connectors Outdoor Unified AP. Restricted regulatory domain:US
OAW-AP375-EG	OmniAccess AP375 (EG) Dual 2x2:2/4x4:4 Radio Integrated Omni Antenna Outdoor Unified AP. Restricted regulatory domain: Egypt
OAW-AP375-IS	OmniAccess AP375 (IS) Dual 2x2:2/4x4:4 Radio Integrated Omni Antenna Outdoor Unified AP. Restricted regulatory domain:Israel
OAW-AP375-JP	OmniAccess AP375 (JP) Dual 2x2:2/4x4:4 Radio Integrated Omni Antenna Outdoor Unified AP. Restricted regulatory domain:Japan
OAW-AP375-RW	OmniAccess AP375 (RW) Dual 2x2:2/4x4:4 Radio Integrated Omni Antenna Outdoor Unified AP. Restricted regulatory domain:Rest of the world
OAW-AP375-US	OmniAccess AP375 (US) Dual 2x2:2/4x4:4 Radio Integrated Omni Antenna Outdoor Unified AP. Restricted regulatory domain:US
OAW-AP377-EG	OmniAccess AP377 (EG) Dual 2x2:2/4x4:4 Radio Integrated Directional Antenna Outdoor Unified AP. Restricted regulatory domain: Egypt
OAW-AP377-IS	OmniAccess AP377 (IS) Dual 2x2:2/4x4:4 Radio Integrated Directional Antenna Outdoor Unified AP. Restricted regulatory domain:Israel
OAW-AP377-JP	OmniAccess AP377 (JP) Dual 2x2:2/4x4:4 Radio Integrated Directional Antenna Outdoor Unified AP. Restricted regulatory domain:Japan
OAW-AP377-RW	OmniAccess AP377 (RW) Dual 2x2:2/4x4:4 Radio Integrated Directional Antenna Outdoor Unified AP. Restricted regulatory domain:Rest of the world
OAW-AP377-US	OmniAccess AP377 (US) Dual 2x2:2/4x4:4 Radio Integrated Directional Antenna Outdoor Unified AP. Restricted regulatory domain:US