

Alcatel-Lucent OmniAccess AP80

DUAL-RADIO 802.11A/B/G ACCESS POINT

The Alcatel-Lucent OmniAccess AP80M is the ideal wireless solution for harsh outdoor environments where conventional Wi-Fi access points cannot be deployed. The OmniAccess 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 OmniAccess AP80M operates as a “thin” AP, fully controlled and managed by an OmniAccess WLAN switch. The OmniAccess 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.

TECHNICAL SPECIFICATIONS



Network Configuration

- Wireless access point (802.11a/b/g)
- Air monitor (802.11a/b/g)

Antennas

- None. External N-type antenna interfaces provided (see Electrical Interfaces section)

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

Manageability

- Management of all 802.11 parameters as AP
- Network-wide AP management via:
 - CLI
 - Web GUI
 - SNMP
- Access point profiles
- Management by:
 - Geographical location
 - BSSID
 - Radio type
- Encryption support (AP and WLAN switch)
 - 40-bit / 64-bit / 128-bit / 152-bit WEP, TKIP, AES, WPA, WPA2

Interfaces-Electrical

- 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 anten-

na Interface

- 1 x electrical ground / safety terminal
- 1 x Integral ENET lightning arrester

Power Adapter Interfaces

Access point (AP) port

- 1 x 10/100 Base-TX auto-sensing Ethernet (RJ-45) network (AP) interface:
 - Auto-sensing MDI/MDX
 - PoE 48V DC / 1.2A power over Ethernet (non-standard 802.3af)

Network (ENET) Port

- 1 x 10/100 Base-TX auto-sensing Ethernet (RJ-45) network (ENET), auto-sensing MDI/MDX Ethernet interface supplied with 8-Pin DIN to RJ-45 CAT-5 shielded Ethernet cable (164 ft / 50 m)

Interfaces-Mechanical

- 4 x mounting bracket points
- Ruggedized pole or mast mount hardware provided (articulating in horizontal and vertical planes)
- Ruggedized wall mount hardware as an available option.

Visual Indicators (LEDS)

- (Ready) power on/off (provided on power Injector)

Power Requirements

- 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)

Device Dimensions H/W/D

- 7.80 x 7.80 x 2.76in. (198 x 198 x 70mm)
- Weight - 3.53lbs (1.6Kilo)

Shipping Dimensions H/W/D

- 19.7 x 11.8 x 6.7in. (500 x 300 x 170mm)
- Gross weight - 13.22lbs (6Kilos)

Environmental

- Temperature
 - Operating: -22 to 131 °F (-30 to 55 °C)
 - Storage: -40 to 176 °F (-40 to 80 °C)
- Humidity 0% - 95% (non-condensing)
- Survival wind speed: 201Km/hr / 125mph

External Power Adapter

- Temperature
 - Operating: 32 to 140 °F (0 to 60 °C)
 - Storage: -58 to 158 °F (-50 to 70 °C)
- Humidity 0% - 95% (non-condensing)

Mounting Options

- Pole or mast mount (hardware included)
- Wall mount (optional hardware)

Standards

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

Radio Approvals

- FCC DOC Part 15 Class B (digital portion)
- FCC Part 15 subpart C 15.247
- FCC Part 15 subpart E 15.407
- ICES-003 Class B
- RSS 210 (Canada)
- VCCI Class B (Japan)
- Telec 2.4, Channel 14 and 5 GHz approved (Japan)
- CE marked with NB letter of opinion for RTTE
 - ETS 300 328 2.4 GHz
 - ETS 301 893 5.4 GHz
 - ETS 301 489 EMC
- MIC Korea
- SRRC (China)
- AS/NZS 3548 Class B
- AS/NZS4771 (C-tick)

Safety Approvals

- 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

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
OAW-AP80M	Alcatel-Lucent OAW-AP80M outdoor wireless access point. Includes one OAW-AP80M (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 BaseT (8Pin DIN) Ethernet interface (supports high power-over-Ethernet, integral power lightning 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 10/100BaseT RJ-45). External antennas and antenna lightning arrester shall be purchased separately.
OAW-AP-LAR-1	Outdoor antenna lightning arrester. Lightning surge arrester for the OAW-AP80 access point: Single, in-line lightning arrester with N-type male to N-type 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.

www.alcatel-lucent.com

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