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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 Enterfaces 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 antenna Interface
- 1 x electrical ground / safety terminal
- 1 x Integral ENET lightening 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 ºF (-30 to 55 ºC)
  - ¬ Storage: -40 to 176 ºF (-40 to 80 ºC)
- Humidity 0% - 95% (non-condensing)
- Survival wind speed: 201Km/hr / 125mph

External Power Adapter
- Temperature
  - ¬ Operating: 32 to 140 ºF (0 to 60 ºC)
  - ¬ Storage: -58 to 158 ºF (-50 to 70 ºC)
- 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 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 10/100BaseT RJ-45). External antennas and antenna lightning arrestor shall be purchased separately.
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 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.

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