OmniAccess AP85TX

ACCESS POINT

The Alcatel-Lucent OmniAccess™ AP85TX (OAW-AP85TX) is a fully hardened, outdoor rated, wireless access point with a dual high-power radio (dual-band concurrent 802.11a plus b/g). The OmniAccess AP85TX is capable of supporting multiple functions including WLAN access, air monitoring/wireless intrusion detection and prevention, and high-performance secure outdoor enterprise mesh and LAN bridging across the 2.4-2.5 GHz and 5 GHz RF spectrums. Designed to operate from standard Power-over-Ethernet (PoE) or +12 V DC solar power, the OmniAccess AP85TX delivers secure, user-centric enterprise network services and applications for a variety of deployments such as outdoor locations on campuses, indoor and outdoor warehouses, storage yards, and extreme industrial production environments.

Centrally managed from an OmniAccess wireless switch, the OAW-AP85TX empowers the network administrator with unparalleled control over services, security and deployment models. The OAW-AP85TX is specifically engineered for deployment in the harshest outdoor environments. It is able to withstand exposure to extreme high or low temperatures, moisture from humidity and precipitation, and is fully sealed for protection from airborne contaminants. The OAW-AP85TX is a very flexible access point (AP) in outdoor deployments because it supports standard 802.3af PoE power and DC power from solar or plant bus power sources. The AP supports quad antenna interfaces (with diversity) for connecting external antennas and can be wall, pole or mast mounted.

FEATURES

- Dual high-powered radios
- Flexible power options
- Advanced wireless network functions

BENEFITS

- Multi-service 802.11a/b/g WLAN. High-performance secure enterprise mesh and LAN bridging across the 2.4-2.5 GHz and 5 GHz RF spectrums. Dual-band concurrent 802.11a plus b/g. High powered radios for increased point to point range.
- Standard 802.3af PoE or +12 V DC power source
- WLAN access, mobility services delivery, air monitoring/wireless intrusion detection and prevention, and RF management

FEATURES

- Flexible mounting options
- Rugged construction

BENEFITS

- Wall, pole or mast mounting options
- Designed for outdoor deployments with the capability to function in extreme high or low temperatures. Enclosure is sealed to protect against moisture and air-borne contaminants

TECHNICAL SPECIFICATIONS

Application

- Advanced high-performance outdoor campus, warehouse, container/transportation facilities, industrial plants, and other harsh indoor and outdoor environments. Supports advanced delivery of high-performance mesh and bridging services.

Operating mode

- Multi-service 802.11a/b/g WLAN, 802.11a/b/g air monitor, hybrid combination of WLAN/AM and remote AP or secure mesh point/mesh portal.

Radios

- Dual high-power radios are software configurable to 802.11a and 802.11b/g

RF management

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

Mobility service delivery

- Virtual AP Services
  - ¬ Supports up to 16 SSIDs per access point
  - ¬ Multiple captive portals per SSID
  - ¬ Supports any combination of encryption/ authentication per SSID
  - ¬ Session level quality of service (QoS)
  - ¬ VLAN load balancing
  - ¬ Guest account creation/management
- Voice Services
  - ¬ Wireless multi-media QoS (WMM)
  - ¬ 802.1p and DSCP to WMM AC tagging
  - ¬ Upstream traffic prioritization
  - ¬ Call admission control (CAC)
  - ¬ Traffic classification/session bandwidth reservation (T-SPEC/TCLAS)
  - ¬ Unscheduled power save delivery (U-APSD)
  - ¬ Stateful session awareness (soft voice client QoS)
    - SIP
    - NOE
    - Cisco Skinny
    - Vocera
  - ¬ Spectralink voice prioritization (SVP)
  - ¬ Support for multicast filtering
  - ¬ Battery boost
  - ¬ Priority queuing
  - ¬ Voice-aware scanning support in ARM
- Location-based services

802.11a Radio Specifications

- Operating frequency: 5.150– 5.950 GHz*
- Available channels: WLAN switch managed, dependent upon configured regulatory domain
- Modulation: Orthogonal frequency division multiplexing (OFDM)
- Transmit power: Configurable in increments of 0.5 dBm
- Association rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 with automatic fallback

802.11b Radio Specifications

- Operating frequency: 2.4–2.5 GHz
- Available channels: WLAN switch-managed, dependent upon configured regulatory domain
- Modulation: Direct-sequence spread-spectrum (DSSS)
- Transmit power: Configurable in increments of 0.5 dBm
- Association rates (Mbps): 11, 5.5, 2, 1 with automatic fallback

802.11g Radio Specifications

- Operating frequency: 2.4–2.5 GHz
- Available channels: WLAN switch managed, dependent upon configured regulatory domain
- Modulation: Orthogonal frequency division multiplexing (OFDM)
- Transmit power: Configurable in increments of 0.5 dBm
- Association rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 with automatic fallback

Antenna

- Quad, N-type female interfaces (2 x 2.4 GHz, 2 x 5 GHz) for external antenna support (Supports signal diversity)

Interfaces

- Network:
  - ¬ 1 x 10/100BaseT Ethernet (RJ45), auto-sensing link speed and MDI/MDX
  - ¬ 48 V DC IEEE compliant 802.3af Power-over-Ethernet (PoE)
  - ¬ Serial-over-Ethernet
- Power
  - ¬ 1 x 12 V DC (for external DC solar supplied power)
- Antenna
  - ¬ 4 x N-Type female antenna interfaces (2 per radio)
- Other
  - ¬ 1 x electrical safety / ground terminal point
  - ¬ Onboard LED array for RSSI level reading

Power

- 48 V DC 802.3af Power over Ethernet (PoE) (Maximum power draw 12 W at 48 V DC)
  - ¬ 12 V DC for external solar supplied power (Maximum power draw 9.6 W at 12 V DC)

Mounting

- Standard
  - ¬ Articulating adjustable pole or mast mount kit, wall mount kit
- Optional mounting kit
  - ¬ Antenna mount bracket allows direct mount of external antennas to the access point enclosure

Mechanical

- Dimensions/Weight
  - ¬ 10.80" x 12.64" x 3.07"
  - ¬ 261 mm x 321 mm x 78 mm
  - ¬ 4.1 lbs/1.86 kg
- Dimensions/Weight (Shipping)
  - ¬ 19.7" x 11.8" x 6.7"
  - ¬ 500 mm x 300 mm x 170 mm
  - ¬ 13.9 lbs/6.0 kg

Environmental

- Operating
  - ¬ Temp: -30° to 55°C (-22° to 131°F)
  - ¬ Humidity: 0 to 95% non-condensing
- Storage
  - ¬ Temp: -40° to 80°C (-40° to 176°F)

TECHNICAL SPECIFICATIONS

Regulatory

- FCC Part 15
- Industry of Canada
- VCCI
- MIC
- Anatel
- NOM/COFETEL
- SRRC
- GS Mark
- CE Mark
- R&TTE Directive
  - ¬ 1995/5/EC
- Low Voltage Directive
  - ¬ 72/23/EEC
- EN 300 328
- EN 301 893
- EN 301 489
- UL/IEC/EN 60950-1:2001
- CB, cULus
- AS/NZS 4268, 4771
- ATEX Zone 2
- IEC 60529 IP68

Certifications

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

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
OAW-AP85TX	OmniAccess AP85TX outdoor access point. Supports 802.11a and 802.11b/g (200 mW). Supports one 10/100BaseT (RJ-45) Ethernet interface supporting 802.3af Power over Ethernet and Serial over Ethernet. Supports four (4) external antenna connectors (2 for 2.4 GHz band and 2 for 5 GHz band), one (1) 12 V DC power interface, one (1) 8ft DC power cable, integral ground point, visual status LEDs, wall, pole and mast mount kit. Antennas and antenna lightning arrestors (both required) shall be ordered separately.
OAW-AP85-MNT1	OmniAccess AP85 Antenna Mount Bracket. Includes mount bracket for use with OAW-AP85 (all models) for direct mounting of various antenna types to access point.
OAW-AP-LAR-1	Outdoor Antenna Lightning Arrestor. Lightning surge arrestor for the OAW-AP80/AP85 access points: Single, In-line lightening arrester with N-type male to N-type female interface. Supports RF frequency pass through of 2Ghz – 6 GHz. One required per port.
OAW-AP-CBL-1	Outdoor Antenna Cable Extension. 10' long low-loss LMR 400 antenna extension cable for use with the OAW-AP80 outdoor access points, interfaces OAW-AP80/AP85 N-Type Female interface to N-Type Male on antenna.
AP-ANT-80 to AP-ANT-90	Detachable antennas

To learn more, contact your dedicated Alcatel-Lucent representative, authorized reseller, or sales agent. You can also visit our Web site at www.alcatel-lucent.com.

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