OmniAccess AP85FX, OmniAccess AP85LX

ACCESS POINTS

The Alcatel-Lucent OmniAccess™ AP85FX and AP85LX (OAW-AP85FX and OAW-AP85LX) are fully hardened, outdoor rated, wireless access points with dual high-power radios (dual-band concurrent 802.11a plus b/g). The OmniAccess AP85FX and AP85LX are 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.

The OmniAccess AP85FX and AP85LX are designed to operate from a 90-288 V AC main power source or +12 V DC solar power source, and have fiber optic network interfaces. The OmniAccess AP85FX and AP85LX access points deliver secure user-centric enterprise network services and applications in a variety of situations such as outdoor locations on campuses, indoor and outdoor warehouses, storage yards, extreme industrial production environments, and metro city environments.

Centrally managed from an OmniAccess wireless switch, the OAW-AP85FX and AP85LX empower the network administrator with unparalleled control over services, security, and deployment models. The OAW-AP85FX and OAW-AP85LX are able to withstand exposure to extreme high or low temperatures, moisture from humidity and precipitation, and is fully sealed for protection from airborne contaminants. They also provide many outdoor location deployment options because they support AC or DC power from sources such as street lights, solar or plant bus power sources. The APs support quad antenna interfaces (with diversity) for connecting external antennas and can be street light, wall, pole or mast mounted.

FEATURES

- Dual high-powered radios

- Advanced wireless network functions

- Flexible power options

- Flexible mounting options

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.

- WLAN access, mobility services delivery, air monitoring/wireless intrusion detection and prevention, and RF management

- 90-288 V AC main power source or +12 V DC solar power source.

- Wall, pole or mast mounting options

F E A T U R E S

- Rugged construction

- Fiber optic interface

B E N E F I T S

- 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

- Provides a fiber optic network interface. Impervious to cross-talk and is able to operate over greater distances than copper

T E C H N I C A L   S P E C I F I C A T I O N S

Application
- Advanced high-performance outdoor enterprise campus, warehouses, 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
  - ¬ Support any combination of encryption/ authentication type 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

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 (OAW-AP85FX)
  - ¬ 1 x 100BaseFX multi-mode, 1310 nm wavelength dual-fiber LC interface
  - ¬ 2 km reach
- Network (OAW-AP85LX)
  - ¬ 1 x 100BaseLX single-mode, 1310 nm wavelength dual-fiber LC interface
  - ¬ 10 km reach

- Power
  - ¬ 1 x 12 V DC up to 2.0 A (for external DC solar supplied power)
  - ¬ 1 x 90-288 V AC / 500 mA auto-sensing power interface with transient surge suppression
- Antenna
  - ¬ 4 x N-type female antenna interfaces (2 per radio) (Supports signal diversity)
- Other
  - ¬ 1 x electrical safety / ground terminal point
  - ¬ 1 x console interface
  - ¬ Onboard LED array for RSSI level reading

Power
- 90-288 V AC (Maximum power draw 20 W @ 240 V AC)
- 12 V DC for external solar supplied power (Maximum power draw 9.6 W @ 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-AP85FX	OmniAccess AP85FX outdoor access point. Supports 802.11a and 802.11b/g (200 mW). Supports one (1) 100BaseFX (Multi-mode, dual fiber Ethernet - up to 2 km) Ethernet interface. Supports four (4) external antenna connectors (2 for 2.4 GHz band and 2 for 5 GHz band), one (1) 90-288 V AC auto-sensing power interface, one (1) 8 ft AC power cable, one (1) 12 V DC power interface, one (1) 8 ft DC power cable, one (1) console interface, integral ground point, visual status LEDs, wall, pole and mast mount kit. Antennas and antenna lightning arrestors (both required) shall be ordered separately.
OAW-AP85LX	OmniAccess AP85LX outdoor access point. Supports 802.11a and 802.11b/g (200 mW). Supports one (1) 100BaseLX (Single-mode, dual fiber Ethernet - up to 10 km) Ethernet interface. Supports four (4) external antenna connectors (2 for 2.4 GHz band and 2 for 5 GHz band), one (1) 90-288 V AC auto-sensing power interface, one (1) 8 ft AC power cable, one (1) 12 V DC power interface, one (1) 8 ft DC power cable, one (1) console interface, 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-PT1	OmniAccess AP85FX and AP85LX Street Light Power Tap Kit (8 ft). Includes NEMA street light power tap kit with 8ft AC cable for interfacing with the OAW-AP85FX and OAW-AP85LX to street light sensor points.
OAW-AP85-CBL1	OmniAccess AP85FX and AP85LX AC Power Provisioning Cable (3 ft). Includes AC power cable 3 ft length with AC AP to IEC-320 (PC style) male interface. Used for powering the OAW-AP85FX and OAW-AP85LX when pre-provisioning/staging. NOT suitable for outdoor use.
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.

www.alcatel-lucent.com

Alcatel·Lucent