



## ARUBA AP-85FX AND AP-85LX ACCESS POINTS

The Aruba AP-85FX and AP-85LX models are fully-hardened, outdoor-rated, dual high-power radio (dual-band concurrent 802.11a plus b/g) wireless access points, capable of supporting multiple functions including WLAN access, air monitoring/wireless intrusion detection and prevention, 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 90-288VAC mains power or +12VDC, and incorporating fiber optic network interfaces, the Aruba AP-85FX and AP-85LX access points support diverse deployment options, delivering secure enterprise mobility services and applications outdoors on campuses, in storage yards, in indoor and outdoor warehouses, in extreme industrial production environments, and around metro city environments. Centrally managed from an Aruba Mobility Controller, the AP-85FX and AP-85LX models empower the network administrator with unparalleled control over services, security and deployment models. The AP-85FX and AP-85LX APs are specifically engineered for deployment in the harshest outdoor environments, able to withstand exposure to extreme high or low temperatures, moisture and precipitation, and fully sealed for protection from airborne contaminants. The AP-85FX and AP-85LX models provide unparalleled flexibility in an outdoor AP, supporting AC or DC sourcing of power from street light, 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.



### APPLICATION

- Advanced high-performance outdoor enterprise campus, warehouses, and 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.

### WIRELESS RADIO SPECIFICATIONS

- AP type: High-power dual-radio, dual-band
- Supported Frequency Bands (country-specific restrictions apply):
  - 2.400 - 2.4835 GHz
  - 5.150 - 5.250 GHz
  - 5.250 - 5.350 GHz
  - 5.470 - 5.725 GHz
  - 5.725 - 5.850 GHz
- Available Channels: Controller-managed, dependent upon regulatory domain
- Modulations:
  - 802.11b: Direct-Sequence Spread-Spectrum (DSSS)
  - 802.11a/g: Orthogonal Frequency Division Multiplexing (OFDM)
- Transmit Power: Configurable in increments of 0.5 dBm
- Association Rates (Mbps):
  - 802.11b: 1, 2, 5.5, 11 with automatic fallback
  - 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 with automatic fallback

### RF MANAGEMENT

- Automatic transmit power and channel management control with auto coverage hole correction via ARM

### ANTENNA

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

### 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
- Optional mounting kit:
  - Antenna mount bracket allows direct mount of external antennas to the access point enclosure

### MECHANICAL

- Dimensions/Weight (Unit):
  - 366mm x 285mm x 75mm (14.4" x 11.2" x 3.0")
  - 5.0kg (11.0lbs)
- Dimensions/Weight (Shipping):
  - 455mm x 400mm x 250mm (17.9" x 15.7" x 9.8")
  - 9.5 kg (20.9 lbs)

### ENVIRONMENTAL

- Operating:
  - Temp: -30° to 55° C (-22° to 131° F)
- Storage and Transportation Temperature Range:
  - Temp: -40° to +70° C (-40° to +158° F)

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## INTERFACES

- Network (AP-85FX):
  - 1 x 100Base-FX multi-mode, 1310 nM wavelength dual-fiber LC interface
  - 2 Km reach
- Network (AP-85LX):
  - 1 x 100Base-LX single-mode, 1310 nM wavelength dual-fiber LC interface
  - 10 Km reach
- Power:
  - 1 x 12 V DC up to 2.0A (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

## 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

(For more Country specific regulatory information, and approvals, please see your Aruba Representative)

## CERTIFICATIONS

- Wi-Fi Certified: 802.11a/b/g
- FIPS 140-2 (when operated in FIPS mode)

## WARRANTY

- 1 year parts/labor



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## RF PERFORMANCE TABLE

	Max TX power (dBm)	RX Sensitivity (dBm)
<b>802.11b 2.4GHz</b>		
1Mbps	+23.5	-90.0
2Mbps	+23.0	-87.0
5.5Mbps	+22.5	-85.0
11Mbps	+22.0	-82.0
<b>802.11g 2.4GHz</b>		
6Mbps	+23.0	-86.0
9Mbps	+23.0	-85.0
12Mbps	+23.0	-84.0
18Mbps	+23.0	-82.0
24Mbps	+23.0	-78.0
36Mbps	+22.5	-75.0
48Mbps	+22.0	-71.0
54Mbps	+21.5	-68.0
<b>802.11a 5GHz</b>		
6Mbps	+20.0	-86.0
9Mbps	+20.0	-85.0
12Mbps	+20.0	-84.0
18Mbps	+20.0	-82.0
24Mbps	+20.0	-78.0
36Mbps	+18.0	-75.0
48Mbps	+17.0	-71.0
54Mbps	+16.5	-68.0

Maximum capability of the hardware provided. Maximum transmit power will be limited by local regulatory settings.

## ORDERING INFORMATION

Part number	Description
AP-85FX	Aruba 85 Outdoor Wireless AP (100-FX MMF), with generic/US AC cable (3m)
AP-85FX-EU	Aruba 85 Outdoor Wireless AP (100-FX MMF), with EU AC cable (3m)
AP-85LX	Aruba 85 Outdoor Wireless AP (100-LX SMF), with generic/US AC cable (3m)
AP-85LX-EU	Aruba 85 Outdoor Wireless AP (100-LX SMF), with EU AC cable (3m)
AP-85-CBL-1	Aruba 85 AC Power Provisioning Cable (1m)
AP-85-CBL-2-EU-S	Aruba 85 AC Power Cable (3m), EU version
AP-85-CBL-2-US-S	Aruba 85 AC Power Cable (3m), US version
AP-85-CBL-4-S	Aruba 85 DC Power Cable (3m)
AP-85-PT-1	Aruba 85 Street Light Power Tap Kit (3m)
AP-85-MNT-S	Aruba 85 Mounting Kit Spare
AP-85-MNT-2	AP-85 Low Profile Wall Mount Bracket
AP-CBL-1	Aruba Outdoor Antenna Cable Extension - N-Type Connector - 10'
AP-LAR-1	Aruba Outdoor Antenna Lightning Arrester - N-Type Connector