

The Aruba AP 80SB & MB

The Aruba 80SB & MB product family is the ideal wireless solution for harsh outdoor environments where conventional Wi-Fi access points or wireless bridges cannot be deployed. The Aruba 80SB & MB are dual-radio 802.11a/b/g access points with wireless backhaul capability that can also function as secure WDS point to point or point to multi-point bridges. Designed for extreme, all-weather deployment, the Aruba AP 80SB & MB offer a flexible solution that supports a variety of applications using attachable antennas and an integrated PPP over Ethernet client enables remote deployments over service provider networks.



Network Configuration

AP-80SB

- Stand-alone Wireless Access Point (802.11b/g) with support for wireless backhaul over 5GHz
- Point to Point WDS Bridge for 5GHz or 2.4GHz

AP-80MB

- Stand-alone Wireless Access Point (802.11a/b/g) with support for wireless backhaul over 5GHz or 2.4GHz
- Point to Point WDS Bridge for 5GHz or 2.4GHz
- Point to Multi-Point WDS Bridge for 5GHz or 2.4GHz

Antennas

AP-80SB

Integral 5GHz Antenna Specifications

- Gain (5.150 ~ 5.850GHz) 17.0 dBi
- VSWR 1.5:1
- Front to Back Ratio >25dB
- Frequency Range 5.150 ~ 5.850GHz
- VSWR 1.8:1
- Power handling 10W
- Pattern: 30 degree beam width directional
- Application - wireless backhaul / WDS bridging

AP-80MB

- None. External N-type female antenna interfaces only (see interfaces electrical)

Radio Specs - 5GHZ

IEEE 802.11a

- Frequency Bands Supported
 - 5.150 ~ 5.250GHz, country specific
 - 5.250 ~ 5.350GHz, country specific
 - 5.470 ~ 5.725GHz, country specific
 - 5.725 ~ 5.825/5.850GHz, 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 - 8
 - ETSI - up to 19
 - Japan - 4
- Data rates (Normal) Mode: 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel
- Data rates (Turbo) Mode: 12, 18, 24, 36, 48, 54, 72, 96 108 Mbps per channel
- Radio band selectable via software

Radio Specs - 2.4GHZ

IEEE 802.11b

- Frequency Bands Supported
 - 2.400 ~ 2.4835GHz, 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 - 13
 - Japan 14
- Data rates: 1, 2, 5.5, 11 Mbps per channel
- Radio band selectable via software

IEEE 802.11g

- Frequency Bands Supported
 - 2.400 ~ 2.4835GHz, 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 - 13
 - Japan 13
- Data rates (Normal) Mode: 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel
- Data rates (Turbo) Mode: 12, 18, 24, 36, 48, 54, 72, 96 108 Mbps per channel
- Radio band selectable via software

Complete country list available at:
<http://www.arubanetworks.com/products/aps/certification>

Manageability

- Management of all 802.11 parameters as AP / Bridge
- Network-wide AP management via:
 - Telnet
 - WEB GUI
 - SNMP
- Authentication support
 - Open, Local MAC, RADIUS MAC, Local User Database, RADIUS, IEEE 802.1x
- Encryption support
 - 64-bit / 128-bit / 152-bit WEP, WEP Pre-shared Key, TKIP, AES, WPA, 802.1x

Interfaces (Electrical)

AP-80SB/MB Common Interfaces

- 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 power over Ethernet (non-standard 802.3af)
 - Integral lightning arrester
- 1 x RSSI Low Voltage BNC Interface
- 1 x Electrical Ground / Safety Terminal
- 1 x Integral ENET lightning arrester

AP-80SB Interfaces

- 2x 2.4Ghz N-Type Female Antenna Interface

AP-80MB Interfaces

- 1 x 2.4Ghz N-Type Female Antenna Interface
- 1 x 5Ghz N-Type Female Antenna Interface

Power Adapter (AP-AC-80-1) 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 (50 m / 164 ft)

Interfaces (Mechanical)

- 4 x Mounting Bracket Hex Screw Mounting Points
- Ruggedized wall, pole or mast mount hardware provided (articulating in horizontal and vertical planes)

Visual Indicators (LEDS)

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

Power Requirements

- 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)

Device Dimensions H/W/D

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

Shipping Dimensions H/W/D

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

Environmental

AP-80

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

External Power Adapter

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

Mounting Options

- Wall, pole or mast mount (hardware included)

Standards

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

Compliance

- cULus listed (only if AC Power Supplied)
- PSE Mark (only if AC Power Supplied)
- IEC 60950 CB certificate and report
- 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 2.4GHz, Channel 14 and 5GHz approved (Japan)
- CE marked with NB letter of opinion for RTTE
 - ETS 300 328 2.4 GHz Band
 - ETS 301 893 5.4 GHz Band
 - ETS 301 489 EMC
- MIC Korea
- SRRC (China)
- AS/NZS CISPR22 Class B
- AS/NZS4771 (C-tick)

Safety

- UL Listed (UL60950)
- UL Listed (Canadian Electrical Code/CSA 22.2 No. 60950)
- EN60950 / IEC60950

Warranty

- 90 day parts/labor*

Part Numbers

AP-80SB

Aruba 80SB Outdoor Wireless 802.11a/b/g Access Point / WDS Point-Point Bridge c/w integral antenna. Includes wall, pole, mast mounting hardware, 48V DC (30W) Power Adapter kit with Ethernet (RJ-45) interface and supplied with 50 Meter AP to Power Ethernet Adapter Cable.

AP-80MB

Aruba 80SB Outdoor Wireless 802.11a/b/g Access Point / WDS Bridge. Includes wall, pole, mast mounting hardware, 48V DC (30W) Power Adapter kit with Ethernet (RJ-45) interface and supplied with 50 Meter AP to Power Ethernet Adapter Cable.

AP-LAR-1

N-type antenna interface lightning arrester

Antenna

Aruba offer a wide variety of outdoor rated detachable antenna types certified for use with the Aruba 80. Please contact your local sales representative for details.



*Extended with support contract

ARUBA
The Mobile Edge Company
www.arubanetworks.com

1322 Crossman Avenue
Sunnyvale, California 94089
Tel: 408.227.4500 • Fax: 408.227.4550

© 2005 Aruba Wireless Networks, Inc. All rights reserved. Aruba Networks and Aruba The Mobile Edge Company are trademarks of Aruba Wireless Networks, Inc. All other trademarks or registered trademarks are the property of their respective holders. Specifications are subject to change without notice.

10.5.SSAP80SBMB.kh.10.1