The Aruba AP 70

The Aruba AP 70 is the industry's first dual-radio "hybrid" access point that provides concurrent operation of 802.11a and 802.11b/g services, as well as secure wired access through an additional Ethernet port. Designed for use exclusively with Aruba mobility controllers, the Aruba AP 70 is ideally suited for advanced service delivery in mission-critical networks. The Aruba AP 70 is a multi-purpose device that can function both as an access point and as an RF monitor—either independently or concurrently—across the 2.4 GHz and 5 GHz spectrums. The Aruba AP 70 supports both a built-in 180 degree rotational omni directional high-gain tri-band antenna as well as support for 2.4 and 5 GHz detachable antennas.

Antennas

- AP 70 Integral Antenna:

  Integral, diversity supporting dual, tri-band omni-directional high gain antennas with 180 degrees movement

  – Integral antenna gain
    ~ 2.4-2.5 GHz / 4.46 dBi
    ~ 5.150 GHz / 7.21 dBi
    ~ 5.350 GHz / 6.49 dBi
    ~ 5.850 GHz / 5.23 dBi
- AP 70 External Antenna Interfaces:

  Quad (2 x 2.4GHz and 2 x 5GHz), diversity supporting reverse polarity SMA (RP-SMA) antenna interfaces suitable for a wide array of detachable antennas of various pattern types and gains.

Radio Specs – 802.11A

- Frequency bands
  – 5.150 ~ 5.250 GHz (lower band)
    4 channels
  – 5.250 ~ 5.350 GHz (middle band)
    4 channels
  – 5.470 ~ 5.725 GHz (ETSI band)
    11 channels
  – 5.725~ 5.825 GHz (higher band)
    4 channels
- 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 external antenna / 12 internal antenna
  – ETSI: up to 19
  – Japan: 4
- Data rates: 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel

Radio Specs – 802.11B

- Frequency band
  – 2.4 ~ 2.483GHz (US, Canada & ETSI)
  – 2.4 ~ 2.497GHz (Japan)
- 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 Specs – 802.11G

- Frequency bands
  – 2.412 ~ 2.462GHz (USA, Canada)
  – 2.412 ~ 2.472GHz (ETSI)
  – 2.412 ~ 2.484GHz (Japan)
- Radio technology – OFDM
- Modulation type – CCK, 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: 14
- Data rates: 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel
- Multi-mode radio band 802.11a or 802.11b/g selectable via software

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

Manageability

- Management of all 802.11 parameters
- Network-wide AP management via:
  – CLI
  – WEB GUI
  – SNMPv3
- Access point profiles
- Management by:
  – Geographical location
  – BSSID
  – Radio type

- Encryption support (AP and Controller)

– 40-bit / 64-bit / 128-bit / 152-bit WEP, TKIP, AES, WPA, WPA2.0

Physical (H/W/D)

- Antenna Retracted:
  167 x 190 x 30mm (6.57 x 7.48 x 1.18 in.)
- Antenna Extended:
  293 x 190 x 30mm (11.54 x 7.48 x 1.18 in.)
- Weight 510 grams (18 oz.)

Interfaces (Electrical)

- 2 x 10/100 Base-TX RJ-45 auto-sensing Ethernet interfaces:
  (Port 0)
  – Auto-sensing MDI/MDX
  – PoE 48V DC / 250mA power-over-Ethernet (802.3af compliant)
  – Serial-over-Ethernet (Port 1)
  – Auto-sensing MDX
  – PoE 48V DC / 250mA power-over- Ethernet (802.3af compliant)
- Redundant Ethernet Data Link and power-over-Ethernet
- Secure-jack wired port security (when deployed with the ArubaOS)
- USB ver2.0 Interface
- 1 x 5V DC Power Interface

Interfaces (Mechanical)

- Standard Kensington MicroSaver security cable interface (not supplied)
- Wall, wall gang-box and ceiling mount kit interface
  (optional – part number AP-70-MNT)

Visual Indicators (LEDS)

- (Ready) Power on/off
- (Ethernet 0/1) link status / activity
- (Radio Mode) 802.11a + b/g AP / air monitor mode

Power Requirements

- External AC power or POE
- 5V DC / 3A supplied externally via optional country specific
  AC adapter kits
- 48V DC / 250mA power-over-Ethernet (802.3af compliant)

Environmental

- Temperature
  – Operating: 0 to 50 ºC (32 to 122 ºF)
  – Storage: 0 to 70 ºC (32 to 158 ºF)
- Humidity 5% to 95% (non-condensing)

Standards

- Ethernet IEEE 802.3 / IEEE 802.3u
- Power-over-Ethernet IEEE 802.3af
- Wireless IEEE 802.11a/b/g
- USB 2.0

Safety

- UL Listed (UL60950)
- UL Listed (Canadian Electrical Code/CSA 22.2 No. 60950)
- EN60950 / IEC60950
- National Electrical Code Section 300-22(C)
- Canadian Electrical Code, Part 1, CSA C22.1 Sections 2-128,
  12-010(3), and 12-100
- UL2043 Plenum Rating

Electromagnetic Compliance

- FCC Part 15 Class B
- FCC Part 15 Class C 15.207/15.247
- FCC Part 15 Class E 15.407
- ICES-003 Class A
- RSS 210 (CAN)
- VCCI Class A
- EN 61000-3, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4
- EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11
- 73/23/EEC and 89/336/EEC
- EN 55022, EN55024 (89/336/EEC)
- ETS 300 328 (89/336/EEC), ETS 301 489 (89/336/EEC)
- ETS 301 893
- AS/NZS 3548 Class A
- RFS 29 (NZ)

Warranty

- 90 days parts/labor*

Part Numbers

AP-70
Aruba 70 Access Point 802.11a + b/g
AP-70-MNT
Aruba 70 Access Point Wall / Ceiling Mounting Kit
AP-70 Series (AC power adapter country kit variants)
AP-AC-NA (North America)
AP-AC-JPN (Japan)
AP-AC-UK (United Kingdom)
AP-AC-EC (Central Europe, Schuko)
AP-AC-IT (Italy)

Antennas
Aruba offers a wide variety of detachable antenna types suitable for use with the Aruba 70. Please contact your local sales representative for details.

Wi Fi® CERTIFIED a b g

*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

10.5.SSAP70.kh.10.1