

#### DATA SHEET

# ARUBA 370EX SERIES HAZARDOUS LOCATION ACCESS POINTS

High-performance 802.11ac Wave 2 for hazardous locations and harsh outdoor environments

The Aruba 370EX Series APs deliver proven Gigabit Wi-Fi, as well as advanced client, location and IoT support to meet the most demanding weather and temperature requirements.

Extreme weatherproofing makes the Aruba 370EX ideal for areas such as oil rigs, mining facilities and industrial plants.

Built-in support and traffic prioritization for IoT devices enable organizations to easily monitor the status of machinery, as well as the location and well-being of personnel to maintain productivity and safety standards.

#### **RESILIENT SOLUTION**

Purpose-built to survive in the harshest environments, the 370EX Series APs are certified for Class 1 Division 2 and Class 1 Zone 2, and IP66/67 (water and dust resistant) deployments.

The AP-370EX Series APs can be deployed both indoors and outdoors in extreme high and low temperatures, persistent moisture and precipitation, and are fully sealed to keep out airborne contaminants. All electrical interfaces include industrial strength surge protection.

#### **SIMPLE TO OPERATE**

The 370EX Series is easy to deploy and operate and has innovative capabilities to provide a high-performance wireless solution in harsh environments.

With a maximum concurrent data rate of 1,733 Mbps in the 5 GHz band and 300 Mbps in the 2.4 GHz band, the 370EX AP delivers an aggregate peak data rate of 2.0 Gbps. The 370EX Series also supports 160 MHz channel bandwidth (VHT160), multi-user MIMO (MU-MIMO) and 4 spatial streams (4SS).

To better improve the user and IT experience, the built-in ClientMatch feature dynamically optimizes Wi-Fi client performance as users roam or RF conditions change.



#### **KEY FEATURES**

- Highly resilient and reliable with Class 1 Division 2 and Class 1 Zone 2, IP66/67
- Delivers up 2.0 Gbps aggregate data rate
- Integrated Bluetooth Low Energy (BLE) interface for location services and IoT
- Delivers 802.11ac Wave 2 Gigabit Wi-Fi with 4x4:4SS MU-MIMO capability
- Unified wired and wireless policy with Dynamic Segmentation

For example, if a mobile device moves away from the AP it first establishes a connection with, or if RF interference impedes performance, ClientMatch automatically steers it to an AP that offers a better experience.

For environments where RF characteristics are changing due to client density or other variables, Aruba AirMatch using artificial intelligence automatically assigns a new channel, channel width and power planning to optimized the RF environment for a better user experience.

The 370EX Series APs also include an integrated Bluetooth radio that enables organization to easily support mobile engagement and asset tracking services.

Wayfinding, proximity-based push notification apps and asset tracking tags can help employees navigate a new location, stay informed or find frequently misplaced items.

## **SECURE CONNECTIVITY**

Aruba 370EX is highly secure, with the latest security standard WPA3 and Enhanced Open. A built-in edge access firewall and role-based access simplify managing what users or IoT devices can actually connect to and what their privileges are. These capabilities are the foundation of Aruba's Dynamic Segmentation feature which simplifies managing connections on wired devices as well.

## **UNIQUE FEATURES**

- Dual Radio 802.11ac access point with Multi-User MIMO
  - Supports up to 1,733Mbps in the 5GHz band (with 4SS/ VHT80 or 2SS/VHT160 clients) and up to 300 Mbps in the 2.4 GHz band (with 2SS/HT40 clients).
- Built-in Bluetooth support
  - Enables the use of location-based services such as wayfinding and asset tracking.
- Advanced Cellular Coexistence (ACC)
  - Minimizes interference from 3G/4G cellular networks, distributed antenna systems, and commercial small cell/ femtocell equipment.
- Extreme weather design
  - Sealed interfaces to lock out dust and moisture
- Built-in QoS for unified communications
  - Supports priority handling and policy enforcement for unified communication apps, including Microsoft Skype and for Business applications with encrypted videoconferencing, voice, chat, and desktop sharing.
- Best-in-class RF management
  - Integrated AirMatch technology manages the 2.4-GHz and 5-GHz radio bands and actively optimizes the RF environment.
- Spectrum analysis
  - Part-time or dedicated air monitoring, that remotely scans the 2.4-GHz and 5-GHz radio bands to identify sources of RF interference.
- Wireless mesh support
  - Convenient AP connectivity and extension of Wi-Fi coverage where Ethernet drops are not available.
- Intelligent app visibility and control
  - App visibility technology leverages deep packet inspection to classify and block, prioritize or limit bandwidth for 1000's of enterprise apps or groups of apps.

- Aruba core hardware and software security
  - Use of Trusted Platform Module (TPM) for secure storage of credentials and keys as well as secure boot
  - Integrated wireless intrusion protection offers threat protection and mitigation that eliminates the need for separate RF sensors and security appliances.
  - IP reputation and security services identify, classify, and block malicious files, URL's and IPs, to provide comprehensive protection against advanced online threats.
  - Encrypted IPsec VPN tunnels securely connect remote users to corporate network resources.

## **CHOOSE YOUR OPERATING MODE**

The AP-370EX Series supports Aruba's unique dual operating system capability called Unified mode. The APs can be deployed with a controller or run in Instant mode and readily switched to accommodate changing network needs.

- Controller mode: When managed by Aruba Mobility Controllers, AP-370EX Series offers centralized configuration, data encryption, policy enforcement and network services, as well as distributed and centralized traffic forwarding or,
- Controllerless (Instant) mode: In Aruba Instant mode, a single AP automatically distributes the network configuration to other Instant APs in the WLAN. Simply power-up one Instant AP, configure it over the air, and plug in the other APs – Instant Network.

Other functional modes include:

- Remote AP (RAP) mode for branch deployments
- Air monitor (AM) for wireless IDS, rogue detection and containment
- Spectrum analyzer, dedicated or hybrid, for identifying sources of RF interference
- Secure enterprise mesh
- Hybrid AP serves Wi-Fi clients and provides wireless intrusion protection and spectrum analysis

For large installations across multiple sites, the Aruba Activate service significantly reduces deployment time by automating device provisioning, firmware upgrades, and inventory management. With Aruba Activate, Unified APs are factory-shipped to any site and configure themselves when powered up.

## **AP-370EX SERIES SPECIFICATIONS**

- AP-375EX
  - 5GHz 802.11ac 4x4 MU-MIMO (1,733 Mbps max rate)
    - Internal Omni Antennas 4.6 dBi
  - 2.4 GHz 802.11n 2x2 MIMO (300 Mbps max rate) radios
    Internal Omni Antennas 4.0 dBi
- AP-377EX
  - 5GHz 802.11ac 4x4 MUMIMO (1,733 Mbps max rate)
     Internal 80°H x 80°V Directional Antennas 6.3 dBi
  - 2.4 GHz 802.11n 2x2 MIMO (300 Mbps max rate) radios
    - Internal 80°H x 80°V Directional Antennas 6.4 dBi

## WI-FI RADIO SPECIFICATIONS

- AP type: Outdoor Hardened, dual radio, 5 GHz 802.11ac 4x4 MIMO and 2.4 GHz 802.11n 2x2 MIMO
- Software-configurable dual radio supports 5 GHz (Radio 0) and 2.4 GHz (Radio 1)
- 5 GHz: Four spatial stream Multi User (MU) MIMO for up to 1,733 Mbps wireless data rate to up to three MU-MIMO capable client devices simultaneously
- 5 GHz: Four spatial stream Single User (SU) MIMO for up to 1,733 Mbps wireless data rate to individual 4x4 VHT80 or 2x2 VHT160 client devices
- 2.4 GHz: Two spatial stream Single User (SU) MIMO for up to 300 Mbps wireless data rate to individual 2x2 HT40 client devices
- Support for up to 256 associated client devices per radio, and up to 16 BSSIDs per radio
- Supported frequency bands (country-specific restrictions apply):
  - 2.400 to 2.4835 GHz
  - 5.150 to 5.250 GHz
  - 5.250 to 5.350 GHz
  - 5.470 to 5.725 GHz
  - 5.725 to 5.850 GHz
  - 5.825 to 5.875 GHz
- Available channels: Dependent on configured regulatory domain.
- Dynamic frequency selection (DFS) maximizes the use of available RF spectrum.
- Supported radio technologies:
  - 802.11b: Directsequence spreadspectrum (DSSS)
  - 802.11a/g/n/ac: Orthogonal frequencydivision multiplexing (OFDM)
- Supported modulation types:
  - 802.11b: BPSK, QPSK, CCK
  - 802.11a/g/n/ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM

- Transmit power: Configurable in increments of 0.5 dBm
- Maximum (conducted) transmit power (limited by local regulatory requirements):
  - 2.4 GHz band: +25 dBm per chain, +28dBm aggregate (2x2)
  - 5 GHz band: +22 dBm per chain, +28dBm aggregate (4x4)
- Note: conducted transmit power levels exclude antenna gain.
- Maximum EIRP (limited by local regulatory requirements):
  - 2.4 GHz band:
    - 375EX: 32.0 dBm EIRP
    - 377EX: 34.4 dBm EIRP
  - 5 GHz band:

375EX: 35.6 dBm EIRP

- 377EX: 36 dBm EIRP
- Advanced Cellular Coexistence (ACC) minimizes interference from cellular networks.
- Maximum ratio combining (MRC) for improved receiver performance.
- Cyclic delay/shift diversity (CDD/CSD) for improved downlink RF performance.
- Short guard interval for 20-MHz, 40-MHz, 80-MHz and 160-MHz channels.
- Space-time block coding (STBC) for increased range and improved reception.
- Low-density parity check (LDPC) for high-efficiency error correction and increased throughput.
- Transmit beam-forming (TxBF) for increased signal reliability and range.
- Supported data rates (Mbps):
  - 802.11b: 1, 2, 5.5, 11
  - 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54
  - 802.11n (2.4GHz): 6.5 to 300 (MCS0 to MCS15)
  - 802.11n (5GHz): 6.5 to 600 (MCS0 to MCS31)
  - 802.11ac: 6.5 to 1,733 (MCS0 to MCS9, NSS = 1 to 4 for VHT20/40/80, NSS = 1 to 2 for VHT160)
- 802.11n high-throughput (HT) support: HT 20/40
- 802.11ac very high throughput (VHT) support: VHT 20/40/80/160
- 802.11n/ac packet aggregation: A-MPDU, A-MSDU

## POWER

- Worst-case power consumption from the AP: 23W
- Power sources sold separately
- Power over Ethernet (PoE+): 802.3at-compliant

#### DATA SHEET ARUBA 370EX SERIES

## **OTHER INTERFACES**

- One 10/100/1000BASE-T Ethernet network interfaces
   (RJ-45)
  - Autosensing link speed and MDI/MDX
  - 802.3az Energy Efficient Ethernet (EEE)
- One 1000BASE-X SFP Port
- Bluetooth Low Energy (BLE) radio
- Up to 4dBm transmit power (class 2) and 91 dBm receive sensitivity
- Visual indicator (multi-color LED): For system and radio status
- Reset button: Factory reset (during device power up)
- Micro USB console interface
- Kensington security slot

#### MOUNTING

- AP-270-MNT-V1
- AP-270-MNT-V2
- AP-270-MNT-H1
- AP-270-MNT-H2

#### **MECHANICAL**

AP-375EX

- Dimensions/weight (excluding mount):
- 23 cm (W) x 24 cm (D) x 27 cm (H)
- 9.0" (W)  $\times$  9.4" (D)  $\times$  10.6" (H)
- 2.4 kg/5.3 lbs

#### AP-377EX

- Dimensions/weight (excluding mount):
  - 23 cm (W) x 22 cm (D) x 13 cm (H)
  - 9.0" (W) × 8.7" (D) × 5.1" (H)
  - 2.1 kg/4.6 lbs

#### **ENVIRONMENTAL**

- Operating:
  - Temperature: 40° C to +60° C (40° F to +140° F)
- Humidity: 5% to 95% noncondensing
- Storage and transportation:
  - Temperature: -40° C to +70° C (-40° F to +158° F)
- Operating Altitude: 3,000 m
- $\cdot\,$  Water and Dust
  - IP66/67
- Salt Tolerance
  - Tested to ASTM B117-07A Salt Spray 200hrs
- Wind Survival: Up to 165 Mph
- Shock and Vibration ETSI 300-19-2-4

#### REGULATORY

- FCC/ISED
- CE Marked
- RED Directive 2014/53/EU
- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- UL/IEC/EN 60950
- EN 60601-1-1, EN60601-1-2

For more country-specific regulatory information and approvals, please see your Aruba representative.

#### **REGULATORY MODEL NUMBER**

- AP-375EX: APEX0375
- AP-377EX: APEX0377

#### **CERTIFICATIONS**

- CB Scheme Safety, cTUVus
- UL2043 plenum rating
- Wi-Fi Alliance certified 802.11a/b/g/n
- Wi-Fi CERTIFIED<sup>™</sup> ac (with wave 2 features)
- Passpoint<sup>®</sup> (Release 2) with ArubaOS and Instant 8.3+

#### WARRANTY

• Limited Lifetime Warranty

### MINIMUM OPERATING SYSTEM SOFTWARE

• ArubaOS & Aruba InstantOS 8.3.0.0

## **RF PERFORMANCE TABLE**

	Maximum transmit power (dBm) per transmit chain	Receiver sensitivity (dBm) per receive chain
802.11b 2.4 GHz		
1 Mbps	25	-95
2 Mbps	25	-93
5.5 Mbps	25	-90
11 Mbps	25	-88
802.11g 2.4 GHz		
6 Mbps	25	-93
54 Mbps	19	-75
802.11n HT20 2.4 GHz		
MCS0/8	25	-93
MCS7/15	18	-71
802.11n HT40 2.4 GHz		
MCS0/8	22	-90
MCS7/15	18	-68
802.11a 5 GHz		
6 Mbps	22	-93
54 Mbps	19	-75
802.11n HT20 5 GHz		
MCS0/8	22	-93
MCS7/15	18	-71
802.11n HT40 5 GHz		
MCS0/8	22	-90
MCS7/15	18	-68
802.11ac VHT20 5 GHz		
MCS0	22	-93
MCS9	16	-68
802.11ac VHT40 5 GHz		
MCS0	22	-90
MCS9	15	-63
802.11ac VHT80 5 GHz		
MCS0	22	-87
MCS9	15	-61
802.11ac VHT80 5 GHz		
MCS0	22	-86
MCS9	15	-57

Maximum capability of the hardware provided (excluding antenna gain). Maximum transmit power is limited by local regulatory settings.

#### **ORDERING INFORMATION**

Part Number	Description	
AP-370EX Series Unified Outdoor Access Points		
R3P73A	Aruba AP-375EX (EG) 802.11n/ac Dual 2x2:2/4x4:4 Radio Int Omni Antenna Outdoor Hazloc AP	
R3P72A	Aruba AP-375EX (IL) 802.11n/ac Dual 2x2:2/4x4:4 Radio Int Omni Antenna Outdoor HazLoc AP	
R3P71A	Aruba AP-375EX (JP) 802.11n/ac Dual 2x2:2/4x4:4 Radio Int Omni Antenna Outdoor HazLoc AP	
R3P70A	Aruba AP-375EX (RW) 802.11n/ac Dual 2x2:2/4x4:4 Radio Int Omni Antenna Outdoor HazLoc AP	
R3P69A	Aruba AP-375EX (US) 802.11n/ac Dual 2x2:2/4x4:4 Radio Int Omni Antenna Outdoor HazLoc AP	
R3P96A	Aruba AP-377EX (EG) 802.11n/ac Dual 2x2:2/4x4:4 Radio Int Directional Ant Outdoor HazLoc AP	
R3P95A	Aruba AP-377EX (IL) 802.11n/ac Dual 2x2:2/4x4:4 Radio Int Directional Ant Outdoor HazLoc AP	
R3P94A	Aruba AP-377EX (JP) 802.11n/ac Dual 2x2:2/4x4:4 Radio Int Directional Ant Outdoor HazLoc AP	
R3P93A	Aruba AP-377EX (RW) 802.11n/ac Dual 2x2:2/4x4:4 Radio Int Directional Ant Outdoor HazLoc AP	
R3P90A	Aruba AP-377EX (US) 802.11n/ac Dual 2x2:2/4x4:4 Radio Int Directional Ant Outdoor HazLoc AP	



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