AP361-L

Enterprise outdoor 802.11ax (Wi-Fi 6) Access Point

HAN AP361-L is an enterprise level 802.11ax outdoor AP, it supports 2.4GHz & 5GHz dual-band, 4 spatial streams, 5GHz 2x2:2 +2.4GHz 2x2:2 UL/DL MU-MIMO, deliver high performance, ideal for your high quality outdoor wireless requirement.

AP361-L supports a maximum concurrent data rate of 2.97Gbps (2.4Gbps in 5GHz and 574Mbps in 2.4GHz), four spatial streams (2SS in 2.4GHz and 2SS in 5GHz), and all mandatory Wi-Fi 6 (802.11ax) features, such as UL/DL MU-MIMO etc.

Featuring enhanced WLAN technology with RF Radio Dynamic Adjustment, a distributed control Wi-Fi architecture, secure network admission control with unified access, built in application intelligence and analytics, making it ideal for enterprises of all sizes demanding a simple, secure, and scalable wireless solution.

802.11ax (Wi-Fi 6) Features

• Orthogonal frequency division multiple access (OFDMA) enables more clients to simultaneously operate in the same channel and thereby improving efficiency, latency, and throughput. OFDMA can concurrently address multiple clients in both directions downlink (DL) and uplink (UL). OFDMA is very effective in environments where there are many devices with short frames demanding lower latency.

• 1024 quadrature amplitude modulation mode (1024-QAM) a new encoding format that increases system capacity, reduces latency, and improves Wi-Fi efficiency in high-density multi-user scenarios. Compared to 256-QAM in 802.11ac, the coding efficiency has been increased by 25%.

• WPA3 this new security authentication method brings significant enhancements to Wi-Fi communication. WPA3-Personal provides password-based authentication, strengthening the robustness of Wi-Fi communication security by resisting offline dictionary attacks based on password guessing and enhancing protection against third-party password guessing attacks. Even if users choose weak passwords, it provides enhanced password security and encrypts forwarded user data.

WPA3-Enterprise, an enterprise-level security mechanism, provides encryption strength of up to 192 bits, protecting information-sensitive entities such as government, financial, and corporate institutions.

• The BSS Color space reuse feature identifies different WLANs' Basic Service Sets (BSS) using different colors (BSS Color) to achieve channel reuse in high-density environments, mitigating the impact of co-channel interference in real network deployments.

Network Management Platform

The AP361-L can be managed by HAN CSP (Cloud Service Platform) or HAN ESP (Enterprise Service Platform). AP is managed as one or more AP Groups (a logical grouping of one or more access points). The HAN Network Management Platform embeds a visionary controller-less architecture, providing user friendly workflows for WLAN management together with integrated Authentication Manager which helps to define authentication strategy and policy enforcement for Employees, Guest, and BYOD devices.

Plug-and-play deployment

The AP361-L works in a fully redundant cluster architecture to provide simplified plug-and-play deployments. The AP cluster is an autonomous system that consists of a group of HAN APs and a virtual manager, which is a selected access point for cluster management. One cluster supports up to 255 APs.

The access point cluster architecture ensures simplified and quick deployment. Once the first AP is configured using the configuration wizard, the remaining APs in the network will come up automatically with updated configuration. This ensures that the whole network is up and functional within a few minutes.

The administrator can use a web browser to log in and manage the cluster with secure HTTPS or HTTP.

The Administrator has full privileges to optimize network configuration to ensure a seamless experience for critical network applications. AP361-L also supports zero-configuration management developed in collaboration with third-party partners. This mechanism allows all APs within the same cluster to securely obtain the startup configuration file and the latest AP OS image file from a locally deployed device.

Integrated guest management

The AP361-L supports role-based management access to the AP cluster which includes Admin, Viewer and Guest Operator access. The Guest Operator access simplifies guest account creation and management, and therefore can be used by any non-IT person, such as a receptionist. The AP361-L also supports a built-in customizable captive portal which enables customers to offer unique guest access.

Quality of service for unified communication apps

The AP361-L supports fine-tuned, quality of service (QoS) parameters to differentiate and provide appropriate QoS for each application such as voice, video, and desktop sharing. Application aware RF scanning avoids interruption of real-time applications.

RF management

Dynamic Frequency Adjustment (DFA) technology automatically assigns channels and power settings, provides Auto Channel Selection (ACS) and Auto Power Transmission (APT), to ensure that access points stay clear of all radio frequency interference (RFI) sources to deliver reliable, high-performance wireless LANs.

Product specifications

Radio specification

• AP type: Outdoor, dual radio, 5 GHz 802.11ax 2x2:2 and 2.4 GHz 802.11ax 2x2:2

• 5 GHz: Two spatial streams for up to 2.4 Gb/s wireless data rate with HE160

• 2.4 GHz: Two spatial streams for up to 574 Mb/s wireless data rate with HE40

• 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

• Available channels: Dependent on configured regulatory domain

• DFA (Dynamic Frequency Adjustment) optimizes available channels and provides proper transmission power

• Supported channels:

- 20-MHz
- 40-MHz
- 80-MHz
- 160-MHz

• Transmit beamforming (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:6.5 to 300 (MCS0 to

MCS15, HT20 to HT40), 400 with 256-QAM

- ¬ 802.11ac(5GHz): 6.5 to 866.7 (MCS0 to MCS9, NSS = 1 to 2 for VHT20/40/80), 1083 with 1024-QAM
- ¬ 802.11ax(2.4GHz): 3.6 to 573.5 (MCS0 to MCS11, NSS=1 to 2, HE20 to HE40)
- ¬ 802.11ax(5GHz): 3.6 to 2402 (MCS0 to MCS11, NSS=1 to 2, HE20 to HE160)

• Supported modulation types:

- ¬ 802.11b: BPSK, QPSK, CCK
- ¬ 802.11a/g/n/ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
- ¬ 802.11ax: BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM

• Advanced Cellular Coexistence (ACC)

- ¬ Minimizes interference from 3G/4G cellular networks, distributed antenna systems, and commercial small cell/femtocell equipment.

Interfaces

• 1× 10/100/1000 port, Power over Ethernet (PoE) 802.3at compliant

• Reset button: Factory reset.

Visual Indicators (Tri-color LED)

• For system and radio status

- ¬ PWR: ON, power up
- ¬ SYS: ON, running; FLASHING, OS upgrading
- ¬ WAN: ON, WAN connection established
- ¬ 2.4G: ON, 2.4GHz SSID created and working
- ¬ 5G: ON, 5GHz SSID created and working

Antenna

- ¬ Integrated dual band omni-directional antennas for 2x2 MIMO with peak antenna gain of 6dBi in 2.4GHz and 5dBi in 6GHz.

Receiver sensitivity (per chain)

2.4 GHz	5 GHz
-96 dBm	-91 dBm

Maximum Transmit power (per chain)

2.4 GHz	5 GHz
22 dBm	22 dBm

Power

• Supports Power over Ethernet (PoE)

• Maximum (worst case) power consumption:

- ¬ 16W

Environmental

• Operating temperature: -20°C to 55°C (-4°F to +131°F)

• Humidity: 5% to 95% non-condensing

• Storage and transportation Temperature: -40°C to +75°C (-40°F to +167°F)

• IP67 Protection

Dimensions/weight

• Single AP excluding packing box and accessories

¬ 180mm (W) x 298mm (D) x 87mm (H) / 1200g

Reliability

MTBF: 1, 003, 257 hours (114. 5years) at +25ºC operating temperature

Software feature

• Up to 8 SSID/Radio (16 SSID/AP)

• Up to 255 APs per Web managed (HTTP/HTTPS) cluster

• Auto channel selection

• Auto transmit power control

• Bandwidth control per SSID

• L2 roaming

• L3 roaming with CSP/ESP

• Captive Portal

• Internal User Database

• Radius Client

• Wireless QoS

• Band steering

• Client smart load balance

• Client sticky avoidance

• Allowlist/Blocklist

• Zero-touch provisioning (ZTP) with support of third-party partner

• NTP client

• ACL

• System log report

• Wireless Attack Detection

Note: some features are limited by local regulatory settings

Authentication & Encryption

• 802.11i, Wi-Fi Protected Access 3 (WPA3), WPA2, WPA

• 802.1X

• Portal page authentication

• WEP, Advanced Encryption Standard (AES), Temporal Key Integrity Protocol (TKIP)

IEEE standard

• IEEE 802.11a/b/g/n/ac/ax

• IEEE 802.11e WMM, U-APSD

• IEEE 802.11h, 802.11i, 802.11e QoS

• 802.11k Radio Resource Management

• 802.11v BSS Transition Management

• 802.11r Fast roaming

Regulatory & certification

• SRRC

Ordering information

Item	Description
AP361-L	Enterprise Outdoor 802.11ax AP, 2.4GHz 2x2:2 + 5GHz 2x2:2, 1xGbE, built-in omnidirectional antennas. Mounting kit included.