

# ZISA W120 ACCESS POINTS

Optimize High Performance 600Mbps Dual-Band 802.11n AP





## **Overview**

The W120 is a dual band 2x2 MIMO indoor Wi-Fi AP, which is designed for high-density deployments in large offices, schools, hospitals and hotels that require premium performance. Having perfect compatibility, the W120 works with most wireless terminals to builds a high capacity Wi-Fi network.

The W120 can provide up to 600Mbps high throughput. The enhanced TX power and receive sensitivity make it deliver the high throughput and reliable coverage required by the most demanding business applications. The W120 supports multiple operation mode, including AP, AP WDS and WDS bridge. The flexible applications can meet the requirements in different senarios.

The W120 entralized management by integration with 3rd party controller or cloud management systems. It is convenient to remotly manage and mornitor the APs. Multiple separate SSIDs help to control the access to the network. With the QoS policy, the service with high priority can be assured for the good experience. The 802.1x and Web authencicaiotn provide the enhanced security for the system.

# **Highlight**

- Dual band 2x2 MIMO
- Up to 600Mbps combined data rate
- Gigabit wired interface
- AP/WDS/AP-WDS operation modes
- Prioritizes Applications and Maintains Quality of Experience
- 32 SSIDs



- Up to 256 simultaneous users
- Industry-Standard Security

# **Feature**

#### Dual band 2x2 MIMO radio

The W120 is compliant with IEEE 802.11 a/b/g/n standard (MIMO 2×2). Utilizes 802.11 standard speeds, up to 300 Mbps on the 2.4 GHz frequency band and up to 300 Mbps on the 5GHz frequency band. It finds the most efficient path to a Wireless client device and locks onto it delivering throughput speeds ideal for media streaming, online gaming, and large file transfers. The W120 has perfect compatible with most wireless terminals, including the wireless adapter, the notebook, the phone, etc.

#### All-in-one Integrated AP

The integrated FAT AP software package provides complete functionalities for quick deployments. The functions include, QoS, Web auth, MAC auth, MAC ACL, Portal Integration, VLAN, IGMP, NTP, etc. It can meet the requirements of the various applications.

#### • 3rd party integration: Open platform

The W120 supports centralized management by integration with 3rd party controller or cloud management systems. The management data between the W120 and the access controller is encrypted. The APs are zero configurations, before connecting to the AC. By creating the different service templates, it is easy for the manager to configure many APs in a short time. It is possible for the manager to manage the W120 from anywhere, modifying the configurations, upgrading the software, rebooting the AP, and monitoring the AP status by the alarms or system logs.

#### Multiple operation modes

The W120 supports multiple operation modes, including AP, AP WDS and WDS bridge. Working in the AP mode, the W120 provides the high capacity wireless access. By enabling the AP WDS for the radio, the W120 can support the client with WDS to access.WDS brige mode on 5GHz radio and AP mode on 2.4GHz radio, make it possible to establish the mesh network.

#### Prioritizes Applications and Maintains Quality of Experience

Advanced QoS (Quality of Service) prioritizes bandwidth intensive applications like HD video and gaming or bandwidth sensitive applications like VoIP telephone calls. The bandwidth limitation based on the SSID/Role helps to control the access for the different users, for example the SSID/Role for the guest accessing will get less bandwidth and more bandwidth is guranteed for the SSID/Role for the staff accessing.

#### Multiple SSIDs

The W120 supports up to 32 SSIDs, 16 SSIDs for each radio. And these SSIDs are isolated. That means, it is possible to create multiple SSIDs for different users, the guest, the staff and the administrator. And the clients accessing to different SSIDs are forbidden to visit each other. The private information is protected very well. Based on each SSID, it can apply the different



QoS policy and authentication method. With the W120, it is convenient for the customer to calssify the access roles. Supports up to 256 users accessing.

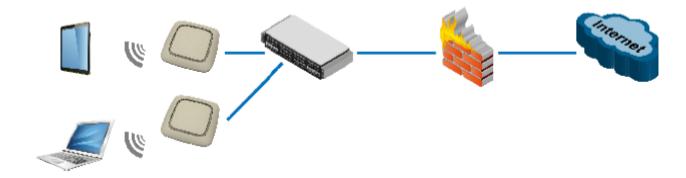
#### Industry-Standard Security

The W120 supports multiple security methods, WEP, WPA/WPA2-PSK, 802.1x Auth (PEAP, EAP/SIM), MAC Auth and Web Auth. Denial of accessing by MAC ACL make your business network safe from intruders or from malicious software attacks from the Internet.

#### Easy Installation

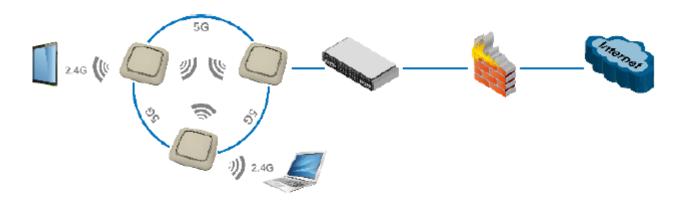
The W120 is designed with indoor industry standard. And the operation temperature is 0°C to +45°C. It can be installed in most outdoor environments to support broadband access services for wired or wireless users. For example, it can be placed on a wall or on the ceiling.

# **Applocations**



#### Indoor coverage as stand-alone AP

As a stand-alone Wi-Fi AP, the W120 supports up to 32 SSIDs (16 SSIDs for each radio) with enhanced high-performance and high capacity. It is a good fit for small to medium sized corporate wireless LAN network.



#### Wireless Mesh Network

By enable the WDS bridge on 5GHz radio, the W120 can establish the mesh with each other. On 2.4G Hz radio, it provide the wireless coverage for the area. And the different clients accessing to different APs can visit each other or visit the Internet by



the wireless mesh network.

# **Specifications**

#### **Physical Specification**

- Dimension:160mm (W) x 160mm (D) x 40mm (H)
- Installation:ceiling mounting or wall mounting
- LEDs: RUN
  - ➤ ETH
  - ➤ 5G
  - ≥ 2.4G

#### **Environmental Specification**

- Operating temperature:0°C ~ +45°C
- Humidity: 5% ~ 95% relative humidity
- Dustproof and Waterproof: GB 4208-2008: IP30, IEC60529:2001
- RoHS 2011/65/EU compliant; WEEE 2002/96/EC recyclable materials requirements

#### **Power Supply**

- Power input:
  - > +12V/1A
  - > 802.3af PoE (PD)
- Power consumption: less than 12W

#### **Antenna Pattern (Built-in Antennas)**

| Frequency(MHz) | 2400~2500 | 5150~5850 |
|----------------|-----------|-----------|
| Polarization   | Vertical  | Vertical  |
| Gain(dBi)      | 3+        | 3+        |

#### Interface

- 1 x GE(uplink) & PoE Interface
- 1 x Console
- 1 x Reset Button
- 1 x One external DC power input (12VDC)

### Wi-Fi Interface



- Operating frequency:
  - > 2.4G radio:2.4000GHz~2.4835GHz
  - > 5G radio:5.150~5.250,5.250~5.350,5.470~5.725, 5.725~5.850 GHz
- Maximum Transmit power:
  - > 2.4G radio:18dBm per chain
  - > 5G radio:18dBm per chain
- Data rate:
  - > 802.11b: 1, 2, 5.5, and 11Mbps
  - > 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps
  - > 802.11a: 6, 9, 12, 18, 24, 36, 48 and 54Mb/s
  - > 802.11n: MCS0~MCS15
- Receive sensitivity:
  - > 802.11b:
    - √ -86dBm@1Mbps
    - ✓ -86dBm@11Mbps
  - > 802.11g:
    - ✓ -86dBm@6Mbps
    - √ -73dBm@54Mbps
  - > 802.11n:
    - ✓ -86dBm@MCS0/8
    - ✓ -69dBm@MCS7/15
  - > 802.11a:
    - ✓ -86dBm@6Mbps
    - √ -73dBm@54Mbps

#### Safety & EMI

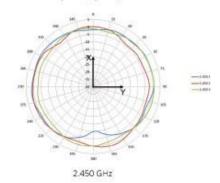
- FCC compliant
- UL certificate

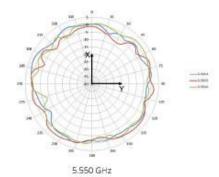


### **ANTENNA PATTERN PLOTS**

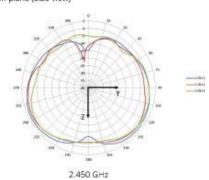
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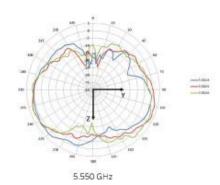
Horizontal or Azimuth plane (top view)





Elevation plane (side view)





# **RF PERFORMANCE TABLE**

|                       | Maximum transmit power (dBm)<br>per transmit chain | Receiver sensitivity (dBm)<br>per receive chain |
|-----------------------|--|---|
| 802.11b 2.4 GHz       |  |   |
| 1 Mbps                | 18.0   | -94.0   |
| 2 Mbps                | 18.0   | -90.0   |
| 5.5 Mbps              | 18.0   | -89.0   |
| 11 Mbps               | 18.0   | -88.0   |
| 802.11g 2.4 GHz and 8 | 02.11a 5 GHz                                       |   |
| 6 Mbps                | 18.0   | -91.0   |
| 54 Mbps               | 16.0   | -76.0   |
| 802.11n HT20 2.4 GHz  | and 5 GHz  |   |
| MCS0/B                | 18.0   | -91.0   |
| MCS7/15               | 14.5   | -73.0   |
| 802.11n HT40 2.4 GHz  | and 5 GHz  |   |
| MCS0/8                | 18.0   | -88.0   |
| MCS7/15               | 14.5   | -70.0   |
| 802.11ac VHT20 5 GHz  |  |   |
| MCS0                  | 18.0   | -91.0   |
| MCS9                  | 12.5   | -64.0   |
| 802.11ac VHT40 5 GHz  |  |   |
| MCS0                  | 18.0   | -88,0   |
| MCS9                  | 12.5   | -61.0   |
| 802.11ac VHT80 5 GHz  |  |   |
| MCS0                  | 18.0   | -85.0   |
| MCS9                  | 12.5   | -58.0   |

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



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