



# WA6102X

## Dual Band Enterprise Access Point

### Product Overview

WA6102X is an enterprise IEEE 802.11a and 802.11b/g dual-band wireless Access Point. It is Ideal for small and medium businesses to provide users mobility and easy access to corporate information for increased productivity. Detachable antennas allow a variety of external antenna options for extending the radio range and shaping the coverage area. Simultaneous use of 11a and 11g radios maximizes the capacity to accommodate a large number of users. With its strong authentication, data privacy and packet integrity features, the WA6102X maintains data security over open air.

### Key Features and Benefits

#### Performance and Scalability

The dual-radio design allows for simultaneous access of IEEE 802.11a and 802.11b/g clients to the wireless LAN, for flexibility and an increased number of clients, up to 128 users per band.

Both IEEE 802.11a and 802.11b/g radios support data rates of up to 54Mbps. With Turbo A/G, the data rates can be increased up to 40 - 60Mbps. With Super A/G, data rates can be increased up to 108Mbps.

Auto channel selection simplifies Access Point deployment by testing all available channels and selecting the best channel based on signal-to-noise ratio.

The WA6102X has 2 SMA connectors and includes 2 detachable diversity dual-band omni-directional antennas for easy deployment.

Integrated IEEE 802.3af Power over Ethernet simplifies deployment and dramatically reduces installation costs.

High power 17dBm for 11g and 14dBm for 11a in 54Mbps high band; 20dBm for 11g and 20dBm in 6Mbps high band

WDS (Wireless Distribution System) bridge mode and repeater mode are supported and is perfect for extending the network without wires in large open areas such as warehouses and retail stores.

#### Continuous Availability

IEEE 802.11f IAPP provides rapid handoff for seamless roaming as clients move between Access Points.

IEEE 802.1D Spanning Tree Protocol ensures a loop free network.

8 Virtual AP (Multiple SSID) per radio are supported, segregating departmental traffic and guest traffic into different VLANs for different access control, security and QoS policies.

#### Comprehensive QoS

IEEE 802.11e and WMM prioritize delay sensitive traffic, such as voice and video over data traffic, ensuring high quality as well as optimal network utilization.

#### Enhanced Security

IEEE 802.1x authentication, Pre-shared key authentication and MAC address authentication are all supported to ensure that only authorized users are allowed access to the wireless network.

IEEE 802.1x support includes EAP-MD5, EAP-TLS, EAP-TTLS and PEAP, providing strong, mutual authentication and dynamic encryption key management per user and session.

Wi-Fi Protected Access (WPA) combines IEEE 802.1x user authentication with enhanced, industry-compatible encryption (TKIP). WPA2 and IEEE 802.11i include AES-CCM for data encryption, significantly enhancing wireless data privacy.

IEEE 802.1Q compliant VLAN support and tagging permit 64 VLANs to be independently mapped to a RADIUS server.

The local wireless bridge filter, when enabled, prevents communication between wireless devices associated with the same access point.

#### Simple Management

Industry standard Command Line Interface (CLI) via console port or Telnet provides a common user interface and command set for users to manipulate the Access Point.

Embedded user friendly web interface helps users to quickly and simply configure the Access Point.

SNMP v1, v2, v3 network management and can be used with SNMP software such as ECview.

Dual flash images enable auto-recovery upon unsuccessful software download.

Wireless



## Features

### Physical Ports

- 1 10/100Base-T/TX RJ-45 port (Supports IEEE 802.3af Power Over Ethernet)
- 1 RS-232 DB-9 console port
- 2 SMA connectors

### Wireless Features

- Supports IEEE 802.11a, 802.11b and 802.11g
- Supports detachable antenna or integrated antenna
- Up to 8 Virtual APs per radio (multiple SSIDs)
- Auto-Channel Selection
- Auto-data rate switching
- Advanced Settings:
  - Transmitting power
  - Five Levels: Full, -3dB (50%), -6dB (25%), -9dB (12.5%), Min.
  - Threshold
  - RTS/CTS, Fragmentation
  - Selectable long or short preamble for 11b only
  - Selectable Beacon interval
  - WDS Bridge (AP to AP): PtP, PmP

### L2 Features

- Supports IEEE 802.1D Spanning Tree Protocol
- VLAN support for up to 64 groups

### Electrical

- Radio: Complies with IEEE 802.11a/b/g
- Modulation Type:
  - IEEE 802.11a: BPSK, QPSK, 16-QAM, 64-QAM
  - IEEE 802.11b/g: CCK, BPSK, QPSK, OFDM
- Data Rates
  - IEEE 802.11a: 6/9/12/18/24/36/48/54 Mbps Up to 108Mbps (turbo mode)
  - IEEE 802.11g: 6/9/12/18/24/36/48/54 Mbps Up to 108Mbps (turbo mode)
  - IEEE 802.11b: 1/2/5.5/11 Mbps
  - Power Adapter: Input 5V DC, 3A
  - Power over Ethernet: Input voltage 48V / 0.35A

### Operating Channels

- IEEE 802.11a:
  - 12 channels in base mode (US, Canada)
  - 5 channels in turbo mode (US, Canada)
  - 4 channels (Japan)
  - 11 channels in base mode (Europe)
  - 4 channels in turbo mode (Europe)
- IEEE 802.11b/g:
  - 11 channels in base mode (US, Canada)
  - 13 channels (ETSI)
  - 14 channels (Japan)

### QoS

- 8 queues with strict priority scheduling
- Supports Wi-Fi Multimedia (WMM) and IEEE 802.11e
- Classification: SA, DA, Ether Type, IEEE 802.1p tag
- Local configuration for up to 10 clients/priority

### Security

- IEEE 802.1x Authentication Access Control with Key Rotation
- IEEE 802.1x Mutual Authentication Access Control between two bridged APs
- WEP security: 64/128/152 bits
- Local MAC address filtering
- Radius Client support

## Ordering Information

### Optional Accessories

- ECview

### Security

- ACL
- WPA/WPA2, AES
- SSHv2

### Management

Management:

- CLI via console port or Telnet
- WEB management
- SNMP v1, v2, v3

Firmware & Configuration:

- Dual firmware images
- Firmware upgrade via FTP, Web or TFTP server
- Multiple configuration files
- Configuration file upload/download via TFTP server

Supports DHCP for IP address assignment

Supports DHCP relay

Event/Error Log/Syslog

(Optional) ECview, a powerful network management software that maximizes the managed capabilities of Edge-Core devices with:

- Topology Management
- Performance Management
- Configuration Management
- Event Management
- SNMP Management

### Mechanical

- Dimensions (H x W x D): 25 x 125 x 210 mm
- Hardware version: WA6102X2

### Safety

- CSAus (CSA22.2 No.60950-1& UL60950-1)
- TUV/GS (EN60950-1)
- CB (IEC60950-1)

### Electromagnetic Compatibility

- CE Mark
- FCC Class B

### Wireless Radio Certifications

- ETSI EN300 328, EN301 489-17, EN301 893
- FCC
- Wi Fi

### Environmental Specifications

- Operating Temperature: 0°C to 50°C
- Storage Temperature: 0°C to 70°C
- Humidity: Max 95%
- Environment Vibration: IEC 68 part, test Ee & Fh
- Environment Stock: IEC 68-2-29, ASTM D3332
- Drop: IEC 68-2-32, or ISO 4180/ 2
- Altitude: IEC 68-2-40 test Z/AM, IEC 68-2-41 test Z/ AMD
- Acoustic: ISO 7779, ISO3744

### Warranty

- Limited lifetime warranty

## Product Description

SNMP Network Management Software