

WA6102X 2 Dual-Band Enterprise Access Point



Product Overview

The Edge-Core WA6102X 2 is a enterprise class 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 in order to increase productivity.

It provides a variety of external antenna options for extending the radio range and shaping the coverage area.

The simultaneous support of IEEE 802.11a and 802.11b/g maximizes the capacity to accommodate a large number of users. With its strong authentication, data privacy and packet integrity features, the WA6102X 2 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 802.11g 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 integrated diversity dual-band omnidirectional antenna is great for easy deployment, while the external antenna for 11b/g radio, using SMA connector, is excellent for increasing signal intensity and coverage.

Integrated 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

Supports WDS (Wireless Distribution System) bridge mode and repeater mode. Bridging In large open areas, such as warehouses and retail stores, extending the network without wires.

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) 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

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.

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.

Supports SNMP v1, v2, v3 network management.

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

WA6102X 2 Product Specifications

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
- 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
- Supports 8 Virtual AP (Multiple SSID)

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 Accessory

- ECview

- ACL
- WPA/WPA2, AES
- SSL/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

Safety

- cCSAus (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 Shock: 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