BROWAN

BW1251

Dual Radio 2.4GHz/5GHz Access Point

RoHS

V1.3

Flexibility and high performance

BW1251 is a high-performance and feature-rich indoor Access Point. BW1251 offers flexibility for deploying an enterprise-scale wireless networks including warehouses, universities, airports, hospitals, and large corporations.

▲ Simultaneously supports 802.11a and 802.11b/g standard
▲ Mix of AP, AP Router and Bridge configuration: working simultaneously, blanketing last miles with high-speed data rate.
▲ Wireless AP router mode: Static Route table, NAT, Different IP subnet per BSSID, Enable/Disable DHCP server or DHCP relay per BSSID.
▲ Dual AP/ AP Router configuration: for high client density environment
▲ Dual Bridge (repeater) configuration: serves to extend the transmission range of wireless bridging and backhaul services.

Secure and reliable wireless networking

BW1251 supports and meets standard industry security requirement of wide area networking professionals for secured wireless network:

▲ Supports VLAN, up to 16 VLAN ID per Radio
▲ IEEE 802.1x/EAP with password, certificates and SIM card
▲ 64bits/128bits static and dynamic WEP encryption
▲ Supports Wi-Fi Protected Access (WPA/WPA2) with AES and TKIP support
▲ Layer 2 Isolation for preventing snooping on the same BSS
▲ MAC address filtering (ACL) for preventing illegal attacking from Internet
▲ Hidden SSID broadcast to prevent illegal users connection
▲ Built-in Web login authentication (UAM)

Strong Anti-interference

Dynamic Channel Allocation (DCA) solution automatically selects optimal operational frequency channel during power up and the periodically monitors the environment and adjusts for best operational channel. DCA enhances the BW1251 performance and provide continuous coverage under high AP density wireless network environment.

☀ Application

- BW1251
- Access Controller
- AAA Server
- Employee Server
- NMS

- Employee
  SSID 1
  VLAN 1
  WPA
- Guest
  SSID 2
  VLAN 2
  Open

Dynamic Wireless Bridging

Dynamic Wireless Bridging capability enables BW1251 to automatically seek and discover potential nearby root AP, and dynamically configures itself for better wireless bridging connectivity. With this feature in BW1251 network, whenever a bridge link is failover, the network will auto reconfigure route structures to minimize the lost of WLAN operation.

Multiple BSSID "Virtual AP" Technology

Supports up to16 BSSID per radio and each can be configured independently to support different security policies, authentication model, RADIUS servers and VLAN IDs. Each BSSID also can be set with different priority, based on 802.1p tag or 802.11e EDCA which enables QoS capability of wireless link between client device and Access Point.

Quick Installation and Deployment

BW1251 can be powered on by connecting to either Power Adapter or an integrated IEEE 802.3af Power-over-Ethernet supplying effortless deployment in various environments at a reduced cost. Besides, the BW1251 is designed to be mounted on wall with theft-protection mechanism or to stand alone using a removable back panel.

Easy and Secure Remote Management

BW1251 supports secure remote management through HTTPS, CLISH and SNMP connections.
▲ Secure management via HTTPs, CLISH, SNMP
▲ Detailed client survey and site survey
▲ Remote firmware update via WEB UI
▲ Backup/Restore configuration file
▲ Command Line Interface(CLI) with optional SSH
▲ Simple Network Management Protocol(V1,V2)
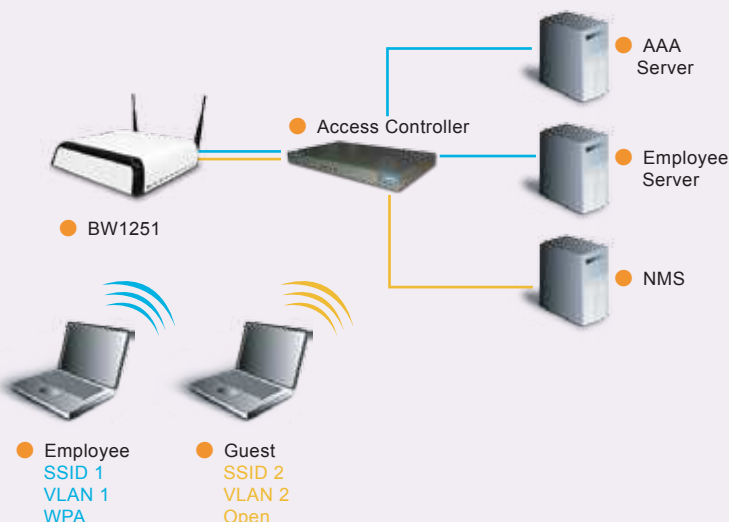
☀ Features

▲ Two dual-band radios, supporting 802.11a/g/b simultaneously
▲ Superior Wireless Bridging Capability (PtP，PtMP and Repeater)
▲ Support up to 16 BSSID per Radio - "Virtual AP"
▲ Wi-Fi Protected Access (WPA and WPA2) with TKIP or AES
▲ Wired Equivalent Privacy (WEP) using static or dynamic key of 64 or 128 bits
▲ Anti-Interference with Dynamic Channel Allocation (DCA)
▲ Hidden SSID for blocking illegal users accessing
▲ Supports 802.1x authentication using EAP-TLS, EPP-TTLS, PEAP, and SIM
▲ MAC Access Control List (ACL)
▲ Layer 2 Isolation prevents wireless clients from communicating with each other
▲ Built-in Web user login Authentication
▲ DHCP: server, client and relay
▲ Support up to 16 VLAN ID per Radio
▲ AAA Proxy, RADIUS authentication, RADIUS Proxy Server (RFC 2865, 2058)
▲ Wireless Quality of Service
▲ Back/Restore configuration settings
▲ System Log, Save/Send System Log to remote log server with different log levels
▲ NTP for clock Synchronization
▲ Remote firmware upgrade via HTTP
▲ Remote secure management by HTTPS and SNMP
▲ Software watchdog is supported

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☼ Specification

WIRELESS SPECIFICATION			
Data Rate Supported	802.11a : 6, 9, 12, 18, 24, 36, 48, and 54 Mbps 802.11b : 1, 2, 5.5, 11 Mbps 802.11g : 6, 9, 12, 18, 24, 36, 48, and 54 Mbps		
Frequency Band	802.11a : 802.11a 5.150-5.350GHz and 5.725-5.825GHz 802.11b/g :802.11b/g 2.4-2.483GHz, North American Channel (1-11)		
Modulation	802.11a : OFDM	802.11b: DSSS	802.11g: OFDM
Receive Sensitivity	802.11a/g @PER≦10% 54Mbps @ -70dBm 48Mbps @ -72dBm 36Mbps @ -76dBm 24Mbps @ -80dBm 18Mbps @ -82dBm 12Mbps @ -84dBm 9Mbps @ -86dBm 6Mbps @ -88dBm	802.11b @PER≦8% 11Mbps @ -86dBm 5.5Mbps @ -88dBm 2Mbps @ -90dBm 1Mbps @ -92dBm	
Transmit Power	802.11a/g Max 17dBm ± 2dBm@ 6~24Mbps Max 15dBm ± 2dBm@ 54Mbps 802.11b Max 18dBm ± 2dBm@ 1~11Mbps (Maximum power will vary by channel, rate and regulatory domain)		
Antenna	Two RP-TNC type connectors with approved antenna (2dBi)		
Radio	Two dual-mode 802.11a and 802.11b/g radios		

PRODUCT SPECIFICATION		
Interface	1 x 10/100 Mbps Ethernet port (RJ-45), 1 x RS-232 console port	
Physical Characteristics	Dimension: L:205 x H:45 x W:160 mm	Weight: 600g
Environment	Operating temperature: 0℃ ～ +55℃ Storage temperature: -20℃ ～ +75℃ Humidity: 10 ～ 90% (non-condensing)	
Power Supply	PoE : IEEE 802.3af compliance PoE (48V) Power Adapter : input / 100-240V AC, 50-60 Hz, output / 12V DC	
Power Consumption	10W(Maximin)	
LEDs	Power, LAN, WLAN1, WLAN2	

NETWORK MANAGEMENT	
Remote Management	HTTPS, SSH, Telnet, SNMP(v1, v2)
MIBs	MIB II for IP (RFC 1213), Bridge MIB, Ethernet MIB, 802.11 MIB
NTP Synchronization	RFC 1305
Self-Recovery Ability	Software watchdog
Firmware Upgradeable	Remote Firmware upgrade

REGULATORY	
Certificate : FCC	Compliance : RoHS, WEEE

WARRANTY
Three Years

RELATED PRODUCT	
Access Controller	BG6020G Access Controller
Access Point	BW1330 High Performance Hotspot Access Point BW2250 Dual Radio 2.4GHz/5GHz Outdoor Access Point