

A background image showing a circular pattern of concentric lines, resembling a fingerprint or a signal pattern, in shades of brown and grey. A white horizontal line is positioned above the text.

WLAN Wireless

Three diagonal bars of varying shades of blue and teal, positioned on the right side of the page, overlapping each other and extending from the top right towards the bottom left.

WAP2100-T512B

In-ceiling/drop-on wireless APs

Product Overview

BDCOM WAP2100-T512B is a Shanghai Boda business, school, hospital, government, Ceiling-mounted wireless AP products designed and launched in medium to high density wireless scenarios such as hotels and smart buildings.

The WAP2100-T512B is designed with a high-performance RF chip scheme that delivers high wireless throughput and concurrent access. With a built-in omni-directional MIMO high-power antenna, WLAN wireless coverage is maximized and signal deadlocks are avoided. The WAP2100-T512B supports POE and Adaptor two power supply solutions, the appearance is beautiful and can be widely used for plaster board, cement roof and other applications in ceiling installation. It's the perfect choice for your affordable wireless network.



WAP2100-T512B

"Key Features"

- **High-performance wireless solutions**

The WAP2100-T512B is built with a high-performance wireless chip scheme that supports 802.11a/b/g/n/ac/wave2 and other wireless protocols, with high throughput and stability. The entire 2.4G and 5G machine can support 1267Mbps open bandwidth and can meet up to 80 users with business access, with extremely high concurrency capability.

The WAP2100-T512B supports wireless load balancing technology. In high-density access scenarios, not only can you ensure that traffic is evenly distributed across multiple APs, avoiding local congestion; Within a single AP, the terminal can also be properly allocated through the 2.4GHz and 5GHz spectrum. This ensures that the AP not only has access to more end users, but also that each user has a good online experience.

- **Powerful, fully automatic network advantage**

The WAP2100-T512B not only provides access to a large number of users, but also supports wired wireless QoS, automatic terminal recognition, automatic channel selection,

Operational network features such as automatic power adjustment and dynamic receive sensitivity provide enterprise customers with easy-to-use WLAN services and experiences. The WAP2100-T512B, in conjunction with the WSC6100 family of wireless controllers, enables "one-click" self-optimization for the "family" and "background auto-optimization for the "family" to ensure that the wireless environment changes and the user experience decreases. Users do network tuning themselves without having to wait for vendors and dealers to go on-site.

- **Comprehensive security features**

WAP2100-T512B can provide a variety of secure access methods such as WEP/WPA/WAP2, support wireless IPS/IDS, support layer 2 user isolation, support centralized ACL control, etc.

Supports docking to WSC6100 Wireless AC, BCP8200 Cloud Platform for PCs, cell phones, A variety of terminals, such as tablets, provide rich and practical diversity authentication features, to provide users with convenient access services.

Supports rogue AP detection and follow-up, supports wireless attack prevention, supports static black and white lists, and reduces intrusion of rogue users into the wireless network.

- **Human-focused detail optimization**

WAP2100-T512B supports LED controlled design: During night rest, the device can be operated with LED lights off, to avoid the light source irritating the human eye; When the network patrol, the LED lights can be turned on all the time, improving the efficiency of the engineer. All LEDs can be issued in bulk on the AC controller, or push-button switch on a per AP basis, providing flexibility and convenience.

The WAP2100-T512B body and mounting bracket are ultra-thin design, while the mesh interface is also designed to be internal shrink and hidden, the AP after the overall installation, can be with the surrounding lighting, A better combination of environments ensures a good look and cleanliness.

- **Rich management features**

The WAP2100-T512B supports the thick-thin AP all-in-one design, can be configured for use separately, or can interface with the Borda WSC6100 series wireless AC products, implementing the CLI, Web, SNMP, and more.

T512B interfaces to the Borda PALLAS platform, enabling and AC, switching, routing, Security and other products, greatly improve dispute operations efficiency.

"Hardware Specifications"

Product model number	BDCOM WAP2100-T512B
Mesh ports are standard	1 Gigabit WAN (POE support) 1 Gigabit LAN
Operating frequency	2.4GHz and 5GHz
Wireless Protocol	802.11 a/b/g/n/ac/wave2
Wireless MIMO	Dual band 4-stream
Air velocity	1267Mbps
Antenna type	Built-in omni-directional
RF Power	23dBm
Number of coverage areas	10-30 m (may be affected by the environment)
Recommend concurrent users	80 with business users (may be affected by the environment)
Other interfaces	One RST/LED switch
Power supply mode	POE input or 12V DC
Overall power consumption	12W maximum
Deployment methods	Ceiling, wall mounting, mounting
Device dimensions	180 × 180 × 26mm
The weight of the device	400g
Operating temperature	0°C to 50°C
Operating humidity	10% to 95% (non-condensing)
Degree of protection	IP41

"Software Features"

Operating mode	Supports AP mode, route mode, bridge mode
IP Function	Support for IPv4, DHCP, NTP, and more
	Supports address acquisition methods such as static IP assignment, dynamic DHCP, and PPPoE dial-up
Wireless management	Support CAPWAP management protocol
	Supports discovery of AC in Option43, DNS, etc.
	Supports AC, AP Layer 2 and Layer 3 networking
	Support AC and AP cross-NAT networking
	Supports Layer 2 and Layer 3 user roaming
Wireless access	Supports AC, AP clock synchronization, version synchronization, and configuration synchronization
	Supports 802.11 protocol suite
	Support multi-SSID management, Chinese SSID and SSID hiding
	Support SSID-free and VLAN binding function
	Supports SSID-based user count limiting and isolation
User authentication	Each SSID is supported to specify a parameter template individually
	Support country code settings
	Supports on-premises and cloud certifications
	Support local account number, SMS, WeChat, card voucher and other authentication methods
QoS	Supports black-and-white lists of users
	Time period control and bandwidth control for user access is supported
	Supports 802.11e/WMM
	Support for global traffic speed limiting
Wireless optimization	Supports AP, VLAN, and user-based traffic limits
	Supports radio band and AP based user load balancing
	Supports one-touch automatic network optimization and radio frequency parameter customization
	8 wireless scene templates are factory-set to allow user-defined add-on templates
Security Defense	Supports automatic background optimization without manual intervention
	Supports 5G priority access, enabling low-rate users to limit access
	Supports PSK authentication methods
	Supports wireless encryption such as WEP, WPA, WPA2, etc.
Apply value added	Supports secure filtering based on IP, MAC, etc.
	Support DDoS, De-Auth and other attack protection
Management and Operations	Support Rogue AP detection
	Support RTLS probe
Management and Operations	Supports docking the wireless positioning system
	Supports legacy device management such as Telnet, SSH, Web, SNMP, and TR069

	Supports multiple diagnostic tools such as ping, tracet, debug, etc.
	Supports centralized management of CAPWAP-based AC
	Support PALLAS unified cloud management
	Supports AP indicator on/off

"Ordering Information"

WAP2100-T512B	WAP2100-T512B smart wireless in-ceiling AP with 2 Gigabit ports standard, built-in MIMO antenna, Wave2 protocol support. Maximum speed 1267Mbps; Supports dual POE and Adaptor power supply, power supply sold separately.
WAP-PSE-1000	Single-port Gigabit PSE power supply module
Adaptor	12V/1A adapter

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Shanghai Baud Data Communication Co., Ltd.

Address: No.123 Juli Road, Pudong Zhangjiang High Tech Park, Shanghai 201203, P.R. China

Official website: www.bdcom.cn

Tel: 021-50800666

Fax: 021-50801839