XD3000K SPEC SHEET V1.0

802.11AX WiFi6 3000M Dual-band Ceiling-mounted AP

1.Product Introduction

The XD3001K is a ceiling-mounted dual-band wireless access point that uses the 802.11ax wireless network standard. It operates in the 2.4G & 5G ISM frequency bands and can support the demand for high-speed wireless internet access for up to 128 concurrent users. With a 10/100/1000Mbps network interface, it supports remote PoE power supply in accordance with the 802.3af/at standard. In 2.4G 802.11ax mode, it can support speeds of up to 573Mbps, while in 5G 802.11ax mode, it can support speeds of up to 2402Mbps, with a total wireless rate of up to 3000Mbps. It features high performance, high gain, high reception sensitivity, high bandwidth, low latency, high density, and high access capabilities, which not only allows for wider coverage but also provides higher wireless transmission performance and stability. With a ceiling-mounted design and integrated Ethernet interface, the appearance is simple, elegant, and easy to deploy. It can be easily installed on ceilings or walls without disrupting the overall decor, making it the ideal choice for high-density and high-bandwidth environments such as hotels, shopping malls, offices, conference rooms, KTVs, and restaurants.

2. Product Image

3. Product Features

1) Based on standard operator hardware design, the anti-electromagnetic interference capability meets the requirements of YD/T968-2010 "Electromagnetic Compatibility Requirements and Measurement Methods for Telecommunications Terminal Equipment." Overvoltage and overcurrent protection comply with YD/T 993-2006 "Technical Requirements and Test Methods for Lightning Protection of Telecommunications Terminal

Equipment," meeting the criteria for simulated lightning strikes, power line induction, power line contact, etc., with common-mode protection of 6KV and differential-mode protection of 1.5KV. The surge protection capability meets the YD/T1082-2011 "Technical Requirements and Test Methods for Overvoltage and Overcurrent Protection and Basic Environmental Adaptability of Access Network Equipment." Enhanced heatsinks and optimized airflow ensure that the device will not experience downtime due to overheating in the hot summer months, guaranteeing real-time, long-term, stable, and efficient transmission of user network data, and improving user experience.

2) Supports the 802.11AX protocol, providing wireless access speeds of 573Mbps on 2.4G and 2402Mbps on 5G, with a total wireless access speed of 3000Mbps.

3) Equipped with an external professional WiFi6 MIMO RF chip, ensuring wider signal coverage, higher speeds, and longer transmission distances.

4) Full gigabit wired ports, HNAT fast forwarding, with a throughput of up to 900Mbps+, providing strong background bandwidth support for wireless.

5) Features MU-MIMO, OFDMA, BSS Color, high-speed rates, and better coverage, as well as low latency characteristics. It offers improved wireless network performance and user experience in high-density network environments and scenarios with numerous connected devices.

6) Combined with integrated software for both fat and thin scenarios, it can be used independently in small environments or paired with gateway devices in medium to large environments, meeting various complex network environments.

7) Supports remote management through cloud platforms and apps, allowing for real-time remote viewing, configuration, upgrading, and maintenance.

8) Continuous product updates, functional, and performance optimizations ensure adaptability to various network environments and enhance user experience.

4. Technical Specifications

Hardware configuration	
Main Chip	MT7981BA+MT7976CN High-performance enterprise-level chip
Frequency	Quad-core ARM® Cortex-A53 MPCoreTM 1.3GHz
Memory	256MB
Flash	16MB
	2.4G WiFi 2*2 802.11b/g/n/ax (theoretical maximum rate up to 573Mbps) 5.8G WiFi 3*3 802.11a/n/ac/ax (theoretical maximum

Wireless Technology	rate up to 2402Mbps) Time fairness, beamforming 1024QAM ultra-fast access rate, OFDMA ultra-high-density user access OFDMA / MU-MIMO uplink / downlink BSS Color spatial reuse Space-Time Block Coding (STBC), Low-Density Parity-Check (LDPC), uplink and downlink beamforming (Beamformer TX/RX) Energy-saving: single-antenna standby technology, dynamic MIMO power-saving technology, enhanced automatic power-saving transmission technology, per-packet power control technology, etc.
Device Interfaces	WAN PoE*1 10/100/1000Mbps adaptive DC direct power supply interface, suitable for connecting power plugs with an outer diameter of 5.5mm, inner diameter of 2.1mm, and length of 9.5mm or above.
Buttons	Reset button for factory reset (long press for 6 seconds to reset)
Indicators	Status indicators
Antennas	Built-in 2.4G 2dBi FPC antenna * 2

	Built-in 5G 2dBi FPC antenna * 3
Power	48V 802.3af/at PoE power supply，DC 12V/1.5A
Operating/Storage Temperature	-10℃～45℃/-20℃～70℃
Operating/Storage Humidity	10%～90%(non-condensing) / 5%～90%(non-condensing)
Dimensions	Φ175*42mm
Weight	N/A

WiFi Spec	
Frequency Range	2.4G：2.4~2.4835GHz 5G: UNII-1: 5.15~5.35GHz UNII-2: 5.47~5.725GHz UNII-3: 5.725~5.825GHz
Channel	2.4G: 1、2、3、4、5、6、7、8、9、10、11、12、13 5G: 36、40、44、48、52、60、64、149、153、157、161、165
Modulation	802.11b: DSSS (DQPSK, DBPSK, CCK) 802.11g: OFDM (BPSK, QPSK,16-QAM) 802.11n: OFDM (BPSK, QPSK,16-QAM, 64-QAM) 802.11ac: OFDM (BPSK, QPSK,64-QAM, 256-QAM) 802.11ax: OFDMA (BPSK,256-QAM, 1024-QAM)

Transmission Rate	11b up 11Mbps, 11g up 54Mbps, 11n up 300Mbps 11ac up 864.7Mbps, 11ax 2.4G up 573Mbps, 11ax 5G up 2402Mbps
Receiver Sensitivity	2.4G: 11b: < -99±1.5dBm @1Mbps, < -90±1.5dBm dBm@11Mbps 11g: < -96±1.5dBm@6Mbps, < -78±1.5dBm @54Mbps 11n 20MHz: < -96±1.5dBm@MCS0, < -76±1.5dBm @MCS7 11n 40MHz: < -92±1.5dBm @MCS0, < -74±1.5dBm @MCS7 11ax 20MHz: < -96±1.5dBm @MCS0, < -66±1.5dBm @MCS11 11ax 40MHz: < -94±1.5dBm @MCS0, < -63±1.5dBm @MCS11 5G: 11a: < -94±1.5dBm @6Mbps, < -78±1.5dBm @54Mbps 11n 20MHz: < -94±1.5dBm@MCS0, < -74±1.5dBm @MCS7 11n 40MHz: < -90±1.5dBm @MCS0,

	< -72±1.5dBm @MCS7 11ac 20MHz: < -94±1.5dBm @MCS0, < -72±1.5dBm @MCS8 11ac 40MHz: < -90±1.5dBm @MCS0, < -66±1.5dBm @MCS9 11ac 80MHz: < -88±1.5dBm @MCS0, < -62±1.5dBm @MCS9 11ax 20MHz: < -94±1.5dBm @MCS0, < -64±1.5dBm @MCS11 11ax 40MHz: < -92±1.5dBm @MCS0, < -60±1.5dBm @MCS11 11ax 80MHz: < -88±1.5dBm @MCS0, < -58±1.5dBm @MCS11
Transmit Power	11b: 23dBm±1.5dBm@11Mbps 11g: 20dBm±1.5dBm@54Mbps 11n(20/40MHz): 20dBm±1.5dBm@MCS7 11ac(40/80/160MHz): 20dBm±1.5dBm@MCS9 11ax(20/40/80/160M) : 17dBm±1.5dBm@MCS11

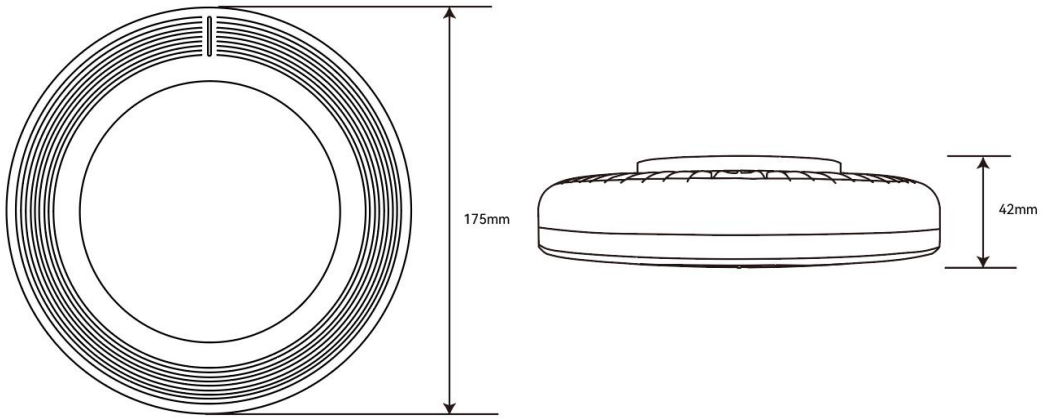
Software Functions	
Working Mode	Integrated Fat-Thin
Capacity	128 Users

Management mode	English WEB remote management / Cloud platform management / Mini Program management
Status	- Device Status: CPU usage, remaining memory, number of wireless users, device information (device name, device model, software version, serial number, MAC address, system time, total memory, remaining memory, uptime) - System Log
Basic Management	- LAN Settings: Automatic/Static IP, WAN Port VLAN, LAN Port VLAN, MAC Address - DHCP Configuration: Disabled/Normal/Advanced Settings - Mode Switching: Router/AP, DHCP Server (Enable/Disable)
Wireless	2.4GHz Wireless Configuration: - SSID Settings: SSID (GB2312/UTF-8), VLAN ID, Encryption, WiFi password (supports up to 5 SSIDs) - Basic Settings: Wireless Network On/Off, Region, Channel, Bandwidth, Transmission Power, AP Advanced (Network Mode/AP Isolation/Multicast [Off/Multicast to Multicast/Multicast to Unicast]/Weak Signal

	Disconnection) - WDS Settings: WDS Mode (Off/Self-learning Mode/Bridge Mode/Repeater Mode), Connection Status - User List (IP Address, MAC Address, Signal Strength, Transmission Rate, Reception Rate) 5.8GHz Wireless Configuration: - SSID Settings: SSID (GB2312/UTF-8), VLAN ID, Encryption, WiFi password (supports up to 5 SSIDs) - Basic Settings: Wireless Network On/Off, Region, Channel, Bandwidth, VHT Bandwidth, Transmission Power, AP Advanced (Network Mode/AP Isolation/Multicast [Off/Multicast to Multicast/Multicast to Unicast]/Weak Signal Disconnection) - MESH Networking: Mode (Off, Master Device, Slave Device) - WDS Settings: WDS Mode (Off/Self-learning Mode/Bridge Mode/Repeater Mode), Connection Status - User List (IP Address, MAC Address, Signal Strength, Transmission Rate, Reception Rate)

ARP List	ARP List (IP Address, MAC Address, Interface, Type, Status, Action [Static/Unique]) Supports All Unique, All Static, All Dynamic, Export List Information, Export Binding Information, Import Binding Information, Add Binding, Refresh
AC Platform Client	Status switch, Server Address, Device Name, Group Name, Maximum Number of Users, Maximum Number of 5G Users, Transmission Power, AP Isolation, Remark, DHCP Defense, Current Connection Status
Network Tools	Ping Test, TraceRoute
System Management	- Configuration Management: Backup and Import, Factory Reset - System Upgrade: Local Upgrade - Device Restart: Immediate Restart/Scheduled Restart - Device Name: Project Name, Device Name, Host Name, Internal Domain Name

5. Product dimension diagram(mm)



6. Packaging information

XD3001K*1, mounting bracket*1, rubber plugs*4, self-tapping screws*4, user manual*1