



AIR-AP3600BE

**COMMANDO AirX 3600Mbps, 802.11be, 1x2.5Gbps,
PoE and DC, FIT/FAT, Cloud Wi-Fi 7 Access Point**

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Product Overview

COMMANDO AirX AIR-AP3600BE is a Wi-Fi 7, Cloud Access Point Indoor Access Point which works in standalone as well as COMMANDO RouteX controller-based mode of operation. It enables communication between wireless users with speed up to 3600Mbps with beamforming Wi-Fi technology. It is standalone as well as controller-based device, comes with dual band with 2.4GHz (688Mbps) and 5GHz (2882Mbps), equipped with 1x2.5Gbps RJ-45 Port. It can provide powerful wireless coverage to enterprise environments such as Small, Medium enterprises, university campus, concert venue, gymnasium, Commercial establishments etc.

It is indoor Wall/Ceiling AP which can install at every place to work as a stable base station for access users. It supports (IEEE 802.3at) PoE+ as well DC power supply, which helps in easy installation by eliminating the need of a dedicated power source and need of a power adapter. It can identify and determine the correct transmission speed and half/full duplex mode of the attached devices. It also supports standard Auto-MDI/MDI-X that can detect the type of connection to any Ethernet device without requiring special straight or crossover cables, Store-and-Forward forwarding scheme to ensure low latency and high data integrity.

Product Highlights

- Cloud Managed 4x4 Indoor Wi-Fi 7 Access Point
- Dual Radio Access Point (2.4 GHz/5 GHz) , 4x4 MIMO stream for IEEE802.11be (Wi-Fi 7) operation greatly improves communication efficiency.
- Up to 3.6 Gbps 2.4GHz(688Mbps) and 5GHz(2882Mbps),
- Equipped with 1*2.5Gbps Port, dual purposes IEEE 802.3at Port (PoE+) port supporting 1x 10/100/1000/2500Mbps.
- Wi-Fi 7 standard supports ultra-wide 320 MHz channels that can deliver extreme throughput and provides greater network capacity.
- 4-MU-MIMO, 4096-QAM, which increase overall performance, reliability, and high-density device support by utilizing multiple bands, avoiding interference, and reducing latency.
- Cutting-edge COMMANDO Cloud for centralized management and mass scalability.
- Access point monitoring with COMMANDO RouteX controller and COMMANDO Cloud for real-time remote monitoring and troubleshooting.

- FAT mode support multiple operational modes like AP, routing mode (Default mode is FIT-AP mode).
- Multi SSID up to 8 with inbuilt Wi-Fi channel analysis.
- Management with the help of WEB GUI, COMMANDO RouteX Controller and from Cloud portal.
- Supports IEEE 802.11be/ax/ac/a/b/g/n with backward compatibility for wireless clients, 2.4GHz+5GHz Wireless dual band.
- Built-in 5dBi MIMO Antenna with wireless RF power adjustable as per user movements from AP.
- Access end users up to 130+.
- Supports band steering automatically moves to wider 5G band for faster connections, intelligent load balance based on users.
- Supports Wi-Fi client distance 35 meters and above depending on surrounding conditions.
- Dual input for power either PoE+ via WAN/LAN port or DC power inputs 12V, 2A.
- Support Open or encryption like WPA3, WPA/WPA2PSK_TKIPAES.
- With the function of the built-in firewall, IP filter, URL filter, and MAC filter.
- Comply with IEEE 802.3az standard.
- Plug and Play design simplifies installation with self-adaption.
- Compact, silent design perfect for noise sensitive environments.
- With Zero Touch Provisioning with plug and play and no setup. Affordable, Easy-to-Use AP for all sized business networks, with Zero Configuration Required.
- Comes with one-year default warranty – optionally extendable up to 3 years.

Features and Benefits

Wi-Fi 7 (IEEE 802.11be)

It has ultra-wide 320 MHz channels with 4K-QAM and features like Multi-Link Operation (MLO) which allows a device to simultaneously connect on multiple bands, enabling faster speeds by aggregating bandwidth, with more reliable Wi-Fi connections on multiple concurrently used bands. In Wi-Fi 6, the spectrum resource could be wasted if the channel encounters signal interference. With Multi-RU and Puncturing, Wi-Fi 7 devices will be able to take full advantage of the remaining part of the channels that is not being used or interrupted. This way, the Wi-Fi bandwidth can be used efficiently to make data transmission quicker and more reliable and Puncturing. It has 4-MU-MIMO, 4096-QAM, which increase overall performance, reliability, and high-density device support by utilizing multiple bands, avoiding interference, and reducing latency.

2.5Gigabit Ethernet speed

It provides 2.5Gbps speed on RJ-45 port. It Comply with IEEE802.3bz standard with energy efficient, well built, rigorously tested and can sustain very rough environment and provides reliable speed performance.

Wireless client supported

Supports up to 130+ wireless users/clients and supports distance of 35 meters and above from AP in all directions for wireless clients.

FIT and FAT Mode

It supports FIT/FAT operation mode. In FIT mode, AP works with COMMANDO RouteX controller and all configuration is centrally managed by cloud portal also. In FAT mode, AP can use WEBGUI and configure AP and routing mode.

MU-MIMO Technology

It adopts 4-MU-MIMO, 4096-QAM modulation, supports MU-MIMO (Multi-User Multiple-Input Multiple-Output), 4 Spatial streams greatly improve communication efficiency.

Dual Power Option

It supports Power over Ethernet IEEE802.3at Power over Ethernet (PoE+), as well as power can be fed from 12V, 2Amp adaptor for easy installation and lower cost. So, it can be installed in areas where power outlets are not readily available.

Easy to Use

COMMANDO AIR-AP3600BE is standalone WEB GUI based as well as controller-based cloud access point which is easy to use and manage device. It requires minimal configuration, so setup is simple and hassle-free. Auto-negotiation senses the link speed of a network device in wired 10/100/1000/2500Mbps and also for wireless devices intelligently adjusts for compatibility and optimal performance by DFS. It can check free channels available with inbuilt Wi-Fi analysis. It is ideal for installation to any desktops/wall/ceiling with limited space. Dynamic LED lights provide real-time work status display and basic fault diagnosis. Easy Installation, Plug-and-play installation with no configuration required.

Firewall

Support Flexible user Access Control Policies and network Security to meet varied Customer needs. MAC Filtering function to block the access of illegal hosts. Supporting One-Click IP-MAC Binding to avoid ARP spoofing. Access Rules can be applied like URL Filter , IP Filter , MAC Filter , Port Mapping and DMZ to permit or deny Wi-Fi users.

Auto MDIX Capabilities

Auto sensing 10/100/1000/2500Mbps ports with auto MDIX capabilities which also removes speed and duplex mismatches automatically.

Compact and Silent Performance

It operates quietly, making it ideal for use in virtually any room or office. Perfect for noise sensitive environments.

Support uninterrupted critical network infrastructure

It is equipped with dual power options, including DC input and PoE+ support, providing redundancy to safeguard against power failures. This dual-power architecture ensures continuous operation of the device, mitigating potential downtime and extending its operational lifespan. By integrating this feature, businesses can protect against the financial and operational risks associated with power disruptions, ensuring uninterrupted connectivity for critical network devices, users, and servers.

Value for Money

State of art quality product that can serve on real time high-speed Performance with AC input power, highly reliable, conformance to international open standards, durable, serviceable, aesthetics, perceived quality, enhanced performance leads to value to money.

Green Technology

It features the IEEE 802.3az standard, energy-efficient Ethernet that can save power. It automatically adjusts power consumption according to the link status to limit the carbon footprint of your network. It also complies with RoHS, prohibiting the use of certain hazardous materials. Besides that, most of the packaging material can be recycled and reused.

Software

COMMANDO AIR-AP3600BE Supports FIT mode works with COMMANDO RouteX controllers, which can provide cloud-based access and functions as follows.

Monitoring

Interface, Terminal, Protocol, Policy, System, Flow Control.

System Setup

Basic Setting, Disk management, Cloud Account, Advanced Settings like ALG Set, Administration, Upgrading, Reboot.

Network

Interfaces, DHCP, DNS, IP/MAC Group, Static Routes, VLAN,VPN Client, UPNP NAT, Port Mapping, IPv6, IGMP Agent.

Flow Control

Multi-WAN features Load Balancing/Protocol/Port Forward/Domain Name/Upload/Download, Smart Flow Control, IP/MAC Limiters, Protocol Library.

Access Controller

Wireless overview, AP Configuration, AP group, AP Firmware Upgrades, Wireless blacklist and whitelist, User Information.

1. Wireless Overview: Open Access Controller with ON/OFF button. The connected AP will automatically enter the AP device list and can Manage AP. Running State of AP status with Online AP, Offline AP, fast roaming, 5G first along with terminal statistics like 2.4G online, 5G online, peak online, active terminal, inactive terminal. Wireless Network Rating with traffic statistics, terminal association details with Access evaluation, Access times, Average access success rate with Network transmission quality.

2. AP Configuration: Access Point Configuration with All groupings, All Status like Online/Offline/Upgrading, All Frequency like (2.4G/2.4G+5G) and IP/MAC/Model/Remarks.

Interference Analysis with Start Searching AP, MAC, Remarks, BSSID, BSSID Remark, SSID, Signal Value, Channel along with Import or Export configuration files.

Default Configuration for 2.4G, 5G Radio with other Setting like SSID1 Name - COMMANDO01

SSID1 Security No Password, SSID1 VLAN Close, Hide SSID1 Name Open, SSID rate limit Open, Guest Mode Open (Isolate guest devices discovery and access to wired network) Channel Auto, AP Signal 80% default, Airtime scheduling, Advanced settings like Beacon frame power

Follow AP signal strength Beacon frame interval 200ms, RTS threshold 0, Low-rate access license Allow all, Management frame rate 1Mbps.

3. AP Group: AP Group Add/Delete with Group name, Number of AP, channel, Maximum belt capacity, SSID, Actions. With Add button click we can set Group name with 2.4G/5G control state information.

4. AP Firmware Upgrades: Access Point Upgrades with MAC/Model, Upgrade All, Batch Upgrade with information like MAC Address, Current Version, Latest Version, Status, AP Remarks, Actions

5. Wireless blacklist and whitelist: With Add, Import, Export, Enable, Disable, Delete which also shows Mode, Terminal MAC address, SSID, AP, week, time, comment, Status, Actions

6. User Information: User Information with IP/MAC/SSID, All Frequency (2.4G/5G), All users along with weak signal users and normal users showing information like IP Address, MAC, AP Information, SSID, Signal, Connect Time, Tx, Rx, Comment, Actions.

Authentication

Captive Portal, VPN Server, Authentication Account, Push Notification.

Behavior

Behavior Audit with Mark MAC Address, MAC Control, Website Control, URL Control, Application Protocol Control, Secondary Routing, QQ, Blacklist/Whitelist.

Firewall

ACL Rules, ARP binding, Connection Limiter, Advanced Firewall. Advanced application->Dynamic DNS, SNMP, Application across three layers, Wake on LAN, FTP Server, HTTP Server, UDPXY Set.

Services

Ping Test, Capture Packet, Trace Route, IP Sub-netting, Speed Test, Diagnostics, Watchdog.

Log

User Logs, Function Logs, System Logs.

COMMANDO AirX Ceiling AP's controller also has cloud captive portal with AirX Cloud Login <http://commandonetworks.com.cn/#/login> .

COMMANDO AIR-AP3600BE Supports FAT mode supports Standalone software functions as follows.

It's software support SSID broadcasting, Multi SSID up to 8 (4 SSID in 2.4GHz, 4 SSID in 5GHz) and has routing mode with static IP, dynamic IP, Wireless AP mode in FAT AP. It also as built-in firewall with MAC backlist and whitelist.

Hardware

Solid performance with non-blocking architecture

- With Flash 64MB with 512MB DDR3 RAM memory greatly improved the data processing performance.
- All ports capable of 2.5Gbps speed. Full speed of data transferring with (Auto-Negotiation/Auto MDI/MDIX).
- Solid performance with non-blocking architecture.

Physical Ports and Networking Interfaces

- 1 x 10/100/1000/2500Mbps Mbps RJ 45 Ethernet Ports with combined PoE+
- LED Indicators: Power/Sys, LAN, WAN.
- Reset Button

Extra Long operational life

- High Quality PCB Circuit Board and PCB Surface Treatment Using Gold Sinking Process.
- Support temperature range 0° C to 50° C.
- Desktop, Ceiling and Wall mount design Which enables horizontal and vertical wall mounting.

Noise-free Operation

- The ports support reduced power modes for silent operation. Perfect for noise sensitive environments.

Table 1. Hardware Highlights

| Hardware Highlights | |
|----------------------|---|
| Standard | IEEE 802.11be/ax/ac/a/b/g/n |
| RAM | 512MB DDR3 |
| Flash | 64MB |
| Antenna | Built-in 5dBi MIMO Antenna |
| Interface | 10/100/1000/2500Mbps LAN/WAN |
| Data Rate | 3600Mbps |
| Concurrent End Users | 130+ |
| Reset | Hardware button |
| Power | DC 12V 2A or IEEE802.3at (WAN) |
| User Capacity | 130+ |
| Dimension | 188mmx33mm |
| Environment | Operating Temperature: -20~45 °C Limit working temperature: -30~70 °C Storage Temperature: 0~70 °C Humidity: 5%~95% non-condensing |
| Warranty Period | 1 Year |
| Indicator Light | Power/SYS, LAN, WAN |

Specifications

Technical Specifications

Supports 2.4GHz+5GHz, IEEE 802.11be/ax/ac/a/b/g/n with backward compatible wireless clients, wave 2.0 technology, Standalone model with Multi SSIDs up to 8 with either open or WPA3, WPA/WPA2PSK_TKIPAES encryption with Dual option for input Power supply with either 48V PoE+ (IEEE 802.3at) or DC input power.

Table 2. Specifications

| Technical Parameters | Specification |
|-------------------------|--|
| Hardware Specifications | 1 x 10/100/1000/2500Mbps auto-negotiation port combined with IEEE 802.3at PoE+ port 1 x Reset button/Restore to factory default 1 x DC Port |
| Memory | 512MB RAM |
| Flash | 64MB |
| IEEE Standard | IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, IEEE 802.11a, IEEE 802.11ac, IEEE 802.11ax, IEEE 802.11be |
| Data Transfer Rates | Dual band IEEE 802.11b up to 11Mbps IEEE 802.11g up to 54Mbps IEEE 802.11n up to 400Mbps IEEE 802.11ac up to 900Mbps IEEE 802.11ax up to 1800Mbps IEEE 802.11be up to 3600Mbps |
| Frequency | Radio 2.4GHz+5GHz |
| Throughput | Up to 3600Mbps |
| Wi-Fi Operational Modes | Wireless AP, Gateway, WISP, Wi-Fi Repeater |
| Wireless Security | Open or Encryption WPA3, WPA/WPA2PSK_TKIPAES option |

| | |
|-------------------------|---|
| Multiple SSID | Up to 8 SSIDs. |
| Access control Features | MAC Access Control |
| Enclosure Type | Desktop/Ceiling/Wall mounted |
| Firewall | DoS, SPI Firewall, IP Address Filter/MAC Address Filter/Domain Filter, IP and MAC Address Binding |
| Input Power Supply | WAN port PoE+ IEEE802.3at Or DC 12V, 2A |
| Management | Web based management RouteX Controller based Cloud portal Based Backup and Restore to default Settings |
| ENVIRONMENTAL | Operating Temperature: -20~45 °C Limit working temperature: -30~70 °C Storage Temperature: 0~70 °C Humidity: 5%~95% non-condensing |
| Weight | <1Kg |

Table 3. COMMANDO AIR-AP3600BE LED indication

| LED Indicator | LED Status |
|---------------|---|
| Power/SYS | Green Blinking: Power ON Indication Blue and Blinking: Wi-Fi indication that SSID now available for use. |
| WAN | Upper LED WAN: Connect with Gateway or PoE+ devices and Green Blinking shows activity on WAN port. |
| LAN | Lower LED LAN: Connect to end users and Green ON shows activity on LAN port. |

Included in the bundle/box

COMMANDO AIR-AP3600BE comes with following accessories.

1x COMMANDO AirX Wireless AP AIR-AP3600BE.

1x Patch Cord
1x Wall Mount with Mounting Screws
1x LAN cable

Support and Warranty

- Same-day assistance.
- Comprehensive 24-hour support using common communication/chat platforms, Email and Telephone.
- Provide FAQs and troubleshooting help online (self-service) through cloud-based solutions.
- Highly technical and trained representatives to resolve issues.
- One-year default warranty with option of warranty extension up to 3 years

COMMANDO WarrantyX Program available on: www.commandonetworks.com/warranty

Table 4. Support and Warranty

| Warranty and Support | |
|----------------------|---|
| Products covered | COMMANDO AirX 3600Mbps, 802.11be, 1x2.5Gbps, PoE and DC, FIT/FAT, Cloud Wi-Fi 7 Access Point |
| Warranty duration | One Year RTB (Return To Base) replacement warranty – optionally extendable up to 3 years. |
| Hardware replacement | COMMANDO, its resellers or its service center will use commercially reasonable efforts to replace the product subject to stock availability. Otherwise, a replacement will be arranged within 15 working days after receipt of the Return Materials Authorization (RMA) request. |
| End-of-life policy | In case of discontinuation of the product, support is limited to 3 years from announcement date. |
| Effective date | Hardware warranty commences from the date of shipment to customer (and in case of resale by a COMMANDO reseller, not more than 90 days after original shipment by COMMANDO). |
| Support duration | Lifetime support. |
| COMMANDO | COMMANDO will provide 24x7 support for basic configuration, diagnosis, and troubleshooting of device-level problems for up to one year from the date of shipment of the originally purchased product. This support does not include solution or network-level support beyond the specific device under consideration. |
| Online Portal Access | Warranty allows guest access to commandonetworks.com for all available technical queries. |

Ordering Information

To place an order, please contact your local reseller/distributor or COMMANDO Sales Representative at www.commandonetworks.com/catalog

Table 5. COMMANDO AIR-AP3600BE Ordering Information

| Product Code | Description |
|--------------|--|
| AIR-AP1800AX | COMMANDO AirX 1775Mbps, 802.11ax Wave 2, FIT/FAT, Wi-Fi 6 Cloud Access Point |
| AIR-AP3000AX | COMMANDO AirX 2976Mbps, 802.11ax Wave 2, FIT/FAT, Wi-Fi 6 Cloud Access Point |
| AIR-AP3600BE | COMMANDO AirX 3600Mbps, 802.11be, Multi-Gig 1x2.5Gbps, PoE & DC, FIT/FAT, Wi-Fi 7 Cloud Access Point |

Document History

| Release | Remark | Date |
|-----------|---------------|---------------|
| Release 1 | First Release | July 12, 2024 |