



COMMANDO AirONE AIR-APO300 Indoor Wireless Access Points Data Sheet

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Product Overview

COMMANDO AirONE APO300 Outdoor Wireless Access Point enables communication between wireless and wired computers/laptops and mobile devices in the network. It complies with IEEE 802.11b/g/n standard and comes with single band 2.4GHz with MIMO High Gain Omni 5dBi Internal Antenna. It has separate Fast Ethernet 1 WAN with 24V POE input & 1 LAN port along with IP65 casing. It has a wireless speed of up to 300Mbps meaning you do not need buffering when surfing, downloading and streaming videos. The quality of the video makes it ideal for connecting surveillance camera systems. Unlike traditional enterprise Wi-Fi systems that required a controller. It comes as a standalone device.

It is designed for the Outdoors with weather resistant IP65 case specifically for outdoor installations. It has 5 in 1 mode outdoor Access Point with Gateway, Repeater, WISP, Super WDS and Wireless AP mode with range up to 400 meters and above with 1000mW input Power. It is industrial grade Outdoor AP with bridging capability up to 4 devices with great communication efficiency, with combined Concurrent speed up to 300Mbps Wi-Fi speed.

It can also be used as DHCP server and works as layer 3 device when configured in gateway mode. It supports 24V POE, 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

- Multiple Operational Modes like Gateway, Repeater, WISP, Super WDS, AP. All COMMANDO AirONE series Outdoor AP default mode is AP mode.
- Supports Multi SSID up to 4 with inbuilt WI-FI channel analysis.
- Supports IEEE 802.11b/g/n, 2.4GHz, MIMO High Gain Omni 5dBi Internal Antenna with RF input Power up to 1000mW.
- Support wireless RF power adjustable as per user movements from APO.
- Wireless clients up to 64 max, with concurrent end users up to 50.
- Support tag VLAN and VLAN management.
- Supports intelligent load balance based on users.
- Support seamless roaming and low-rate terminal access.
- Dual purposes WAN or 24V POE supporting 1x 10/100Mbps. .
- Dedicated LAN ports 1x 10/100Mbps.
- Supports Wi-Fi client distance of 400 meters and above depending on surrounding conditions.
- Dual input for power either 24V POE or 12V, 1.5A DC power inputs.
- Support Open or encryption like WPA/WPA2PSK_TKIPAES
- Plug and Play design with self-adaption with Zero Touch Provisioning.
- Compact IP65 casing, silent design perfect for noise sensitive environments.
- Affordable, Easy-to-Use AP for Small Business Networks, with Zero Configuration Required.
- Built-in High-Performance Processor with long life, Suitable for Deployment of Large Scale Commercial Scenarios
- Comes with one-year default warranty – optionally extendable up to 3 years.

Features and Benefits

Easy to Use

COMMANDO AirONE APO300 Outdoor AP is Web GUI based easy to use and manage standalone 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 or 100Mbps and also for wireless devices intelligently adjusts for compatibility and optimal performance by DFS and setting channel bandwidth 20/40MHz wireless band and also can check free channels available with inbuilt Wi-Fi analysis. Its compact size makes it ideal for Outdoor 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.

Super WDS Mode Supported

In Super WDS mode, device can act as APO as well as Bridge both simultaneously and can connect up to 4 other bridges and APs.

Fast Ethernet LAN speed

It provides and offers a wide range of models for different network deployment requirements with Fast Ethernet speed. These energy efficient AP are well built and rigorously tested and can sustain in very rough environment to provide the reliable performance.

Weatherproof Enclosure with IP65

It has IP65 resilient weatherproof enclosure protects the access points against harsh outdoor condition. ±6KV Lightning Protection with no Ingress of dust as well as waterproof enclosure.

Wi-Fi That Goes the Distance

With 1000mW transmission power it provides stable wireless coverage at a range of 400 meters and above as per outdoor conditions.

Network Security

Support Flexible user Access Control Policies, 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 to permit or deny Wi-Fi users.

Auto MDIX Capabilities

Auto sensing 10 or 100Mbps 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 has Dual power options with DC input power and 24V POE power input which protect from power failures and increases life of device. It comes with Lighting surge protection Common mode $\pm 6\text{KV}$ and Differential mode $\pm 2\text{KV}$. With this feature protect on cost and the impact to your business by losing these network devices and thus the users/servers connected to them.

Cost Efficient

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

Green Technology

It features the 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 AirONE APO300 supports software functions as follows.

Home

Device Information like CPU Usage, Memory Usage, LAN Information like IP Mode Get IP From AC/Gateway/Static, Status with 2G Wi-Fi Clients Status with information like SSID, Channel, Bandwidth, Encrypt, MAC Address, Operation Mode configure like AP/ Fat AP Mode with Uptime, Flow in bps for AP Downstream and AP Upstream.

Wizard

Gateway Mode, Super WDS Mode, Repeater Mode, WISP Mode, AP Mode (Default Selection).

Wi-Fi

2G Wi-Fi Status ON/OFF, SSID, Hide your SSID, Bandwidth, Channel, Encryption Open/Encryption with WPA/WPA2PSK_TKIPAES, MAC ACL with Add, Delete, Apply with disable/Allow/ Prohibit option, Wi-Fi Timer Off/ON with Time Frame, Advanced setting like Country Region, 2G Channel (1-13), Multicast Fast, Maximum client for per AP (Range 1-64), WLAN Partition, Short GI, Coverage Threshold(-95dBm~-65dBm), TX Power, DFS.

Network

LAN Settings with DHCP server option, Static DHCP, VLAN Settings & Cloud Server Settings.

Security

URL Filter, IP Filter, MAC Filter & DMZ Settings.

Manage

Configure, Reboot, Modify Password, Upgrade, Time, Log, Flow Control, IP Group, Time Group & DDNS Settings.

Table 1. Software functions

SOFTWARE FUNCTION	
Wizard Function	<p>Gateway Mode: In Gateway mode, all Ethernet are bridged together, and wireless clients will connect ISP access point or router connecting directly to the Internet via WAN PORT. NAT is enabled and PCs in Ethernet LAN port share the same IP to ISP through wireless LAN.</p> <p>Super WDS Mode: APO can work as Bridge and can connect other bridges and APs and wireless clients simultaneously.</p> <p>Repeater Mode: In Repeater mode is used to extend the range of wireless coverage of existing Wi-Fi network. This mode is suitable when you are in a Wi-Fi dead-zone or a place with weak wireless signal, and you want to have a larger effective range of the wireless signal throughout your home or office.</p> <p>WISP Mode: In WISP mode, the device connects to ISP station or hot spot wirelessly to share network with local wired and wireless devices.</p> <p>AP Mode: In AP mode, the device works as an access point to transform your existing wired network into a wireless network.</p>
Flow in bps	For Downstream, Upstream graphs at particular time.
Network	LAN Settings with DHCP server option, Static DHCP, VLAN Settings, Cloud Server Settings
Management	Configure, Reboot, Modify Password, Upgrade firmware, Time setting with NTP and from PC, Log, Restore the factory default
Wi-Fi	SSID name setting, Bandwidth, Channel, Encryption options like Open/Encryption like WPA/WPA2/PSK/TKIP/AES, MAC ACL, Wi-Fi Timer OFF/ON with Time Frame. Advanced setting like Country Region, 2G Channel (1-13), Multicast Fast, Maximum clients for APO (Range 1-64), WLAN Partition, Short GI, Coverage Threshold (-95dBm~-65dBm), TX Power, DFS.

Hardware

Solid performance with non-blocking architecture

- All ports capable of Fast Ethernet speed. Full speed of data transferring with (Auto-Negotiation/Auto MDI/MDIX).
- Solid performance with non-blocking architecture.

Physical Ports and Networking Interfaces

- Up to 2 x 10 or 100Mbps Rj45 Ethernet Ports with combined 24V POE with WAN and separate LAN port
- LED Indicators: Power, 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
- Lighting surge protection Common mode $\pm 6KV$ and Differential mode $\pm 2KV$.
- Exceptional Performance in Harsh Outdoor Climates with IP65 weatherproof and dust proof enclosure ensuring it can with stand harsh outdoor and indoor environments.

Noise-free Operation

- Silent operation. Perfect for noise sensitive environments.

Table 2. Hardware Specifications

Parameters	Specification
Standard	IEEE 802.11b/g/n
RAM	128 MB
Flash	16 MB
Interface	2* 10 or 100Mbps LAN/WAN ports.
Reset	Hardware Reset button/ Restore to Factory Defaults software based

Power	DC In 12V, 1.5A or POE IN 24V
User Capacity	64
Dimension	315mm * 145 mm * 80 mm
Temperature & Humidity	0°C to +50°C & 5%~95% RH Non-Condensing
Warranty Period	1 Year
LED	Power, LAN, WAN.

Specifications

Technical Specifications

Supports Single Radio 2.4GHz, IEEE 802.11b/g/n, with Multi SSIDs up to 4 with either open or WPA/WPA2PSK_TKIPAES encryption with Dual option for input Power supply with either 24V POE or 12V, 1.5A DC input power.

Table 3. Specifications

Technical Parameters	Specification
Hardware Specifications	1* 10 or 100Mbps auto-negotiation WAN port or 24V POE 1* 10 or 100Mbps auto-negotiation LAN port 1* Reset button/Restore to factory default 1*DC Port MIMO High Gain Omni 5dBi Internal Antenna
Memory	128RAM
Flash	16MB
IEEE Standard	IEEE 802.11b, IEEE 802.11g, IEEE 802.11n
Data Transfer Rates	IEEE 802.11b up to 11Mbps IEEE 802.11g up to 54Mbps IEEE 802.11n up to 300Mbps
Frequency	2.4GHz
Throughput	Up to 300Mbps
Network Functions	802.1q Tag based VLAN, DHCP Server, Static, PPPoE
Wi-Fi Operational Modes	AP, Repeater, WISP Mode, Super WDS, Gateway Mode
Wireless Security	Open or Encryption WPAWPA2PSK_TKIPAES option
Multiple SSID	Up to 4 SSIDs

Access control Features	MAC Access Control
Enclosure Type	Desktop/Wall/Ceiling mounted
Wi-Fi Transmit Power	Up to 1000mW
Input Power Supply	WAN port 24V POE OR DC 12V ,1.5A
Management	Web based management Backup & Restore to default Settings
ENVIRONMENTAL	Operating Temperature: 0° C to +50° C (+32° F to +122° F) Humidity: 5% to 95% non-condensing Storage and transportation Temperature: - 40° C to +70° C (-40° F to +158° F)
Weight	<1Kg

Table 4. Model Comparison

Features	AIR-APO300	AIR-APO750	AIR-APO1200
Standard	IEEE802.11b/g/n	IEEE802.11ac/b/g/n	IEEE802.11ac/b/g/n
Frequency	2.4GHz	2.4GHz + 5.8GHz	2.4GHz + 5.8GHz
Wireless data rate	300Mbps	300Mbps + 450Mbps	300Mbps + 900Mbps
WAN	1 * 10/100Mbps	1 * 10/100Mbps	1 * 10/100/1000Mbps
LAN	1 * 10/100Mbps	1 * 10/100Mbps	1 * 10/100/1000Mbps
DC	DC:12V 1.5A	DC:12V 1.5A	DC:12V 1.5A
PoE Power	Support 24V POE	IEEE 802.3af/at 48V POE	IEEE 802.3at 48V POE

Lightning Level	Common mode: 6KV; Differential mode 2KV	Common mode: 6KV; Differential mode 2KV	Common mode: 6KV; Differential mode 2KV
RF Power	1000mW	500mW	500mW
Water-proof Level	IP65	IP65	IP65
Operation Mode	AP, Gateway, WISP, Repeater, Super WDS	AP, Gateway, WISP, Repeater	AP, Gateway, WISP, Repeater
Distance	400 meters	400 meters	400 meters
Users Supported	Max: 64, Recommended: 50	Max: 128, Recommended: 80	Max: 128, Recommended: 100
Dimensions	315mm * 145 mm * 80 mm	315mm * 145 mm * 80 mm	257mm * 87mm * 38 mm

Table 5. COMMANDO AirONE APO300 LED indication

LED Indicator	LED Status
Power	24V POE / 12V, 1.5A DC power given.
WAN	Connect with Gateway or 24V POE devices and Green shows activity on WAN port.
LAN	Connect to end users and Green shows activity on LAN port.

**Included in the bundle/box
COMMANDO AirONE APO300**

AirONE APO300 comes with following Accessories.

- 1x COMMANDO AIR-APO300.
- 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

Table 6. Support and Warranty

Warranty and Support	
Products covered	COMMANDO AirONE AIR-APO300 Outdoor Wireless 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 Care	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/ordering

Table 7. COMMANDO AirONE APO300 Ordering Information

Product Code	Information
AIR-APO300	COMMANDO AirONE 300Mbps, 2.4GHz, 802.11b/g/n Outdoor Access Point

Document History

Release	New or Revision	Described in	Date
Release 1	First Release	First Release	July 15, 2021