COMMANDO AirACE Wireless Bridge
Data Sheet

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Product Overview

COMMANDO AirACE Series Wireless Bridge comes with default AP mode where bridge be step up by keeping one device in CPE mode and one device in AP mode. It supports speed up to 300Mbps with IEEE 802.11a/n standard along with build in MIMO 8~13dBi Internal Panel Antennas as per model. All Bridges Supports HI-MAX TDMA Technology which use polling technique to solve the hidden node and resource waste problem between the AP and Base Station. It provides low latency, high throughput in PTP application likes IP camera, long range Wi-Fi Transmission) with Beamforming Technology. It can have Multi SSID up to 4.

It has IP65 Waterproof and Dust proof Enclosure casing with 24V Passive PoE power input. It enables the connection of two or more different local area network (LAN) segments by bridging a wireless connection between them. It works much like a wired network bridge and is used to connect LANs that are logically separated and/or located in different physical locations. It is primarily used in corporate LANs, which often span across geographical locations. At the backend, the wireless bridges are connected to the LAN switch or router. For the two network segments to communicate, each data packet travels from the local Ethernet/router to the wireless bridge, which wireless broadcasts it to the wireless bridge of the other LAN segment. Besides point-to-point bridging, 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 2 in 1 mode with AP mode and CPE mode with range up to 3 Kms. It is industrial grade Bridge with great communication efficiency, equipped with Ethernet WAN/LAN port which enhances the sharing of files, photo, audio, video, and gaming experience over wireless network.

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

- Support AP as well as CPE mode.

- Supports IEEE 802.11a/n 5GHz Wireless bands and IEEE 802.11n 2GHz Wireless bands.

- IEEE 802.1q Tag based VLAN

- Support Enterprise security: WPA, WPA2, PSK

- It has MIMO 8~13dBi Internal Panel Antennas.

- Support wireless RF power adjustable as per user movements from bridge.

- Supports intelligent load balance based on users.

- Support seamless roaming and low-rate terminal access.

- Dual purposes WAN/LAN port supporting 1x 10/100 Mbps.

- Supports Wi-Fi client distance up to 3Km depending on surrounding conditions.

- Support Open or encryption

- Plug and Play design simplifies installation with self-adaption.

- Compact IP65 casing comes with ABS waterproof, dust proof and sunscreen shell which avoid the damage from dust & rainy weather. Meantime, it is adaptive to various environment.

- Silent design perfect for noise sensitive environments.
- With Zero Touch Provisioning: Plug and play and no setup. 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

Multiple Operational Modes

It has 2 in 1 mode like AP Mode or CPE mode. AirACE bridge can act as AP as well as Bridge but one at a time.

Easy to Use

COMMANDO AirACE Bridge are WEB GUI based easy to use and manage standalone device. It requires minimal configuration, so setup is simple and hassle-free. For wireless clients/users, it can intelligently adjust for compatibility and optimal performance by DFS. Its compact size makes it ideal for Outdoor 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.

Wireless speed for client and bridge

By setting channel bandwidth up to 20/40MHz can increase the speed of bridge connection up to 300Mbps between bridges.

Weatherproof Enclosure with IP65

It has IP65 resilient weatherproof enclosure protects the access points against harsh outdoor condition. It comes with ABS waterproof, dust proof and sunscreen shell which avoid the damage from dust & rainy weather. Meantime, it is adaptive to various environment with ±6KV Lightning Protection with no Ingress of dust as well as waterproof enclosure. These energy efficient Bridges are well built and rigorously tested and can sustain in very rough environment to provide the reliable performance.

Auto MDIX Capabilities

Auto sensing 10/100Mbps 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, office, and terrace. Perfect for noise sensitive environments.

Support uninterrupted critical network infrastructure

It has POE IN power input which protect from power failures and increases life of device. It comes with Lighting surge protection Common mode ±6KV and Differential mode ±2KV. 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 PoE 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 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 AirACE Bridge supports software functions as follows.

Main

Displays information of basic setting of device.

A) **General Information:** This page shows the current status and some basic settings of the device.

B) **Statistics:** This page shows the packet counters for both transmission and reception over the respective wireless and Ethernet networks.

Digital

Used to configure digital feature and view of status code.

System

System Setting page to configure Country, Time Zone of device.

A) Device Setting: You can set Device Name and Country in this field. Keep the Reset Button and WLAN check Enabled.

B) Time Setting: You can set current time, time zone in this field.

Network

This page configures the IP address, subnet mask, DHCP and other parameters for your local area network that is connected to the LAN port of the device.

Wireless

Use this page to change the wireless mode as well as configure any associated wireless networks parameter.

Logout

User Logout from Web access.

Hardware

Solid performance with non-blocking architecture

- Full speed of data transferring with (Auto-Negotiation/Auto MDI/MDIX).

- Solid performance with non-blocking architecture.

Physical Ports and Networking Interfaces

- 1 x 10/100Mbps Rj45 Ethernet Ports with combined POE IN with WAN/LAN

- LED Indicators: Power, Diag, Ethernet

- Reset Button

- WDS mode Button

Extra Long operational life

- High Quality PCB Circuit Board and PCB Surface Treatment Using Gold Sinking Process.

- Support temperature range 0° C to 55° C

- Lighting surge protection Common mode ±6KV and Differential mode ±2KV.

- Exceptional Performance in Harsh Outdoor Climates with IP65 weatherproof and dust proof enclosure ensuring it can withstand harsh outdoor and indoor environments.

Table 2 Hardware Specifications

HARDWARE SPECIFICATION	
Standard	802.11a/n
RAM	32-64 MB

Flash	8MB
Interface	1* 10/100Mbps LAN/WAN with POE IN Port
Hardware reset button	Reset Button
Mode Button	WDS mode Button
Power	POE IN 24V, 1 A
Antenna	Panel 8-13dBi MIMO Panel antenna.
Working Temperature	0° C to +55° C
Working Humidity	5%~95%RH(Non-condensing)
Warranty Period	1 Year
LED Indicator Light	PWR, Diag, Ethernet

Specifications

Technical Specifications

Supports 802.11a/n, with Standalone models with either open or encryption with PoE input Power supply with 24V, 1A POE IN and also have 8-13dBi gain Internal Panel Antenna.

Table 3. Specifications

Standard	IEEE 802.11a/n, MIMO technology
Interface	1 * 10/100Mbps RJ45 WAN Port 1 * WDS switch button, press it to do WDS PTP/PTMP connection 1 * DC injector, 12V, 1A 1 * Reset button, press 15 seconds to revert to default setting
Power consumption	24V PoE, <8W
Antenna	Build in 8~13dBi MIMO Panel Antenna
Size	260mm * 85 mm * 45mm
Memory	32~64MB DDR2 RAM
Flash	8MB
Data Rate	150~300Mbps
Operation Mode	Wireless AP, CPE
SSID	Multiple SSID up to 4
Wireless Security	WEP, WPA / WPA2, WPA-PSK/ WPA2-PSK encryption
WAN Type	Dynamic IP/Static IP/PPPoE/L2TP (Dual Access) / PPTP (Dual Access)

Table 4. COMMANDO AirACE Series AP LED indication

LED Indicator	LED Status
Power	Green OFF: No power. Green ON: POE/ DC power given.
Diag	Diagnostic Green and Blinking: It shows activity on device.
Ethernet	Green and Blinking: It shows activity on Ethernet ports.
Digital LED Display	Digital Display Red light: Indicate CPE Mode Red light OFF: Indicate AP mode

Included in the bundle/box

COMMANDO AirACE Series Wireless Bridge

All COMMANDO AirACE series Bridge made available for use globally along with accessory used to facilitate or enhance operations. All COMMANDO AirACE series Bridge Comes with following Accessories.

1x COMMANDO AirACE series Bridge.
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 5. Support and Warranty

Warranty and Support	
Products covered	COMMANDO AirACE Series Wireless Bridge
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

Ordering information for the COMMANDO AirACE series Bridge, To place an order, please contact your local reseller/distributor or COMMANDO Sales Representative at www.commandonetworks.com/ordering

Table 6. COMMANDO AirACE series Bridge Ordering Information

AIR-WB5G-3K-ACE	COMMANDO AirACE 3KM, 300Mmbps, 5GHz, 802.11a/n, 23dBm, IP65, Wireless Bridge

Document History

Release	New or Revision	Described in	Date
Release 1	First Release	First Release	March 18, 2021