

IEEE 802.11ac Ethernet to Wi-Fi Bridge BR-500AC

Solution to Connect Ethernet Devices to Wi-Fi Network Securely and Easily



Overview

The BR-500AC connects Ethernet devices to the Wi-Fi network quickly and securely. Office automation equipment such as printers or MFPs (Multi-Functional Printer), factory equipment, or medical equipment can be unleashed from the Ethernet cable to install them more flexibly or add mobility.

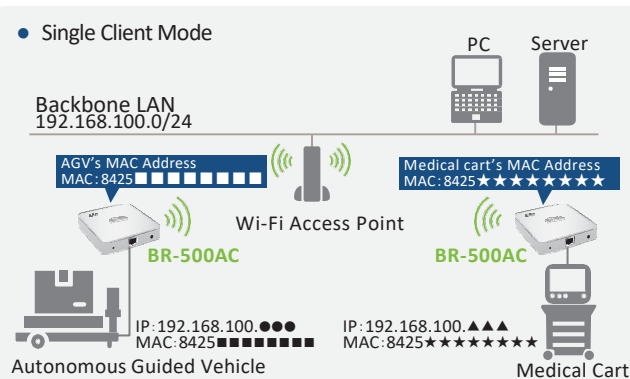
The BR-500AC complies with IEEE 802.11a/b/g/n/ac and supports WPA3/WPA2 and IEEE802.1x for enterprise security. It also supports roaming among Wi-Fi access points to ensure a robust wireless connection for the mobility applications.

Features

1 Two operation modes

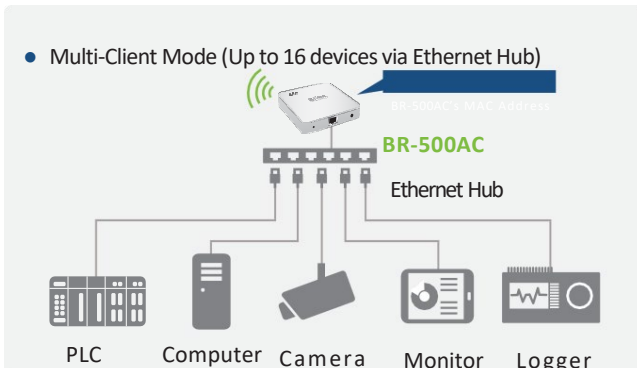
The BR-500AC supports two operating modes.

Single Client Mode



- Ethernet device's MAC address is used in the wireless LAN. The single client mode operates fully transparently through the BR-500AC.
- Communication on the wired LAN port of the BR-500AC is aborted when the connected device is changed during the operation.

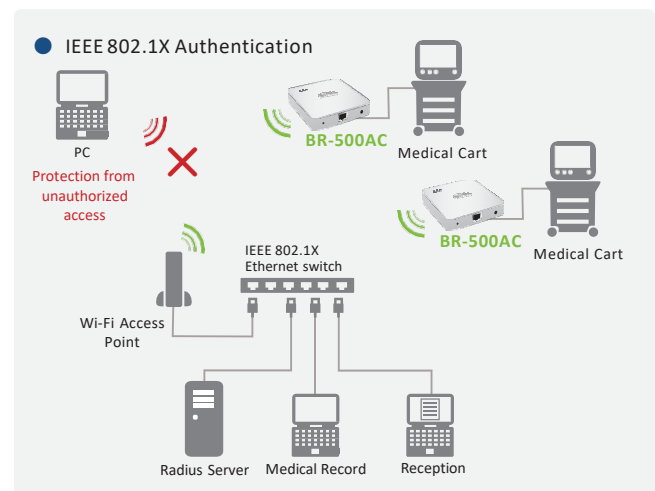
Multi-Client Mode (Up to 16 devices via Ethernet Hub)



- The BR-500AC uses its own MAC address for the wireless LAN in the Multi-Client mode. In this mode, ARP, IPv4, and IPv6 packets can be bridged.

2 Enterprise Security, WPA3/WPA2 and IEEE 802.1X

The BR-500AC connects an Ethernet device to the securest Wi-Fi network protected by the latest Wi-Fi Protected Access (WPA), WPA3, in conjunction with IEEE 802.1X. It also supports the device access password and MAC address filtering to protect the network.

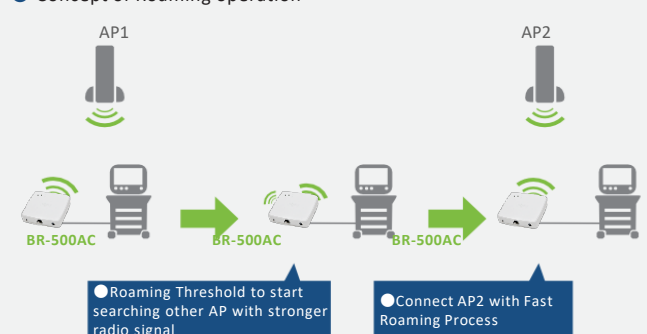


3 Adjustable Roaming Setting / Fast Roaming

The BR-500AC enables seamless roaming to add mobility to an Ethernet device. Fast roaming and fast initial link setup authentication*1 minimize disconnection when the BR-500AC roams among Wi-Fi access points. The radio signal strength threshold to start the roaming process is adjustable to optimize the roaming performance according to the Wi-Fi radio environment.

*1 : The BR-500AC supports IEEE 802.11r/ai. Wi-Fi access points must support them to utilize the features. Fast roaming is effective when the Wi-Fi authentication mode is WPA2.

Concept of Roaming operation



4 WME support with default access category insertion

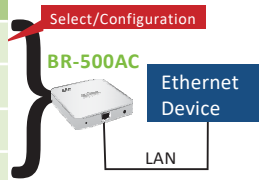
The BR-500AC supports WME (Wireless Multimedia Extensions*2) as part of QoS (Quality of Service). When original packets from the connected Ethernet device do not specify the priority, the BR-500AC can insert the access category tag according to the user configuration. WME feature can prioritize the packets from the connected device to stabilize the wireless connection by reducing the packet loss probability.*3

*2 : WME is sometimes referred to as WMM (Wi-Fi Multimedia).

*3 : WME capable Wi-Fi access point is required to use the feature.

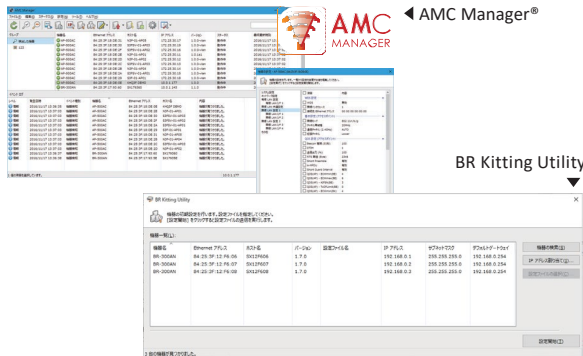
Default Category Configuration

Priority	Access Category	Traffic Type
1	AC_VO	Voice
2	AC_VI	Video
3	AC_BE	Best Effort
4	AC_BK	Back Ground



5 Bulk Configuration and Remote Control by AMC Manager®

The initial setup of a number of the BR-500AC is easy and quick with "BR Kitting Utility", a plug-in utility of AMC Manager®. AMC Manager® allows IT administrators to remotely manage, maintain and monitor the BR-500AC through the network after the installation.

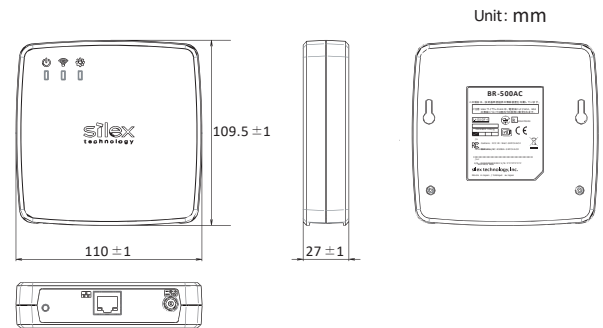


Specifications

Product Name	BR-500AC
Wired LAN Interface	RJ-45: x1
Wireless LAN Interface	10BASE-T/100BASE-TX/1000BASE-T (Auto) Dual band IEEE 802.11a/b/g/n/ac wave2
Switch	2T x 2R, MU-MIMO
LED	Push Switch x 1
LED	RJ-45: x2
Operating Environment	Temperature: 0 to +40°C Humidity: 20 ~ 80% RH
Storage Condition	Temperature: -10 to 50°C Humidity: 20 ~ 90% RH
Power Supply	DC 12V, DC Jack (EIAJ4)
Dimension	110mm X 109mm X 27mm (the main body size excluding protrusions)
Weight	140g (the main body only)
Included Items	BR-500AC, AC adapter, LAN cable, setup guide, GPL inquiry sheet
Regulatory Compliance	FCC Class B, ICES Class B, CE Class B, VCCI Class B, RoHS
Warranty	5 years
Security	<u>Wi-Fi authentication</u> : Open, WPA3-Personal, WPA2-Personal, WPA/WPA2-Personal, WPA3-Enterprise*, WPA2-Enterprise, WPA/WPA2-Enterprise <u>Wi-Fi encryption</u> : WEP, AES, Auto <u>Others</u> : MAC Address Filter
Supported Software	AMC Manager®
Supported OS	Windows 10 (32/64-bit), Windows 8/8.1 (32/64-bit), Windows 7 (32/64-bit), Windows Server 2019, Windows Server 2016, Windows Server 2012R2, Windows Server 2012, Windows Server 2008R2

* WPA3-Enterprise supports only 128-bit security

Dimension



Related Products

IEEE 802.11ac & Bluetooth
2x2 Dual-band
Wireless Radio Module
SX-PCEAC2



SX-PCEAC2-SMT SX-PCEAC2-HMC

IEEE 802.11ah Wi-Fi HaLow™
sub-GHz Access Point
sub-GHz Ethernet to Wi-Fi bridge
AP-100AH / BR-100AH



Contact sillex support for any questions and inquiries about the product.

<https://www.sillextechnology.com/support/contact-sillex-support>

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