Hewlett Packard Enterprise

Data sheet

HPE 501 Wireless Client Bridge Series

Product overview

The HPE 501 Wireless Client Bridge enables you to easily integrate devices with no native wireless support into a wireless LAN (WLAN). The 501 Wireless Client Bridge can bridge up to 15 Ethernet client devices running a legacy networking protocol to the WLAN, extending wireless network access to a wide range of protocols. An integrated serial to TCP/IP converter enables a RS-232 asynchronous terminal device to communicate with a compatible station on the network. Strong enterprise-class layered security features, including an IEEE 802.1X supplicant, protect the network from intrusions. And hardware-accelerated encryption provides high performance when using WPA2/AES security.

The bridge enables organizations to unwire a broad range of computing devices and realize the benefits of mobility. Electronic cash registers, scales, servers, printers, medical equipment, manufacturing machinery, and other devices can be deployed in any location where a WLAN signal is available—saving the time and expense need for installing Ethernet cables for network access.

The HPE 501 Wireless Client Bridge integrates into the HPE Mobility System; and it is interoperable with an IEEE 802.11b/g/n or 802.11a/n/ac WLAN network infrastructure from Hewlett Packard Enterprise or any other vendor.

A summary of the highlights of the 501 Wireless Client Bridge Series:

- Linking of up to 15 Ethernet devices or an RS232 serial device to a wireless network at Gigabit speeds
- One dual-band three spatial-stream MIMO radio running up to 1.3 Gbps
- Support for IEEE 802.11b/g/n and 802.11a/n/ac WLAN networks
- Fast roaming between access points
- Web-based configuration
- Managed via HPE Intelligent Management Center

Features and benefits

Quality of Service (QoS)

- Network management
  - Support for DSCP and WMM
  - SNMP v2c, SNMP v3, MIB-II with traps, and RADIUS authentication client MIB (RFC 2618)
  - Embedded HTML management tool with secure access
  - Scheduled configuration and firmware upgrades via a network management station
- Diagnostic
  - RSSI logging
  - Email alert tool

Connectivity

- IEEE 802.3af PoE support
  - Simplifies deployment and dramatically reduces installation costs by helping eliminate the time and cost involved in supplying local power at each client bridge
- Auto-MDIX
  - Provides automatic adjustments for straight-through or crossover cables on all 10/100/1000 ports
- IEEE 802.11h with International-Telecommunication-Union (ITU) compliance
  - Selects the channel automatically, based on the access point it connects to; and avoids DFS (Dynamic-Frequency-Selection) issues by following the access point to a clear channel

Mobility

- Anywhere, anytime wireless coverage
  - Provides single IEEE 802.11a/b/g/n/ac radio client bridge
  - Offers radio software-selectable configuration of frequency bands
  - Utilizes IEEE 802.3af PoE or local power supply
- Interoperability
  - Meets Wi-Fi Alliance Certification standards, including IEEE 802.11a/b/g/n/ac and WPA2—to help ensure multivendor interoperability
- Supported devices
  - Support Windows-based PCs equipped with Ethernet cards; include point-of-sale devices, scales, network printers, thin clients Mac/Apple machines, Linux/Unix workstations, Ethernet-enabled appliances, medical equipment, manufacturing machinery and/or mix of all the devices listed here
  - Connects RS232 asynchronous terminal devices to the wireless network
- Multiple devices

  Connects up to 15 Ethernet-enabled devices via a multiport switch

Security

- IEEE 802.1X support

  Provides user authentication with support for EAP-TLS and PEAP—with choice of Advanced Encryption Standard (AES), Temporal Key Integrity Protocol (TKIP), and Wired Equivalent Privacy (WEP) encryption for protecting wireless traffic between authenticated clients and the access point
- Choice of IEEE, WPA2, WPA, or WEP

  Secures the data integrity of wireless traffic, using robust AES or TKIP encryption

Warranty and support

- Limited Lifetime Warranty

  See **hpe.com/networking/warrantysummary** for warranty and support information included with your product purchase.
- Software releases

  To find software for your product, visit **hpe.com/networking/support**; for details on the software releases available with your product purchase, visit **hpe.com/networking/warrantysummary**

HPE 501 Wireless Client Bridge Series

SPECIFICATIONS	HPE 501 Wireless Client Bridge (J9835A)
I/O ports and slots	1 RJ-45 autosensing 10/100/1000 port; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) 1 RS-232C serial console port
AP characteristics	
Radios (built-in)	802.11 a/b/g/n/ac
Radio operation modes	Client bridge
Wi-Fi Alliance Certification	a/b/g/n/ac Wi-Fi Certified
Antenna connector	Three RP-SMA
Antenna	2dBi dual-band omnidirectional
Number of external antennas	3
Physical characteristics	
Weight	5.5 (w) x 1.3 (d) x 5.0 (h) in (13.97 x 3.3 x 12.7 cm) 2.01 lb (0.91 kg)
Environment	
Operating temperature	32°F to 122°F (0°C to 50°C)
Operating relative humidity	5% to 95%, noncondensing
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
Nonoperating/Storage relative humidity	5% to 95%, noncondensing
Shock and vibration	EN 61373
Altitude	10,000 feet (3,048 meters)
Electrical characteristics	
Description	IEEE 802.3af PoE compliant or 5-15 VDC from available AC power supply
Maximum power rating	9 W
Power Inputs	5 VDC
PoE power	11 W PoE

SPECIFICATIONS	HPE 501 Wireless Client Bridge (J9835A)
Frequency band and operating channels	
FCC	2.412 - 2.462 GHz (1 - 11 channels) 5.180 - 5.240 GHz (36 - 48 channels) 5.260 - 5.320 GHz (52 - 64 channels) 5.500 - 5.700 GHz (100 - 144 channels) 5.745 - 5.825 GHz (149 - 165 channels)
European Union	2.412 - 2.472 GHz (1 - 13 channels) 5.180 - 5.240 GHz (36 - 48 channels) 5.260 - 5.320 GHz (52 - 64 channels) 5.500 - 5.700 GHz (100 - 140 channels)
Rest of World (Actual channels designated by selecting country in UI)	2.412 - 2.472 GHz (1 - 13 channels) 5.180 - 5.320 GHz (36 - 64 channels) 5.500 - 5.700 GHz (100 - 144 channels) 5.745 - 5.825 GHz (149 - 165 channels)
Taiwan	2.412 - 2.462 GHz (1 - 11 channels) 5.280 - 5.320 GHz (56 - 64 channels) 5.500 - 5.700 GHz (100 - 144 channels) 5.745 - 5.825 GHz (149 - 165 channels)
Japan	2.412 - 2.472 GHz (1 - 13 channels) 5.180 - 5.320 GHz (36 - 64 channels) 5.550 - 5.700 GHz (100 - 140 channels)
Israel	2.412 - 2.472 GHz (1 - 13 channels) 5.180 - 5.320 GHz (36 - 64 channels)
Radio	FCC Part 15.247; EN 300 328; FCC Part 15.407; MIC Notice No. 88, App. 43 & 45; EN 301 893; RSS-210
Safety	UL 2043; UL 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1
RF Exposure	FCC Bulletin OET-65C; RSS-102; EN 62311
Features	Single IEEE 802.11a/b/g/n/ac radio for 802.11ac high-throughput applications and IEEE 802.11a/b/g/n for legacy support applications • Three spatial streams for up to 1.3 Gbps PHY rate • Three RP-SMA connectors for a range of antenna options (NOTE: when using outdoor antennas, customer must supply RP-SMA to Type N adapter) • Operates via PoE or local power
Emissions	EN 55022 Class B; EN 60601-1-2; EN 301 489-1; EN 301 489-17; ICES-003 Class B; FCC Part 15, VCCI Class B

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Notes	Maximum transmit power varies by country. Supported data rates • 802.11b: 1, 2, 5.5, 11 Mbps • 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps • 802.11n: 6.5 to 450 Mbps (MCS0 to MCS23, 1 to 3 spatial streams) • 802.11ac: 6.5 Mbps to 1.3Gbps (MCS0 to MCS9, 1 to 3 spatial streams) The HPE 501 Wireless Client Bridge EIRP information listed includes the 2dBi dipole antenna that is included. Review the Hewlett Packard Enterprise documentation to understand the maximum output setting for your client bridge based on your country's regulation. Maximum transmit power varies by country. Regulatory model number: MRLBB-1302
Services	Refer to the Hewlett Packard Enterprise website at **hpe.com/networking/services** for details on the service-level descriptions and product numbers. For details about services, and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

SPECIFICATIONS	HPE 501 Wireless Client Bridge (J9835A)			
Note				
This transmit power data is EIRP and includes the dipole antenna that ships with the HPE 501 Wireless Client Bridge. The receiver sensitivity also includes the dipole antenna gain.				
IEEE 802.11ac 5GHz @ 80MHz channel				
Data rate	MCS9 - 1300 Mbps	MCS0 - 97.5Mbps		
Receiver sensitivity	-59 dBm	-86 dBm		
Transmit power	18 dBm	25 dBm		
IEEE 802.11n 5GHz @ 40MHz channel				
Data rate	MCS23 - 450 Mbps	MCS16 - 45Mbps		
Receiver sensitivity	-68 dBm	-90 dBm		
Transmit power	20 dBm	25 dBm		
IEEE 802.11n 5GHz @ 20MHz channel				
Data rate	MCS23 - 144.4 Mbps	MCS16 - 14.4 Mbps		
Receiver sensitivity	-71 dBm	-90 dBm		
Transmit power	20 dBm	23 dBm		
IEEE 802.11n 2.4GHz @ 40MHz channel				
Data rate	MCS23 - 450 Mbps	MCS16 - 14.4Mbps		
Receiver sensitivity	-68 dBm	-90 dBm		
Transmit power	19 dBm	19 dBm		
IEEE 802.11n 2.4GHz @ 20MHz channel				
Data rate	MCS23 - 144.4 Mbps	MCS16 - 14.4		
Receiver sensitivity	-71 dBm	-93 dBm		
Transmit power	21 dBm	26 dBm		
IEEE 802.11a 5GHz				
Data rate	54 Mbps	6 Mbps		
Receiver sensitivity	-75 dBm	-92 dBm		
Transmit power	24 dBm	25 dBm		
IEEE 802.11b/g 2.4GHz				
Data rate	54 Mbps	11 Mbps	6 Mbps	1 Mbps
Receiver sensitivity	-75 dBm	-88 dBm	-93 dBm	-96 dBm
Transmit power	24 dBm	26 dBm	26 dBm	26 dBm

STANDARDS AND PROTOCOLS
(applies to all products in series)

Mobility	IEEE 802.11a High Speed Physical Layer in the 5 GHz Band IEEE 802.11b Higher-Speed Physical Layer Extension in the 2.4 GHz Band IEEE 802.11i Medium Access Control (MAC) Security Enhancements IEEE 802.11ac WLAN Enhancements for Very High IEEE 802.11d Global Harmonization IEEE 802.11n Dual Band WLAN Enhancements for Higher Throughput IEEE 802.11e QoS enhancements IEEE 802.11g Further Higher Data Rate Extension in the 2.4 GHz Band Throughput

HPE 501 Wireless Client Bridge Series accessories

Power Supply	HPE MSM31x/MSM32x Power Supply (J9405B) HPE 1-port Power Injector (J9407B)
Mounting Kit	HPE Antenna Lightning Arrester (J8996A) HPE Outdoor Omnidirectional 6dBi at 2.4GHz MIMO 3 Element Antenna (J9719A) HPE Outdoor Omnidirectional 8dBi at 5GHz MIMO 3 Element Antenna (J9720A) HPE Indoor-Outdoor Point-to-Point Dual Band 10/13dBi MIMO 3 Element Antenna (J9170A)

Learn more at
hpe.com/networking

HPE access points and access devices are Wi-Fi Certified, providing our customers with the assurance that these products have met and passed the rigorous interoperability testing performed by the Wi-Fi Alliance Organization. See the Specifications section of this series for more information.

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