

## Wireless Client Bridge

The Wireless Client Bridge 200 (WCB-200) connects legacy Ethernet or serial communications stations to a wireless LAN with simplicity and security. It enables organizations to unwire a broad range of computing devices and realize the benefits of mobility. Electronic cash registers, servers, printers and other devices can be deployed in any location where a WLAN signal is available, eliminating the time and expense of installing Ethernet cable for network access.

The WCB-200 integrates into a Colubris Intelligent Mobility System and it is interoperable with any IEEE 802.11 network infrastructure.



### Key Features:

- Bridges an Ethernet LAN segment or serial interface to WLAN
- Capacity to bridge Ethernet segments with up to 20 client stations
- Converts a TIA-232 serial data stream to TCP/IP over WLAN
- Configurable Ethernet MAC and protocol filters for enhanced security
- WPA2, WPA and WEP security for WLAN privacy
- 802.1x PEAP WLAN authentication
- Hardware-assisted AES and RC4 encryption delivers high performance
- Configurable 802.11 a/b/g radio with external antenna connectors
- 100 milliwatt radio and antenna diversity provide excellent distance performance
- Centrally manageable as part of Colubris Intelligent Mobility System
- Plenum rated metal enclosure

Legacy client devices can be easily integrated into a WLAN using the WCB-200. The WCB-200 can bridge an Ethernet client device running a legacy networking protocol to the WLAN, extending wireless network access to a wide range of DECnet, IPX, Appletalk and other devices. An integrated serial to TCP/IP converter enables a TIA-232 asynchronous terminal device to communicate with a compatible station on the network.

The WCB-200 features an advanced WLAN radio that provides superior performance than most embedded WLAN adapters. It includes support for all 2.4 GHz or 5GHz channels available within each supported regulatory domain. High output power and antenna diversity ensure the best possible range and throughput. External antenna connectors can be used to attach high-gain antennas for specialized applications.

Strong enterprise-class layered security features protect the network from intrusions. The WCB-200 WLAN interface includes an 802.1x supplicant for authentication by an access point and RADIUS server. Hardware accelerated encryption provides high performance when using WPA2 (AES), WPA or WEP security. The web management interface is protected using SSL.

Bidirectional L2/L3 filters enable administrators to control access to WCB-200 interfaces. A MAC address white list restricts access to the Ethernet port and UDP port filtering controls access to network services.

The WCB-200 features comprehensive remote manageability, including full support as a managed node in the Colubris Network Management System. For ease of deployment and operation, the WCB-200 can be configured via an intuitive web user interface and secure file transfer protocols simplify software maintenance. Support for SNMP enables integrated management using any enterprise NMS.

A rugged, metal enclosure and mounting bracket provide installation flexibility. Its small size and plenum rated enclosure enable the WCB-200 to be installed on a desktop, or it can be hidden from view in a ceiling.

## Networking Specifications

Networking	DHCP Client, ARP (RFC 826), TCP (RFC 793), IP (RFC 791)
Ethernet clients	Up to 20 clients
WLAN Authentication	802.1x authentication using PEAP
WLAN Security	Wi-Fi Protected Access (WPA2) with AES support; WPA dynamic or preshared keys, Wired Equivalent Privacy (WEP) using static or dynamic keys of 64 or 128 bits
Fast WLAN Roaming	Configurable RSSI threshold controls association with APs on same channel
Network Management	Fully manageable using Colubris Network Management System v4.0 or later (CNMS), SNMP v2c, MIB-II with TRAPS; Embedded HTML management tool with secure access (SSL) Scheduled configuration and firmware upgrades from central server Packet capture tool for Ethernet interface (PCAP format) Automatically selects SSID on power-up

## Product Specifications

Model Number	WCB-200 Wireless Client Bridge
Network Port	(1) RJ-45, auto-sensing 802.3 10/100 BASE-T Ethernet
Serial Port	(1) DB-9 TIA-232 serial interface
WLAN Interface	802.11a/b/g, selectable
Status LEDs	WLAN and LAN activity, power indicators
Antenna Connectors	(2) Reverse polarity male SMA with diversity
Antenna	(2) 2 dBi dual band 2.4/5 GHz omni directional
Power Inputs	External 5 VDC supply, 90-264 VAC input RJ-45 Power over Ethernet, 802.3af compliant
Power Requirements	5 Watts, max.
Temperature Range Operating	0° to 50°C; Storage: -40° to 80°C
Humidity	5% to 95% typical (noncondensing)
Enclosure	Metal, plenum-rated
Safety Compliance	IEC 60950, UL 1950 and 2043, CSA 22.2 No. 950-95, EN 60950
Overall Physical Dimensions	H: 127 mm (5.0 in); L: 33 mm (1.3 in); W: 139.7 mm (5.5 in)
Shipping Weight	0.9 Kg (2.0 lbs)

## Radio Specifications

	When configured for IEEE 802.11a operation	When configured for IEEE 802.11b or IEEE 802.11g operation
Data Rates Supported	6, 9, 12, 18, 24, 36, 48, 54 Mbps	802.11b: 1, 2, 5.5, 11 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
Frequency Band	USA: 5.250-5.350 GHz, 5.725 – 5.825 GHz Canada: 5.150 – 5.350 GHz, 5.725 – 5.825 GHz Europe: 5.150 – 5.350 GHz, 5.47 – 5.725 GHz (varies by country)	North America: 2.412 – 2.462 GHz, 5.150 – 5.350 GHz, 5.47 – 5.725 GHz (varies by country)
Modulation	OFDM	802.11b: DSSS 802.11g: OFDM
Non-overlapping Channels	North America – 12, Europe: 19 (country specific), Japan – 4	Worldwide – 3
Receive Sensitivity	-90 dBm @ 6 Mbps -72 dBm @ 54 Mbps	802.11g Operation: -92 dBm @ 6 Mbps; -72 dBm @ 54 Mbps 802.11b Operation: -90 dBm @ 11 Mbps
Transmit Power Settings (Maximum power varies as per country regulations)	20 dBm +/- 2 @ 6-24 Mbps 16 dBm +/- 2 @ 54 Mbps	802.11g Operation: 20 dBm +/- 2 @ 6-24 Mbps 16 dBm +/- 2 @ 54 Mbps 802.11b Operation: 20 dBm +/- 2 @ 1-11 Mbps
Standards Compliance	Radio Approvals: Wi-Fi Alliance, FCC Part 15.401, 15.407, RSS-210 (Canada) EN 301 893 (Europe) EMI and Susceptibility (Class B): FCC Part 15.107 and 15.109, ICES-003 (Canada), EN 301 489-1 and -17 (Europe), EN 60601-1-2, EN 50121-2-3 Vibration: EN 61373 Other: IEEE 802.11a, RSS-102	Radio Approvals: Wi-Fi Alliance, FCC Part 15.247, RSS-139-1, RSS-210 (Canada), EN 300 328 (Europe) EMI and Susceptibility (Class B): FCC Part 15.107 and 15.109, ICES-003 (Canada), EN 301 489-1 and -17 (Europe), EN 60601-1-2, EN 50121-2-3 Vibration: EN 61373 Other: IEEE 802.11b/802.11g, RSS-102



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