Cisco WRV210 Wireless-G VPN Router: RangeBooster
Cisco Small Business Routers

Secure Wireless Network Access for Small Offices

Highlights

- IPsec VPN connectivity for highly secure remote access
- Built-in 4-port 10/100 Fast Ethernet switch
- Multiple SSIDs and VLANs provide separate, secure networks
- Simple, browser-based configuration

Figure 1.   Cisco WRV210 Wireless-G VPN Router: RangeBooster

Product Overview

The Cisco® WRV210 Wireless-G VPN Router (Figure 1) is a VPN router with an integrated wireless access point for small offices and home offices. The 10/100 Ethernet WAN interface connects directly to your broadband DSL or cable modem. The LAN interface consists of a built-in 4-port, full-duplex 10/100 Ethernet switch that can connect up to four devices. The wireless access point supports 802.11b/g and incorporates RangeBooster technology, which utilizes multiple-input, multiple-output (MIMO) antennas to provide increased coverage and reliability.

The Cisco WRV210 has the advanced security functions needed for business networking, including a stateful packet inspection (SPI) firewall with denial-of-service (DoS) prevention, as well as a VPN engine for highly secure communication between mobile or remote workers and branch offices. It offers support for multiple service set identifiers (SSIDs) and VLANs for traffic separation. The WRV210 implements Wi-Fi Protected Access Pre-Shared Key (WPA2-PSK), WPA2 Enterprise, and Wired Equivalent Privacy (WEP) encryption, along with other security features, including MAC-based filtering and the ability to enable and disable SSID broadcasts.

Wireless networking in business environments requires flexibility. The Cisco WRV210 can expand or reduce the area of your wireless network via a wireless distribution system (WDS), which allows you to expand your network by connecting select Cisco standalone access points, without the need for additional wiring. This capability, along with the ability to increase or decrease the RF output power, allows for optimal wireless coverage.

To support voice over IP (VoIP), the Cisco WRV210 has a Session Initiation Protocol (SIP) application layer gateway (ALG) and advanced quality of service (QoS) features. SIP-based VoIP data has problems passing through standard firewalls with Network Address Translation (NAT), especially when multiple SIP clients are deployed. The SIP ALG allows this traffic to travel through the router's firewall. QoS can improve the quality of your voice or video over IP. The WRV210's support for wireless QoS (Wi-Fi Multimedia [WMM]) and wired QoS (port prioritization) helps maintain consistent voice and video quality throughout your network.

Features

- 802.11g supports data rates up to 54 Mbps
- Dual fixed antennas with MIMO provide up to three times better coverage than standard 802.11g
- Supports multiple SSID mapping to specific VLANs to create separate, secured networks
- Supports 10 IP Security (IPsec) VPN tunnels with QuickVPN support
- Dual Point-to-Point Protocol over Ethernet (PPPoE) profiles allow easy switching between PPPoE accounts
- Supports Telstra BigPond Heartbeat
- Supports multiple languages on web administrator interface and setup wizard
- Wireless SSIDs can be enabled/disabled based on a predefined schedule
- Supports Trivial File Transfer Protocol (TFTP) based firmware upgrade in addition to web-based firmware upgrade

Specifications

Table 1 contains the specifications, package contents, and minimum requirements for the Cisco WRV210 Wireless-G VPN Router.

Table 1. Specifications for the Cisco WRV210 Wireless-G VPN Router: RangeBooster

Specifications	
Standards	IEEE 802.11g, IEEE 802.11b, IEEE 802.3, IEEE 802.3u, IEEE 802.1X (security authentication), IEEE 802.11i (security WPA2), IEEE 802.11e (wireless QoS)
Ports	1 power port (12V/1A), four 10/100 RJ-45 ports, one 10/100 RJ-45 Internet port
Buttons	Reset
Cabling type	Unshielded twisted pair (UTP) Category 5
LEDs	Power, DMZ, Wireless, Internet, LAN 1 through 4
Operating system	Linux
Performance	
NAT throughput	93 Mbps
IPsec throughput	23 Mbps
Setup/Configuration	
User interface	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)
Management	
SNMP version	SNMP versions 1 and 2c
Event logging	Local, syslog, email
Firmware upgrade	Firmware upgradable through web-browser and TFTP utility
Diagnostics	Flash, RAM, LAN, WLAN

Wireless	
Modulation	Radio and modulation type: 802.11b/direct-sequence spread spectrum (DSSS), 802.11g/orthogonal frequency-division multiplexing (OFDM)
Data rates supported	802.11b: 1, 2, 5.5, 11 Mbps, 802.11g: 6, 9, 11, 12, 18, 24, 36, 48, 54 Mbps
Operating channels	11 North America, 13 most of Europe (ETSI and Japan)
Number of external antennas	2 (omnidirectional)
Antenna connector type	Fixed
Transmit power	Transmit power (adjustable) at normal temp range: 802.11.g: 18dBm (typical); 802.11.b: 20 dBm (typical)
Adjustable power	Yes
Antenna gain	2 dBi
Receiver sensitivity	802.11.g: 54 Mbps at -69 dBm (typical), 802.11.b: 11 Mbps at -82 dBm (typical)
Wireless QoS	WMM, 802.11e ready
Active WLAN clients	32
Security	
WEP/WPA/WPA2	WEP 64 bit/128 bit, WPA Temporal Key Integrity Protocol (WPA-TKIP)/Advanced Encryption Standard (AES), WPA2-PSK, WPA2 Enterprise
802.1X RADIUS authentication	802.1X RADIUS (MD5, SHA1, Transport Layer Security [TLS], Tunneled TLS [TTLS], Protected Extensible Authentication Protocol [PEAP]), dynamically varying encryption keys
Access control	Access control list (ACL) capability: MAC based and IP based
Firewall	SPI firewall
DoS prevention	DoS prevention
Secure management	HTTPS, username/password
Network	
VLAN support	LAN ports and SSIDs can be mapped to up to 5 VLANs
SSID broadcast	SSID broadcast enable/disable
Multiple SSID	Supports multiple SSIDs (4), which can operate on predefined schedules
Wireless VLAN map	Supports SSID to VLAN mapping with wireless client isolation
WDS	Allows wireless signals to be repeated by up to 3 compatible repeaters
Network edge (DMZ) host	A LAN PC can be configured as a DMZ host
PPPoE	Dual PPPoE user profiles
ALG support	FTP, PPTP, Layer 2 Tunnelling Protocol (L2TP), IPsec
VPN	
Tunnels	• 10 IPsec tunnels with QuickVPN support • 5 gateway-to-gateway tunnels
Encryption	Triple Data Encryption Standard (3DES)/AES
Authentication	MD5/SHA1
NAT traversal	IPsec
Routing	
• Static and Routing Information Protocol (RIP) versions 1 and 2	
Environmental	
Dimensions W x H x D	6.69 x 1.65 x 7.62 in. (170 x 42 x 193.5 mm)
Unit weight	0.78 lb (0.355 kg)
Power	12V 1A DC input
Certification	FCC Class B, CE, IC
Operating temperature	32º to 104ºF (0º to 40ºC)
Storage temperature	-4º to 158ºF (-20º to 70ºC)

Operating humidity	10% to 85% noncondensing
Storage humidity	5% to 90% noncondensing

Package Contents
• Cisco WRV210 Wireless-G VPN Router • CD-ROM with user guide and setup wizard • Network cable • Power adapter • Quick install guide

Minimum Requirements
• 802.11b or 802.11g wireless adapter with TCP/IP installed on each PC • Network adapter with Ethernet network cable • Web-based configuration: Java-enabled web browser (Internet Explorer, Mozilla, or Firefox)

Product Warranty
3-year limited hardware warranty with return to factory replacement and 90-day limited software warranty

The maximum performance for wireless is derived from IEEE Standard 802.11 specifications. Actual performance can vary, including lower wireless network capacity, data throughput rate, range, and coverage. Performance depends on many factors, conditions, and variables, including distance from the access point, volume of network traffic, building materials and construction, operating system used, mix of wireless products used, interference, and other adverse conditions.
Check the product package and contents for specific features supported. Specifications are subject to change without notice.

Cisco Limited Warranty for Cisco Small Business Series Products

This Cisco Small Business product comes with 3-year limited hardware warranty with return to factory replacement and a 90-day limited software warranty. In addition, Cisco offers software application updates for bug fixes and telephone technical support at no charge for the first 12 months following the date of purchase. To download software updates, go to: http://www.cisco.com/go/smallbiz.

Product warranty terms and other information applicable to Cisco products are available at http://www.cisco.com/go/warranty.

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