EMC Technologies Report Number: M070237_Cert_4965AGN_NII_BT

APPENDIX G WLAN SPECIFICATIONS



Intel® Wireless WiFi Link 4965AGN

Product Description:

The Intel® Wireless WiFi Link 4965AGN is an embedded 802.11a/b/g/Draft N[©] PCIe^{*} Mini Card network adapter card that operates in both the 2.4GHz and 5GHz spectra. This product delivers high throughput and a host of features that enhance today's mobile lifestyle.



Key Features:

- Data rates up to 300 Mbps
- Intel® Active Management Technology features deliver improved manageability over wireless LAN
- IEEE 802.11e QoS with enhancements for VoIP
- Wake on WLAN support
- Interference Filter enhances performance in congested (noisy) wireless environments
- Business Class Wireless Suite* (version 2) offers High Density Network and Enterprise Conferencing Enhancements
- IEEE 802.11a/b/g/Draft N^{\phi} quad-mode Wireless LAN support (2.4GHz and 5GHz)
- Highest industry-standard wireless LAN security support (802.11i, 802.1X, WEP*, WPA*, WPA2*, AES[§])
- Cisco Compatible Extensions* v4 support available on certain models. Check with your PC manufacturer
- Support for up to 3 antennas allows MIMO diversity for improved wireless throughput at longer range

Intel® PROSet/Wireless Software v11.1

Intel® PROSet/Wireless Software v11.1 is available for users of Intel® Wireless and Intel® PRO/Wireless hardware. The latest version of the software helps enable a superior experience via enhancements for end users as well as IT administrators who deploy and manage wireless networks.

- Support for Microsoft Windows Vista* operating system
- Support for Intel[®] Active Management Technology
- Support for Business Class Wireless Suite^(v2):
 - High-Density Networking Enhancements
 - Enterprise Conferencing Enhancements
- Support for Cisco Compatible Extensions* v4
- Support for Wi-Fi* Protected Setup for improved ease of use
- Supports the following hardware:
- Intel[®] Wireless WiFi Link 4965AGN
- Intel[®] PRO/Wireless 3965ABG Network Connection
- Intel[®] PRO/Wireless 3945ABG Network Connection
- Intel[®] PRO/Wireless 2915ABG Network Connection
- Intel[®] PRO/Wireless 2200BG Network Connection

(Note: Some features may only be supported on the latest hardware)





Technical Specifications	
Product Name	Intel® Wireless WiFi Link 4965AGN
Dimensions (H x W x D)	2.00 in x 1.18 in x 0.13 in (50.95 mm x 30.00 mm x 3.30 mm)
Weight	7g
Antenna Interface Connector	Hirose* U.FL-R-SMT mates with cable connector U.FL-LP-066
Antenna Diversity	On-board diversity support for systems designed with two or three antennas
Radio ON/OFF Control °	Supported in both hardware and software
Connector Interface	Mini Card form factor, based on PCIe electrical interface
LEDs output	Link, Activity
Operating Temperature	0 to +80° Celsius
Humidity Non-Operating	50% to 90% RH non-condensing (at temperatures of 25°C to 35°C)
Operating Systems	Microsoft* Windows* Vista 32/64 bit, XP 32/64 bit, 2000, and Linux
Wi-Fi Alliance	Wi-Fi Certified* for 802.11a, 802.11b, 802.11g, WMM*, WPA*, and WPA2*
Microsoft WHQL	YES
IEEE WLAN Standard	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, Draft N [¢]
Architecture	Infrastructure or ad hoc (peer-to-peer)
Roaming #	Supports seamless roaming between respective access points (802.11b, 802.11g, 802.11a/b/g, and 802.11a/b/g/Draft N^{Φ})
Security §	
Authentication	WPA [§] and WPA2 [§] , 802.1X (EAP-TLS, TTLS, MD5, PEAP, LEAP, EAP-FAST), EAP-SIM
Authentication Protocols	PAP, CHAP, MD5, GTC, MS-CHAP*, MS-CHAPv2*
Encryption	64-bit and 128-bit WEP, AES-CCMP, CKIP, TKIP
Product Safety	UL, C-UL, CB (IEC 60590)

Products Available	Model Code
Intel® Wireless WiFi Link 4965AGN	4965AGN
	4965AG_ (version with Draft N [®] capabilities disabled)

- Φ "Draft N" refers to: IEEE P802.11n™/D1.0 Draft Amendment to STANDARD [FOR] Information Technology-Telecommunications and information exchange between systems-Local and Metropolitan networks-Specific requirements-Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: Enhancements for Higher Throughput
- $\ensuremath{^{\star}}$ Other names and brands may be claimed as the property of others.
- + Wireless connectivity and some features may require the purchase of additional software, services, or external hardware. Availability of public wireless LAN access points is limited, wireless functionality may vary by country and some hotspots may not support Linux-based Intel Centrino mobile technology systems. System performance measured by MobileMark* 2005. System performance, battery life, wireless performance, and functionality will vary depending on the specific operating system, hardware, and software configurations. See http://www.intel.com/products/centrino/more_info for more information.
- § Some security solutions, Intel[®] PROSet/Wireless Software, and/or Business Class Wireless Suite features may not be supported by your PC's operating system and/or by your PC manufacturer. Check with your PC manufacturer for details on availability.
- ♦ Intel® PROSet/Wireless software may not be supported by your PC manufacturer. Check with your PC manufacturer for details on availability.
- # Roaming is supported only between each respective band and mode of access points.

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