



GN-WMAG

IEEE 802.11b/g Dual-Mode Wireless LAN Card

Specification

<http://www.gigabyte.com.tw>

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Contents

CHAPTER 1. PRODUCT OVERVIEW	1
1-1. INTRODUCTION	1
1-2. FEATURES	1
1-3. PHYSICAL DIMENSIONS/PACKAGING	1
1-5. SYSTEM REQUIREMENTS	2
1-5-1. Supported Platform.....	2
1-5-2. Supported Operation System.....	2
CHAPTER 2. SPECIFICATION	3

Chapter 1. Product Overview

1-1. Introduction

This 802.11b/g Wireless Local Area Network (WLAN) card is composed of the MAC, Baseband, and radio components, CARDBUS interface, and two built-in antennas. It operates in 2.4GHz frequency band, providing fast (up to 108Mbps) and secure (support AES, 802.1x & WEP, and WPA) connections to 802.11b and 802.11g networks from a single card.

This product features the compact size, low power consumption, and power management functions, and provides a high-speed wireless data communication. Therefore, this product is ideally suitable for being integrated into the personal mobile and handheld platform.

1-2. Features

- Conforms to IEEE 802.11b and 802.11g specifications.
- Transmits data rate up to the maximum speed of 108Mbps.
- Dynamically scales the data rate.
- Automatic power management to reduce battery consumption.
- Built-in diversity antenna.
- Seamless roaming between 802.11b and 802.11g networks.
- Supports AES (Advance Encryption System), enterprise-class 802.1x security and multiple levels of WEP encryption (64-bit /128-bit/152-bit), and WPA (Wi-Fi Protected Access).
- Driver supports Windows 98SE/Me/2000/XP.

1-3. Physical Dimensions

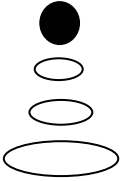
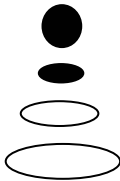
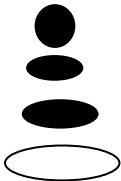
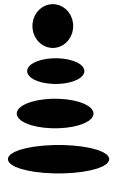


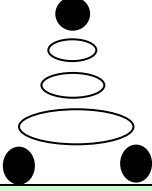
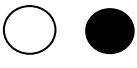
Dimensions: 120 mm * 54mm * 7mm

This WLAN card conforms to the PC card Type II standard. There are six LED indicators, front two indicate currently Tx/Rx status, the other four show the receive signal strength from the linking Access Point.

1-4. LED Indicating Light

The LED display window shows the current condition of the receiver signals. It specifies the four conditions of "**POOR**", "**FAIR**", "**GOOD**", and "**EXCELLENT**" receiver signals. It also provides additional information if the station is "**SCANNING**", "**Rx**" or in "**Tx**" mode.

LED Continuously				
Condition of the Receiver	<i>POOR</i>	<i>FAIR</i>	<i>GOOD</i>	<i>EXCELLENT</i>

LED Blinking			
Status	<i>SCANNING</i>	<i>Rx</i>	<i>Tx</i>

1-5. System Requirements

1-5-1. Supported Platform

IBM PC/AT compatible computer

1-5-2. Supported Operation System

Windows 98SE/Me/2000/XP

Chapter 2. Specification

2-1. System		
Host Interface	CARDBUS (32-bit) card Type II v7.1	
Operating Voltage	3.3VDC ± 5%	
2-2. RF Performance		
802.11b		
Frequency Band	2412 ~ 24835 MHz (subject to local regulation)	
Modulation Technology	DSSS (Direct Sequence Spread Spectrum)	
Modulation Techniques	DBPSK, DQPSK, CCK	
Date Rates	11, 5.5, 2, 1 Mbps, auto fallback	
Typical Power Consumption	Doze: 25mA Receive: 350mA Transmit: 470mA	
Peak Output Power	20dBm @ Nominal Temp Range	
Minimum Receive Sensitivity	- 88dBm @ 11 Mbps @ Nominal Temp Range	
Antenna	Internal antennas supporting diversity	
802.11g(backward compatible to 802.11b)		
Frequency Bands	2412-24835 MHz (subject to local regulations)	
Modulation Technology	OFDM and DSSS	
Modulation Techniques	64QAM, 16QAM, QPSK, BPSK, CCK, DQPSK, DBPSK	
Date Rates	Base mode: 54, 48, 36, 18,12, 9, 11, 6, 5.5, 2, and 1 Mbps, auto fallback Turbo mode: 108, 96, 72, 48, 36, 24, 18 and 12 Mbps auto fallback	
Typical Power Consumption	Doze: 25mA Receive: 350 mA Transmit: 520 mA (Base mode)	
Peak Output Power	20 dBm @ Nominal Temp Range	
Receive sensitivity	Minimum -73dBm;typical -76dBm @54Mbps @ Nominal Temp Range	
Antenna	Internal antennae supporting diversity	
4-3.Safety Regulation and Operating Environment		
EMC certification	FCC Part 15 (USA)	DGT (Taiwan)
	CE (Europe)	
Temperature Range	Operating: 0 ~ 55 deg C, Storing: -20 ~ 65 deg C	
Humidity	Max. 90% Non-condensing	
4-4. Software Support		
Driver	Windows 98SE/Me/2000/XP	
Security	WPA; AES; 802.1X client for Windows XP; 64/128/152 bit WEP	
Roaming	Seamless roaming among 802.11b/g access points.	
Management Utility	Monitors the network situation.	
4-5. Mechanical		
Dimensions	120 x 54 x 7 mm	
Weight	40± 1 g	
Packaging	Packaging specially used by Gigabyte.	
LED indicators	Power, Link, and the receive signal strength	