



## 54Mbps Wireless LAN Adapter Card GW-NS540a

Windows98/98SE

WindowsMe

Windows2000

WindowsXP

CATV/ADSL Support

### Feature

Fully compliant with IEEE802.11a, the GW-NS540a enables 54Mbps high-speed wireless communication to implement stress-free networking in broadband environments.

#### ■ Fully Complies with IEEE802.11a

The GW-NS540a complies with the wireless standard IEEE802.11a to support a maximum wireless data transfer rate of 54Mbps that is nearly five times faster than the average data rate of IEEE802.11b products. Thanks to the fast connectivity, the product easily accommodates transmission of high-volume multimedia data such as video and sound.

#### ■ Utilizes the Radio-Interference-Free 5GHz Range

The product utilizes the 5GHz frequency range for wireless communication. While the 2.5GHz range is used by both IEEE802.11b and home electric appliances such as microwave and thus radio interference might occur between IEEE802.11b products and home appliances, the IEEE802.11a standard utilizes the 5GHz range to enable interference-free, clear wireless data communication. Since the GW-NS540a does not interfere with operation of IEEE802.11b products, it can co-exist with any existing IEEE802.11b-based wireless LAN.

#### ■ Robust Security Features

The product utilizes WEP (Wired Equivalent Privacy) to encrypt communication data, making it impossible to decipher should someone intercept the data by any chance. The GW-NS540a supports 64/128/152bit WEP and converts data signals to more than one trillion patterns.

#### ■ Supports Roaming

The product supports Roaming, an advanced technology which automatically selects (and connects to) the most appropriate access point while the user remains online and moves between multiple AP's. With the GW-NS540a, annoying line disconnections, readjustments and reconnections are all history.

#### ■ Noise-Resistant OFDM Modulation Scheme

The product employs Orthogonal frequency-division multiplexing (OFDM) as its wireless modulation

method. Thanks to its high data transfer capacity per frequency range and strong resistance to multi-path, OFDM facilitates reliable and sound data communication.

### ■ Provides Multi-Channel Support

The product supports up to 4 channels. Unnecessary wireless traffic is eliminated as a unique channel is automatically assigned to each access point. In this manner, the GW-NS540a reduces network load and improves data transfer speed.

## Specifications

Product Model Number	GW-NS540a
Interface	PCMCIA CardBus(Type II)/PCMCIA2.1,JEIDA4.2
Standards Conformance	IEEE802.11,IEEE802.11a
Frequency Range	5GHz Range (5,150-5,250MHz)(Japan Band)
Channels	14(Japan) 13(Europe) 11(North America)
Data Transfer Rate	25m(48Mbps automatic detection ) 30m(36Mbps automatic detection ) 35m(24Mbps automatic detection ) 40m(18Mbps automatic detection ) 45m(12Mbps automatic detection ) 48m(9Mbps automatic detection ) 50m(6Mbps automatic detection )
Communication Range	Indoor line-of-sight distance:100m 54Mbps: Approximately 10m *May vary with different environmental conditions
Antenna Type	Dual Side System Antenna
Access Methods	Supports Ad Hoc and Infrastructure Modes
Modulation Type	Orthogonal frequency-division multiplexing (OFDM)
Security Features	WEP(64bit/128bit/152bit)
LED Indicators	Power,Network
Configuration Interface	Proprietary software (supplied)
Supported Platforms	IBM PC/AT compatible equipped with at least one PCMCIA CardBus Type II slot
Supported OSes	Windows98/98SE/Me/XP/Windows2000
Power Consumption	+3.3V DC,380mA

<b>Dimensions</b>	115(W) x 10(H) x 53(D)mm
<b>Weight</b>	50g
<b>Operating Temperatures</b>	0 - 55 degrees Celsius
<b>Operating Humidities</b>	5 - 80% (non-condensing)
<b>EMI</b>	FCC Class B,VCCI Class B
<b>Package Contents</b>	GW-NS540a, Driver/Utility CD-ROM, User's Manual

Material of obstacle	Influence upon Transfer Distance (The large number means that it is more obstructive material.)	Specific Example
Air	X	-
Wooden	XX	Wooden Partition
Gypsum	XX	Partition wall
Composite Material	XX	Plywood Partition
Asbestos	XX	Ceiling
Glass	XX	Windowpane, Wall
Water	XXX	Wet Wood
Brick	XXX	Wall
Marble	XXXX	Wall
Cement Concrete	XXXX	Floor, Wall
Bulletproof Glass	XXXX	Sentinel Cabin
Iron	XXXXX	Partition, Reinforced Concrete Wall

\*1 The more asterisks, the shorter the communication range

\*Since no cabling is required to set up a wireless LAN, virtually anyone can establish and start using a wireless LAN with ease. However, data communication between two nodes may fail or slow down significantly if they are separated by any of the following materials (see below).To ensure stable data communication, it is strongly recommended to remove these objects or environmental factors from the installation site.

\*The product is incompatible with IEEE802.11b wireless LAN devices as it utilizes a frequency range that is not

supported by IEEE802.11b.

\*In Japan, the outdoor use of the 5.2GHz frequency range utilized by the product is prohibited by Radio Law. Do not use the product outdoors.

▼ Product view



**GW-NS540a Top View**