

54Mbps Wireless LAN PCI Bus Adapter
 **GW-DS54G**

Supplied with a desktop antenna



Feature

The GW-DS54G is an IEEE802.11b/g compliant PCI bus wireless LAN adapter. The product is supplied with an external antenna for improving radio receive sensitivity. The adapter also comes with a low profile PCI bracket.

■ IEEE802.11g compliant adapter achieves 54Mbps high-speed data transfer

The GW-DS54G fully complies with IEEE802.11g standard and achieves high-speed data communication approaching 54Mbps while using the same 2.4GHz frequency range utilized by IEEE802.11b. This feature enables the product to unleash superior data transfer performance when sending or receiving voice, video and large capacity data files. The product also retains compatibility with wireless LAN products supporting IEEE802.11b, the mainstream standard of wireless LAN standard today. The adapter thus enables upgrade to faster data communication environment while making the best use of the existing wireless LAN devices in your network.

■ Supports Burst Mode for improved wireless LAN data rate

The product supports burst mode technology to improve IEEE802.11g connection speed. The PRISM Nitro function of the on-board wireless LAN chip enables burst transfer of packets while reducing collisions, achieving faster data transfer rate and lower overhead.

■ Scheduled to be Wi-Fi certified

The product is currently pending certification of Wi-Fi, a technology that guarantees wireless interoperability (communication) between Wi-Fi certified products from different vendors.

■ Supplied with an external antenna

The GW-DS54G comes with a highly sensitive dipole antenna (for direct attachment to the product) and an external antenna for desktop installation. Since the desktop antenna is equipped with a 90cm cable, its location can be freely adjusted to get the best radio reception. This feature is especially useful when the PC (to which the GW-DS54G is attached) needs to be installed near walls or in a location with many obstructions to radio transmission. In this manner, the supplied external antenna improves layout

flexibility of PC's in your network.

■ **Supplied with a low profile bracket**

The product is supplied with a standard size PCI bus bracket as well as a low profile bracket used in small footprint PC's. The interchangeable brackets of the GW-DS54G allow you to use the bracket that is best suited for the PC to which the adapter is installed.

■ **Security features**

Its on-board 64/128bit WEP function improves communication security as it encrypts communication data, making it impossible to decipher should it be intercepted by an unauthorized party. Furthermore, the product is also scheduled to support the latest wireless security standard "WPA (Wi-Fi Protected Access)".

■ **Supports multiple communication modes**

In addition to Ad Hoc mode for communication between wireless terminals, the product supports Infrastructure mode in which wireless communication occurs via access points (AP).

■ **Supplied configuration utility eases wireless configuration**

The wireless operation settings of the GW-DS54G can be easily configured through the supplied configuration utility program.

Specifications

Product Model Number	GW-DS54G
PC Interface	PCI bus Rev2.2
Standards Conformance	IEEE802.11b, ARIB(Japan) /FCC(North America) /ETSI (Europe) IEEE802.11g, ARIB(Japan) /FCC(North America) /ETSI (Europe)
Frequency Range	2.4GHz band (2,412 to 2,483MHz)
Channels	IEEE802.11b: 1 to 14ch IEEE802.11g: 1 to 13ch
Data Transfer Method	IEEE802.11b:DS-SS (Direct Sequence Spread Spectrum) IEEE802.11g:OFDM (Orthogonal Frequency Division Multiplexing)
Communication Range	54Mbps: 60m(indoor, line-of-sight distance) 1Mbps: 300m(indoor, line-of-sight distance) * The values above are subject to change due to environmental conditions.
Data Transfer Rate	IEEE802.11b: 11, 5.5, 2, 1Mbps auto-detection IEEE802.11g: 54, 48, 36, 24, 18, 12, 9, 6Mbps auto-detection

Antenna Type	Dipole antenna, external antenna
Modulation Types	IEEE802.11b: DBPSK, DQPSK, CCK IEEE802.11g: BPSK, QPSK, 16QAM, 64QAM
LED Indicator	LINK
Security Features	ESS-ID, 64bit/128bit WEP, WPA (scheduled to be supported)
Configuration Interface	Supplied configuration utility
Supported Platform	IBM PC/AT compatible equipped with a normal/low profile PCI bus (both PCI bus types are supported)
Supported OSes	Windows 98SE/Me/2000/XP
EMI	CE, FCC Class B
Power Consumption	1.6W max.
Dimensions (W x H x L)	121(W) x 22(H) x 134(L)mm
Weight	80g
Operating Temperature	0 to 55 degrees Celsius
Operating Humidity	35 to 80% (non-condensing)
Warranty Period	1 year
Package Contents	GW-DS54G, user's manual, dipole antenna, desktop antenna (cable length: 90cm), low profile bracket, driver/utility CD-ROM

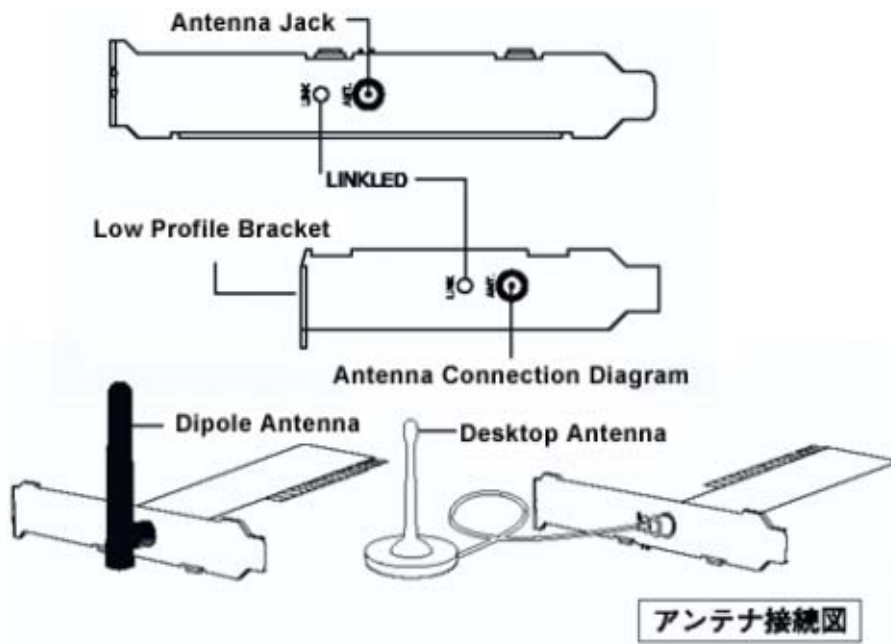
Since no cabling is required to set up a wireless LAN, virtually anyone can establish and start using a wireless LAN with ease. However, data communication between two nodes may fail or slow down significantly if they are separated by any of the following materials (see below). To ensure stable data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

Materials	Negative Impact on Communication Range (*1)	Examples
Air	*	-
Wood	**	Wooden partitioning parts
Plaster	**	Partition walls
Synthetic Materials	**	Partitioning parts in plywood boards


Asbestos	**	Ceilings
Glass	**	Window panes, glass wall plates
Water	***	Damp wooden materials
Bricks	***	Brick walls
Marble	****	Marble walls
Cement/ Concrete	****	Floors, walls
Bulletproof glass	****	Walls/ window panes used in lookouts
Iron/ Steel	*****	Iron partition materials, reinforced concrete walls

*1 The more asterisks, the shorter the communication range

▼ Product view



▼ Connection Sample

 **Ideal solution for your Broadband Network**

The GW-DS54G is an IEEE802.11g compliant wireless LAN PCI adapter that fully supports PCI 2.2 bus slot. The product is supplied with a highly sensitive dipole antenna, and its wireless LAN operation settings can be easily configured via the supplied configuration utility.

