D-Link®

AirPlus G

WiFi® CERTIFIED b g

Designed for Microsoft® Windows® XP™

———— DWL-G510

802.11g Wireless LAN PCI Card

The D-Link AirPlusG DWL-G510 PCI network card connects your desktop PC to a wireless network. It features the latest advanced wireless silicon chip technology with enhanced security to shield and protect your wireless communication from intruders. This 802.11g wireless network card provides high network speeds of up to 54Mbps when used with other 802.11g standard wireless products, delivering throughput speeds capable of handling heavy data payloads.

Up to 54Mbps Wireless Speed
The DWL-G510 network card provides speeds of up to 54Mbps when used with other 802.11g equipment. This enhanced speed and adoption of 2.4GHz frequency, now available for public use in most countries, plus the mobility and convenience inherent in a wireless LAN, make this network card an ideal solution for bandwidth intensive wireless applications for your computer.

Easy Migration to Higher Bandwidth
The DWL-G510 network card is backward compatible with 802.11b standard wireless devices, providing seamless interoperability with the earlier standard equipment. By maintaining compatibility with your existing wireless network equipment, this network card lets you upgrade to a higher speed while protecting your past investments in networking.

Network Security
The DWL-G510 network card features WPA (Wi-Fi ™ Protected Access) and 802.1x for wireless user authentication, providing you a much higher level of security for your data and communications. It also includes a configuration utility to let your computer discover available wireless networks and create and save detailed connectivity profiles for the networks most often accessed.

Easy Installation
With PCI plug-and-play capabilities, this network card can be easily installed into your PC for direct connection to any wireless device in the ad-hoc mode or through an access point or router in the infra-structure mode. When used with other D-Link AirPlusG products, the network card automatically connects to the network.

Key Features

- PCI 2.2 local bus wireless network connection for desktop computer
- 802.11g wireless LAN standard
- Uses popular 2.4GHz frequency band
- Up to 54Mbps network data transfer

- User-selectable 64/128/152-bit WEP data encryption security
- WPA network security
- Compatible with 802.11b wireless devices
- Omni-directional dipole antenna
- Easy configuration, PCI plug-and-play installation
- Operates on Windows 98SE, 2000, ME, XP

DWL-G510

Technical Specifications

Wireless Standards
- 802.11g wireless LAN
- 802.11b wireless LAN

Adapter Type
- 32-bit interface PCI Local Bus 2.2 compliant
- Low-profile half-length PCI short card

Media Access Control Protocol
CSMA/CA with ACK

Network Architecture Types
- Ad-hoc mode
- Infrastructure mode

Operating Frequency
2.4 to 2.4835 GHz ISM band

Operating Channels
- FCC: 11
- ETSI: 13

Radio and Modulation Schemes
- 802.11b: DQPSK, DBPSK, DSSS, CCK
- 802.11g: BPSK, QPSK, 16QAM, 64QAM, OFDM

Receive Sensitivity (for 802.11b)
- -84dBm at 11Mbps (8% PER)
- -90dBm at 2Mbps (8% PER)

Receive Sensitivity (for 802.11g)
(1000-byte PDUs 10% PER)
- -87dBm at 6Mbps
- -86dBm at 9Mbps
- -85dBm at 12Mbps
- -83dBm at 18Mbps
- -80dBm at 24Mbps
- -76dBm at 36Mbps
- -71dBm at 48Mbps
- -66dBm at 54Mbps

Transmit Output Power (for 802.11b)
+18dBm at 11Mbps, 5.5Mbps, 2Mbps, and 1Mbps

Transmit Output Power (for 802.11g)
- +12dBm to 16dBm at 54Mbps
- +13dBm to 17dBm at 48Mbps
- +16dBm to 17dBm at 36Mbps
- +17dBm to 19dBm at 24, 18, 12, 9, and 6Mbps

Security
- 64/128/152-bit WEP data encryption
- WPA EAP, WPA PSK

Antenna
2dBi Gain detachable external omni-directional dipole antenna with RP-SMA connector

Operation Range
- Indoors: up to 100 m*
- Outdoors: up to 400 m*

Environmental factors may adversely affect range

Physical & Environmental

Diagnostic LEDs
- Power
- Activity

Operating Voltage
5VDC +/- 10%

Power Consumption
- Transmission: 1650 mW (max.)
- Reception: 950 mW (max.)
- Sleep: 40mW (max.)

Dimensions
120 (L) x 64 (W) x 6 (H) mm

Weight
78 grams

Operating Temperature
0° to 55°C

Storage Temperature
-20°to- 75°C

Operating Humidity
10% to 90% non-condensing

Storage Humidity
5% to 95% non-condensing

Emission (EMI)
- FCC Class B
- CE

OS Support
Windows 98SE, ME, 2000, XP

Ordering Information

DWL-G510	802.11g Wireless LAN PCI Card