

2.4 GHz Wireless LAN

















The D-Link AirPlusXtremeG $^{\text{TM}}$ DWL-G520 Wireless PCI card is an enhanced 802.11g high-performance, wireless card for desktop computers. This card supports high-speed wireless networking of up to 108Mbps Turbo mode, while providing seamless interoperability with all existing 802.11b wireless equipment. Together with better security, this card is the ideal wireless solution that offers an upgrade to a fast, new technology while protecting your past investments through interoperability with your current network equipment.

Up to 108Mbps Transmission Speed

Unlike most wireless cards, the DWL-G520 provides speeds of up to 108Mbps Turbo mode when used with other D-Link AirPlusXtremeG and other 802.11g products. This compares favorably with 802.11b adapters that offer 11Mbps speed.

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 card an ideal solution for bandwidth intensive WLAN applications.

Compatible With 802.11b

Like the 802.11b adapters, the DWL-G520 uses a single 2.4GHz wireless frequency, eliminating the complexity of dualband networking. 802.11g's compatibility with existing wireless LAN standards means that you do not need to change your entire network to maintain connectivity.

Easy Migration to Higher Bandwidth

By maintaining compatibility with your existing wireless network equipment, this adapter lets you upgrade to a higher speed at the pace you want. The DWL-G520 and other 802.11g standard devices can be gradually added to your network, while the rest of your older network remains perfectly connected.

Wi-Fi TM Protected Access

Wi-Fi[™] Protected Access is provided to authorize and identify users based on a secret key that changes automatically at a regular interval.Used in conjunction with a RADIUS server, WPA uses TKIP (Temporal Key Integrity Protocol) to change the temporal key every 10,000 packets. This insures much greater security than the standard WEP security, which requires the keys to be changed manually.

802.1x Authentication

The DWL-G520 supports 802.1x authentication for protection against network intrusion. Used in conjunction with a RADIUS server, this function provides a means to verify the identity of the client before an access to the network is granted.

Pre-Shared Key

This function brings a lot of convenience (when used in conjunction with other 802.11g products) for users that do not incorporate a RADIUS server in their networks. Utilizing the Pre Shared Key mode of WPA, the DWL-G520 will obtain a new security key every time it connects to the 802.11g network. You only need to input your encryption information once in the configuration menu. With the DWL-G520, you will automatically receive a new key every time you connect, doing away with the inconvenience of manual WEP key input.

Features

- 802.11g industry standard
- Uses popular 2.4GHz frequency band
- Up to 108Mbps Turbo mode network throughput 15 times faster than 802.11b
- Strong 64/128/152-bit WEP data encryption security
- Compatible with existing 802.11b wireless devices

- Advanced security with WPA, 802.1x authentication, TKIP and Pre-Shared Key function support
- Powerful integrated antenna provides 100-meter indoors, 400-meter operation range *
- Easy configuration, plug-and-play installation
- Runs Windows 98SE, 2000, ME, XP

^{*} Enrironmental factor may adversely affect operation range.

Technical Specifications

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Standards

- 802.11g wireless LAN

- PCI 2.2

Media Access Control Protocol

CSMA/CA with ACK

Network Architecture Types

- Ad-Hoc mode

- Infrastructure mode

Frequency Range

2.4 - 2.4835 GHz

Operating Channels

- US (FCC): 11

- Europe (ÉTSI): 13

- Canada (DOC): 11

Network Transfer Rate/Modulation Technique

11Mbps, 5.5Mbps: CCK 2Mbps: DQPSK

1Mbps: DBPSK

- 802.11g:

54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 9Mbps, 6Mbps:

OFDM (Orthogonal Frequency Division Multiplexing)

Receive Sensitivity (for 802.11b)

- 1Mbps: -92dBm

- 2Mbps: -88dBm

- 5.5Mbps: -86dBm

- 11Mbps: -84dBm

Receive Sensitivity (for 802.11g)

- 6Mbps: -88dBm

- 9Mbps: -85dBm

- 12Mbps: -85dBm

- 18Mbps: -81dBm

- 24Mbps: -77dBm

- 36Mbps: -73dBm

- 48Mbps: -71dBm

- 54Mbps: -70dBm

Transmit Output Power (for 802.11b)

1Mbps, 2Mbps, 5.5Mbps, 11Mbps: 16dBm to 18dBm

Transmit Output Power (for 802.11g)

- 6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps: 16dBm to 18dBm

- 36Mbps: 15dBm to 17dBm - 48Mbps: 14dBm to 16dBm

- 54Mbps, 108Mbps: 13dBm to 15dBm

External dipole antenna with detachable reverse SMA connector

Operation Range

- Indoors: up to 100 meters (328 feet)*

- Outdoors: up to 400 meters (1,312 feet)*

* Environmental factors may adversely affect range

Security

- 64/128/152-bit WEP data encryption

- WPAEAP, WPA PSK

Physical & Environmental

Diagnostic LEDs

- Link

- Activity

Operating Voltage

Power Consumption

- Transmit mode: 248 mA

- Power save mode: 28 mA

- Standby mode: 4.66 mA

Dimensions

114 (L) x 54 (W) x 8.7 (H) mm (4.64 x 2.13 x 0.34 inches)

Weight

55 grams (0.12 lb.)

Operating Temperature

0° - 55°C (32° - 149°F)

Storage Temperature

-20° - 75 °C (-4° - 167°F)

Humidity

Up to 95% non-condensing

Emission (EMI)

- FCC Class B

- CE Class B

- R&TTE

OS Support

Windows 98SE, ME, 2000, XP



Ordering Information

DWL-G520 802.11g Wireless LAN PCI Card

Please specify your order as follows:

DWL-G520/NA North America frequency

DWL-G520/EU EU frequency

DWL-G520/CN EU frequency (packaging for China)

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TEL: 49-6196-77990 TEL: 33-1-30238688 TEL: 31-10-282-1445 TEL: 32(0)2-517-7111 Singapore Australia India TEL: 91-022-2652-6696 Middle East (Dubai) TEL: 9714-3916480

Turkey Egypt Israel Latin America Brasil South Africa Russia D-Link Corp.

TEL: 39-2-2900-0676 TEL: 34-93-4090770 TEL: 46-(0)8564-61900 TEL: 47-23-897189 TEL: 45-43-969040 TEL: 358-9-2707-5080 TEL: 65-6774-6233 TEL: 61-2-8899-1800 TEL: 86-10-5863-5800 TEL: 90-212-335-2553 TEL: 202-414-4295 TEL: 972-9-9715700 TEL: 56-2-232-3185 TEL: 55-11-55039320 TEL: 27-1266-52165 TEL: 7-095-744-0099 TEL: 886-2-2910-2626 TEL: 886-2-2916-1600

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FAX: 972-9-9715601 FAX: 56-2-232-0923 FAX: 55-11-55039322 FAX: 27-1266-52186 FAX: 7-095-744-0099#350

FAX: 886-2-2910-1515 FAX: 886-2-2914-6299

Rev. 03 (Oct. 2004)