



— DWL-G650

Wireless 108 G CardBus Adapter

The D-Link AirPlusXtremeG™ DWL-G650 Wireless 108 G Cardbus Adapter is an enhanced 802.11g high-performance, wireless adapter for notebook computers. This adapter 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 adapter 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-G650 provides speeds of up to 108Mbps Turbo mode when used with other D-Link AirPlusXtremeG products. This compares favorably with 802.11b adapters that offer 11Mbps speed. The DWL-G650 provides all these using a single 2.4GHz wireless frequency, eliminating the complexity of dualband networking.

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 adapter an ideal solution for bandwidth intensive WLAN applications.

Compatible With 802.11b

AirPlusXtremeG 802.11g 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-G650 and other 802.11g standard devices can be gradually added to your network, while the rest of your older network remains perfectly connected.

Powerful Performance

To take full advantage of the new 108Mbps network bandwidth, this adapter uses 32-bit high-speed CardBus design to transfer network data with the computer host. This ensures that no bottlenecks take place between your computer's CPU and your network wireless frequency.

Advanced Security

In addition to offering faster data transfer speeds, this adapter also provides the newest, strongest, most advanced security features available today. For home users that do not incorporate a radius server in their networks, security is provided in a convenient, automatic way (when used in conjunction with other 802.11g products). No longer will you have to frequently input a new WEP key to execute security operations. With the DWL-G650, you will automatically receive a new key every time you connect, doing away with the inconvenience of manual WEP key input.

Easy Installation

With hot swap and plug-and-play capabilities, this adapter can be easily installed into a notebook PC for direct connection to any wireless device in the ad-hoc mode or infra-structure mode. Access to your wired Ethernet servers is also provided through your wireless LAN access points.

Key Features

- 32-bit high-performance CardBus (PC Card Type II) adapter for notebook computer
- 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
- WPA EAP/PSK, WPA2 EAP/PSK, TKIP, AES Support
- Compatible with existing 802.11b wireless devices
- Powerful integrated antenna provides 100 meter indoors, 400 meter operation range*
- Easy configuration, plug-and-play installation
- Configuration Utility runs under Windows 98SE, 2000, ME, XP

* Environmental factors may affect operation range.

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Technical Specifications

System Requirements

- 32-bit CardBus slot
- 300MHz processor and 32MB memory (minimum)

Standards

802.11g wireless LAN

Adapter Type

PC Card Type II CardBus

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 (ETSI): 13
- Canada (D)C: 11

Network Transfer Rate/Modulation Technique

- 802.11b:
 - 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

Antenna

Internal patch antenna supporting diversity

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/PSK, WPA2 EAP/PSK
- TKIP, AES support

Physical & Environmental

Diagnostic LEDs

- Link
- Activity

Operating Voltage

3.3V

Power Consumption

- Transmission: 500 mA (max.)
- Reception: 380 mA (max.)

Dimensions

118 (L) x 54 (W) x 7.4 (H) mm
(4.64 x 2.13 x 0.29 inches)

Operating Temperature

0° - 55° C (32° - 131° F)

Storage Temperature

-20° - 65° C (-4° - 149° F)

Humidity

Up to 95% non-condensing

Emission (EMI)

- FCC Class B
- CE Class B

OS Driver Support

- Windows 98SE, ME, 2000, XP, Vista



Ordering Information

DWL-G650 802.11g Wireless LAN CardBus Adapter

Please specify your order as follows:

DWL-G650/NA	North American frequency
DWL-G650/EU	EU frequency
DWL-G650/CN	EU frequency(packaging for China)

D-Link Worldwide Offices

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Canada	TEL: 1-905-8295033	FAX: 1-905-8295223	Romania	TEL: 40(0)21 320 23 05	FAX: 40(0)21 320 23 07
Europe (U. K.)	TEL: 44-(0)20-8955-9000	FAX: 44-(0)20-8955-9001	Singapore	TEL: 65-6774-6233	FAX: 65-6774-63225
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