

Wireless 108G MIMO CardBus Adapter

For Extended Wireless Range Coverage

- Enhanced Wireless Coverage With Smart Antenna Technology
- Up to 8x Better Wireless Range Coverage**
- Wireless Speeds Up to 108Mbps**
- Advanced Security Schemes
- Backward Compatible With 802.11b/g Devices

FEATURES

Extensive Operation Range

- Smart Antenna Technology
- Up to 8x Better Wireless Range Coverage
- Dual Internal Diversity Switching Antennas

High Performance Connectivity

- 802.11g Wireless Speeds
- Up to 54Mbps Wireless Data Transfer Rates *
- Wireless speeds Up to 108Mbps**

Wireless Security

- 64/128-bit WEP data encryption
- WPA-PSK (Pre-Shared Key)

* Maximum wireless signal rate derived from IEEE standard 802.11g. Actual data throughput will vary. Network conditions and environmental factors lower actual data throughput rate.

** Up to 108Mbps when operating with other wireless 108G MIMO and AirPlusXtremeG products, up to 8x signal range when operating with other wireless 108G MIMO products.



With the D-Link DWL-G650M Wireless 108G MIMO CardBus adapter, your laptop computer can have a robust wireless connection at high speeds and with extended coverage range. This adapter uses D-Link's latest Smart Antenna MIMO (Multiple Input Multiple Output) technology to provide up to 8 times better radio signal coverage. Combined with wireless speeds of up to 108Mbps, this adapter allows you to effectively implement high-bandwidth applications such as audio and video streaming, on-line gaming and large file transfer over a wireless network. This innovative adapter serves well not only at home and office; when traveling, you can also feel confident that your computer can connect to the ever-increasing number of wireless hot spots.

Extended Wireless Operation Range. Operating on the 2.4GHz frequency band, the DWL-G650M sends information out over multiple high Gain antennas. Radio signals typically reflect off objects, creating multiple paths that in conventional radios cause interference and fading. The adapter uses these paths to carry more information, which is recombined on the receiving side by the MIMO algorithms. As a result, the adapter reduces "dead" spots and distributes strong wireless signals across farther distances with enough bandwidth to stream multimedia content and transfer large files at far higher rates.

Up to 108Mbps Wireless Speed. The DWL-G650M doubles the spectral efficiency compared with the current wireless network. The maximum non-Turbo data transfer rate for 802.11g networks is 54Mbps, though actual throughput is typically closer to 20Mbps to 30Mbps. Enhanced by the Turbo mode, this adapter can boost the typical raw wireless speeds to 108Mbps, or a real throughput 8 times faster than that of standard 802.11g equipment.**

Seamless Operation. With backward compatibility to 802.11g and 802.11b industry standards, the DWL-G650M ensures your laptop computer complete interoperability with existing 2.4GHz wireless infrastructure. So whether at home, in an office or near a public hot spot, you can stay connected and experience the full benefits of extended range and high speeds.

Secure Connection. The DWL-G650M supports both standard WEP and advanced WPA-Personal (WPA-PSK) data encryption. With 802.1x authentication support, this adapter can be deployed for notebook computers in a secure work environment. For homes 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). With this adapter, you will automatically receive a new key every time you connect, doing away with the inconvenience of manual WEP key input. A configuration utility will keep track of your most frequently accessed networks and their specific settings, so you can rejoin them without hassle.

Complete Wireless 108G MIMO Solution. D-Link offers a complete solution with wireless 108G MIMO adapters and routers. This allows you to obtain the best results with a true MIMO implementation on both ends of a connection.





Product Specifications

Minimum System Requirements

- PC with 500MHz CPU
- 32-bit CardBus slot
- Windows XP/2000
- 64MB memory

Standards

- IEEE 802.11b
- IEEE 802.11g

Bus Type

32-bit CardBus

Media Access Control

CSMA/CA with ACK

Wireless Frequency Range

2.4GHz to 2.4835GHz

Wireless Signal Rates

(With Automatic Fallback)

- D-Link 108G: 108Mbps, 54Mbps, 18Mbps, 6Mbps, 48Mbps, 12Mbps, 5.5Mbps, 36Mbps, 11Mbps, 2Mbps, 24Mbps, 9Mbps, 1Mbps

Modulation Technology

- Orthogonal Frequency Division Multiplexing (OFDM)
- Complementary Code Keying (CCK)

Receiver Sensitivity

- 54Mbps OFDM, 10% PER: -71dBm
- 48Mbps OFDM, 10% PER: -71dBm
- 36Mbps OFDM, 10% PER: -78dBm
- 24Mbps OFDM, 10% PER: -82dBm
- 18Mbps OFDM, 10% PER: -85dBm
- 12Mbps OFDM, 10% PER: -87dBm
- 11Mbps CCK, 8% PER: -85dBm
- 9Mbps OFDM, 10% PER: -90dBm
- 6Mbps OFDM, 10% PER: -91dBm
- 5.5Mbps CCK, 8% PER: -88dBm
- 2Mbps QPSK, 8% PER: -89dBm
- 1Mbps BPSK, 8% PER: -92dBm

Wireless Transmit Power

15dBm +/- 2dB

Antennas

Dual internal diversity switching antennas

Wireless Operating Range *

- Indoors: Up to 100 m (328 ft)
- Outdoors: Up to 400 m (1312 ft)

* Environmental factors may adversely affect wireless signal range.

Wireless Security

- 64/128-bit WEP data encryption
- WPA-PSK (Pre-Shared Key)

Diagnostic LEDs

- Power
- Activity

Physical & Environmental

Power Consumption

- Transmit mode: 248mA
- Power save mode: 28mA
- Standby mode: 4.66mA

Dimensions

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

Weight

55 grams (0.12 lb)

Operating Temperature

0° to 55°C (32° to 131°F)

Operating Humidity

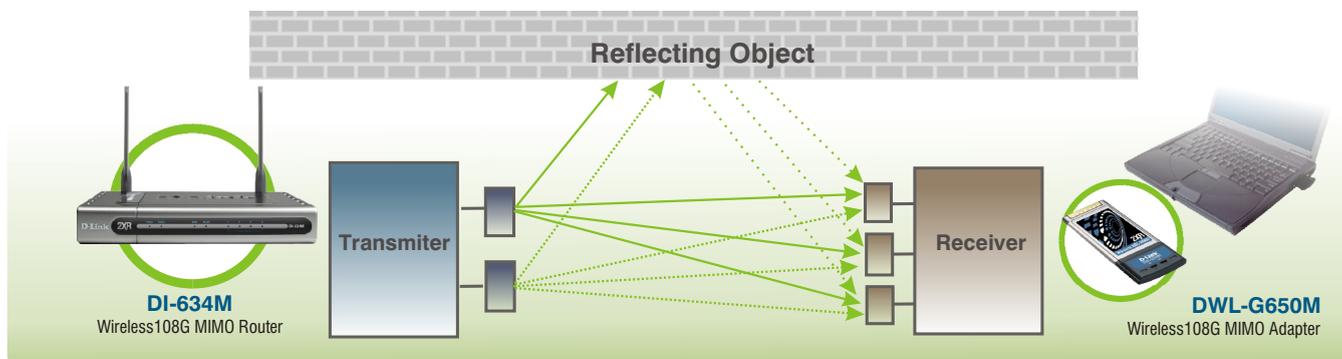
95% maximum (non-condensing)

Emissions

- FCC Class B
- CE

O.S. Support

Windows XP/2000



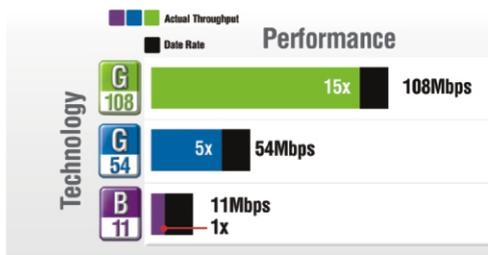
Wireless 108G MIMO (Multiple Input, Multiple Output)

RF Signals Transferred Through Multiple Input/Output for Increased Throughput and Reliability

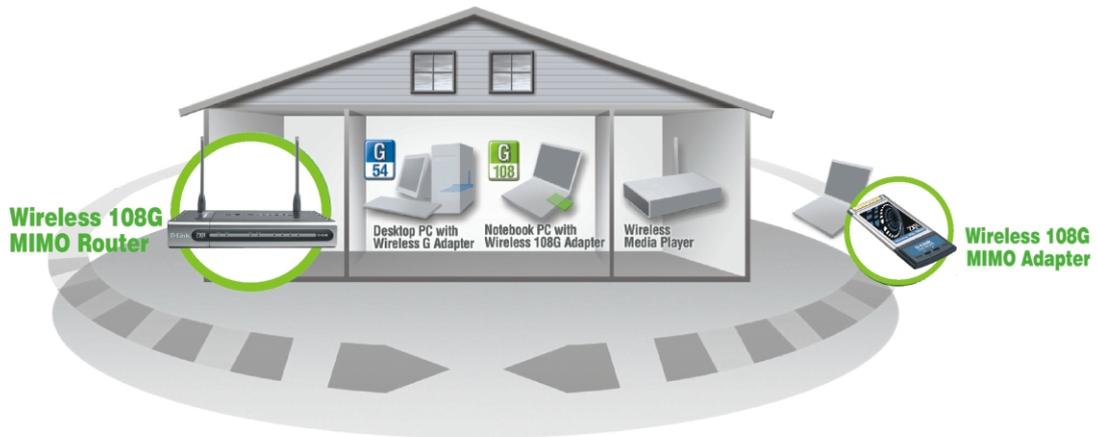


Wireless 108G MIMO CardBus Adapter

■ Faster Speeds*



■ Better Coverage*



Faster Speeds at Farther Distances Than Basic 802.11g

D-Link Wireless 108G MIMO features Smart Antenna Technology to reduce "dead" spots and distribute strong wireless signals across farther distances with enough bandwidth to stream multimedia content and transfer large files at phenomenal rates.

* Up to 108Mbps when operating with other wireless 108G MIMO and AirPlusXtremeG products, up to 8x signal range when operating with other wireless 108G MIMO products.

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