

# Wireless G CardBus Adapter

# High-Powered Wireless Connection for Notebook PC

- Up to 108Mbps Wireless Speed \*
- Multi-Path Antennas for Extended Wireless Signal Reception
- Personal/Enterprise WPA/WPA2 Security
- Business-Class WLAN Utility
- Wi-Fi<sup>™</sup> & Microsoft WHQL Certified

■ he D-Link AirPremier DWL-G680 wireless G CardBus adapter combines powerful business class features with a high-performance hardware platform specifically designed for corporate environments. A perfect complement for yourAirPremier wireless network, this high-powered adapter is a convenient solution for providing superior wireless connectivity for your notebook/laptop PC.

*High Performance.* The DWL-G680 adapter is capable of delivering a maximum wireless signal rate of up to 108Mbps when used with other D-Link wireless 108G devices. The high-powered output featured on the DWL-G680 offers extended wireless signal reception while adhering to industry standards. Higher output power allows your notebook/laptop computer to receive and maintain strong signals from wireless routers and access points at further distances. This translates into more useable, real-world throughput from virtually anywhere in your wireless network.

*Versatile Utility.* The new business-class wireless LAN utility included with this adapter is capable of storing multiple SSIDs per profile. What this means to the notebook user is a hassle-free and automatic process when transitioning between or changing networks. Each time a user enters an area under a different SSID, the notebook adapter will automatically connect to the respective SSID to ensure a positive roaming experience. IT managers will also appreciate the Silent Installation feature of the DWL-G680. With this feature, the drivers can be configured to automatically install on the backend, reducing the time needed to process and configure wireless network settings.

*Enhanced Security.* For accessing secure networks, this adapter supports both Personal and Enterprise versions of WPA and WPA2. Now you can utilize EAP-TLS, EAP-TTLS and PEAP for secure user authentication through an 802.1x RADIUS server. Data traversing the wireless network is encrypted using either TKIP or AES.

*Compatibility.* The DWL-G680 adapter is backward compatible with virtually all 802.11b/g networks and devices. It can be used in peer-to-peer mode (ad-hoc) to directly connect to other 802.11b/g wirelessly enabled computers for direct file sharing, or in client mode (infrastructure) to connect with wireless access points or routers.

In addition to Wi-Fi<sup>™</sup> certification for 802.11b and 802.11g, the DWL-G680 is also certified by Microsoft's WHQL, to ensure compatibly with Microsoft Windows XP and 2000. These certifications ensure wireless compatibility, robust data encryption, and reliable performance.



# FEATURES

#### **High Performance**

- Up to 54Mbps and 108Mbps Turbo Mode Wireless Speed \*
- Dual High Gain Multi-Path Antennas for Extended Wireless Signal Reception
- 32-Bit CardBus Interface to PC Host

## **Connectivity/Interoperability**

- Multiple SSID Per Profile & Silent Installation Feature
- Wi-Fi & Microsoft WHQL Certified
- Supports DFS/TPC for European Operation
- Backward Compatible With 802.11b Wireless Devices
- Operates in Windows 98SE, ME, 2000, XP

#### **Enhanced Security**

- Personal/Enterprise WPA/WPA2 (AES) Security
- 64/128/152-Bit WEP Data Encryption
- \* Maximum wireless signal rate derived from IEEE standard 802.11g specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. 108Mbps Turbo speed when operating with other D-Link AirPremier, AirPremierAG, AirPlusXtremeG and GamerLounge wireless devices.







# Product Specifications

### Standards

- IEEE 802.11b
- IEEE 802.11g IEEE 802.1x

#### **Bus Type**

CardBus (32-bit) Type II PC Card

### Network Data Transfer Rate

- (With auto-fall back) \*
- For 802.11g:
- 108 (Turbo), 54, 48, 36, 24, 18, 12, 9 and 6Mbps For 802.11b:
- 11, 5.5, 2, and 1Mbps

#### Security

WEP 64/128/152-bit data encryption

- WPA-Personal
- WPA-Enterprise
- WPA2-Personal
- WPA2-Enterprise

#### Wireless Frequency Range

- 802.11b: 2400 to 2497MHz
- 802.11g: 2400 to 2483.5MHz

#### **Modulation Technology**

- 802.11b:
- DQPSK DBPSK
- DSSS
- CCK 802.11g:
- BPSK OPSK
- 16QAM OFDM

#### **Receiver Sensitivity**

- 802 11b Typical -84dBm for 11Mbps @ 8% PER Typical -90dBm for 2Mbps @ 8% PER
- 802.11g
- Typical -87dBm for 6Mbps @ 10% PER Typical -86dBm for 9Mbps @ 10% PER Typical -85dBm for 12Mbps @ 10% PER Typical -83dBm for 18Mbps @ 10% PER Typical -80dBm for 24Mbps @ 10% PER Typical -76dBm for 36Mbps @ 10% PER Typical -71dBm for 48Mbps @ 10% PER Typical -66dBm for 54Mbps @ 10% PER

- Wireless Transmit Power\* 802.11b:
- Typical 21dBm at 11, 5.5, 2 and 1Mbps

*Air* Premier<sup>™</sup>

- 802.11g: Typical +15 to 18dBm for 54Mbps
  - Typical +16 to 19dBm for 48Mbps
  - Typical +17 to 20dBm for 36Mbps
  - Typical +18 to 21dBm for 24, 18, 12, 9, 6Mbps

\* Maximum power setting will vary according to individual country regulations

#### Power consumption

- 450mA
- 260mA
- 30mA

#### Antennas

Dual integrated printed PCB diversity antennas for the multi-path environment

#### **Device Management**

D-Link Business Class Utility

#### **Diagnostic LEDs**

- Link Activity

#### Driver Support Microsoft Windows 98SE. ME. 2000, XP

## **Physical & Environmental**

#### Power Consumption

- 450mA at continuous transmit mode
- 260mA at continuous receive mode
- 30mA at sleep mode

#### **Operating Voltage** 3.3VDC +/- 10%

Dimensions 44.6 (L) x 50.75 (W) x 5 (H) mm (1.75 x 1.99 x 0.19 inches)

#### Weight

55 grams (0.12 lb)

**Operating Temperature** 0° to 55 °C

# -20° to 75 °C

**Operating Humidity** 10% to 90%, RH non-condensing

5% to 95%, RH non-condensing

#### Certifications

#### FCC Class B

- CE
- C-Tick

MTBF 30 000 Hours

> \* Maximum wireless signal rate derived from IEEE standard 802.11g specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lowne actual data throughput rate. 108Mbps Turbo speed when operating with other D-Link AirPremier, AirPremierAG, AirPlusXtremeG and GamerLounge wireless devices



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- Storage Temperature

Storage Humidity