D-Link®
Building Networks for People

DWL-G680

AirPremier®

High-Powered Wireless 108G Notebook Adapter

FEATURES

High-Powered Wireless Connectivity

- Increased Power Output Improves Signal Wireless Reception
- Up to 108Mbps[1] Using 802.11g Powered by D-Link 108G Technology
- Backward Compatible to 802.11b

Business-Class WLAN Utility

- Stores Multiple SSID Profiles
- Automatically Connects to Active Wireless Networks When Current Connection is Lost
- One-Click Driver Installation with Silent Installation Feature

Industry Standard Wireless Network Encryption

- WPA-Personal
- WPA-Enterprise
- WPA2
- 64/128-bit WEP

Business-class User Authentication

- 802.1x RADIUS
- EAP-TLS, EAP-TTLS, PEAP

Robust Wireless Data Encryption

- TKIP (Temporal Key Integrity Protocol)
- AES (Advanced Encryption Standard)

Certifications

- Wi-Fi 802.11b
- Wi-Fi 802.11g
- Microsoft WHQL (Windows Hardware Quality Labs)

D-Link's *Air*Premier® line of networking products combine powerful business class features with a high-performance hardware platform specifically designed for corporate environments. The *Air*Premier line of networking products now adds wireless client adapters to its lineup including the DWL-G680 High-Powered Wireless 108G Notebook Adapter.

Powered by D-Link 108G Technology, this High-Powered Notebook Adapter is capable of delivering a maximum wireless signal rate of up to 108Mbps[1] when used with other D-Link Wireless 108G devices. The DWL-G680 is also backward compatible with virtually all 802.11b/g networks and devices.

The high-powered output featured on the DWL-G680 offers extended wireless signal reception while adhering to industry standards. Higher output power allows this client device 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.

The new business-class wireless LAN utility included with this device 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.

For accessing secure networks, this Wireless Notebook 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.

The DWL-G680 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 certification for 802.11b and 11g, the DWL-G680 is also certified by Microsoft's WHQL, to ensure compatibly with Microsoft Windows® XP and 2000. These certifications ensure both wireless compatibility, robust data encryption, and reliable performance.

A perfect complement for your *Air*Premier wireless network, this High-Powered Wireless 108G Notebook Adapter is a convenient solution for providing superior wireless connectivity for your notebook PC.

Product Data Sheet

AirPremier®

DWL-G680

High-Powered Wireless 108G Notebook Adapter

Specifications

Standards
- 802.11b
- 802.11g
- 802.1x

Device Management
- D-Link Business Class Utility

Wireless Signal Rate[1]
- 802.11g: 6, 9,12,18, 24, 36, 48, 54, 108Mbps
- 802.11b:1, 2, 5.5 and 11Mbps

Security
- WEP 64/128bit
- WPA-Personal
- WPA-Enterprise
- WPA2-Personal
- WPA2-Enterprise

Wireless Frequency Range
- 2.4 – 2.5GHz

Wireless Signal Range[2]
- 802.11b
- 2400 – 2497MHz ISM Band
- 802.11g
- 2400 – 2483.5MHz ISM Band

Modulation Technology
- 802.11b
- DQPSK
- DBPSK
- DSSS
- CCK
- 802.11g
- BPSK
- QPSK
- 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 an 1Mbps
- 802.11g
- Typical +15 - 18dBm for 54Mbps
- Typical +16 - 19dBm for 48Mbps
- Typical +17 - 20dBm for 36Mbps
- Typical +18 - 21dBm for 24, 18, 12, 9, 6Mbps

External Antenna Type
- N/A
- Integrated Printed PCB antenna w/ dual diversity

LEDs
- Link
- Activity

Power Consumption
- 500mA at continuous transmit mode
- 300mA at continuous receive mode
- 30mA at sleep mode

Operating Voltage
- 3.3VDC +/- 10%

Operating Temperature
- 0º to +55ºC

Non Operating Temperature
- -20º to +75ºC

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

Non-Operating Humidity
- 5% - 95%, RH, non-condensing

Certifications (US Only)
- FCC part 15.247, 15.205, 15.209
- UL1950-3 for CSA Mark

Dimensions
- L – 1.75in (44.6mm)
- W – 1.99in (50.75mm)
- H – 0.19 (5mm)

Weight
- 0.12 lb (55g)

Mean Time Before Failure
- 30,000 Hours

Warranty
- 1-Year

[1] 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. Environmental factors will adversely affect wireless signal range.

All references to speed are for comparison purposes only. Product specifications, size and shape are subject to change without notice, and actual product appearance may differ from that depicted herein.

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