802.11g Wireless LAN USB Adapter

The DWL-G120 is a high-performance 802.11g wireless LAN USB adapter that connects your computer to a high-speed wireless LAN. This adapter simply plugs to your computer through a fast USB 2.0 interface to provide up to 54Mbps wireless speed. With industry standard interoperability, backward compatibility with 802.11b devices and plug-and-play installation, this adapter is an ideal solution for notebook and laptop PC users needing fast and standard mobile network connection.

Up to 54Mbps Transmission Speed
The DWL-G120 provides speeds of up to 54Mbps when used with other 802.11g wireless devices. This compares favorably with 802.11b adapters that offer only 11Mbps transmission.

Compatible With 802.11b
Like the 802.11b devices, the DWL-G120 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. You may sacrifice some of 802.11g’s speed when you mix 802.11b with 802.11g devices, but you will not lose the ability to communicate.

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-G120 and other 802.11g standard devices can be gradually added to your network, while the rest of your older network remains perfectly connected.

Adjustable Antenna
With its unique flip-up, adjustable antenna design, and the long USB cable that is included with the network adapter, you can position the DWL-G120 adapter virtually anywhere on a flat surface to achieve the best available wireless signal reception.

Network Security
The DWL-G120 supports Wi-Fi™ Protected Access (WPA) to provide the necessary security protocols and tools, so you can communicate with other wireless users confidentially, access sensitive information or send data that is dynamically encrypted as it's sent. WPA allows authorization and identification of 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.

Fast USB 2.0 Interface
The DWL-G120 is equipped with a fast USB 2.0 mini port and a USB cable that connects to your computer, providing data throughput at up to 480Mbps between the network adapter and the host computer. That is about 40 times faster than the earlier USB 1.1 specification, allowing you to take advantage of the high 54Mbps wireless speed that this adapter provides.

Portable Pocket-sized
With its antenna folded up, the DWL-G120 is an attractive, portable wireless device. It can fit into your pocket or carrying case, allowing you to easily carry it around.

Key Features
- 802.11g wireless LAN standard, backward compatible with 802.11b devices
- 2.4GHz frequency band
- Fast USB 2.0 connection to notebook/desktop computer
- Up to 54Mbps wireless data transfer rate
- User-selectable WEP 64/128-bit data encryption and Wi-Fi™ WPA security
- Supports Windows 98 SE, 2000, ME, XP
- Flip-up, foldable, adjustable antenna
- Compact pocket-sized design
DWL-G120

Technical Specifications

Hardware

System Requirements
- Computer with available USB 2.0 interface
- Windows XP, 2000, ME or 98 SE
- 300MHz CPU or above
- 32MB memory or more

USB Interface
Mini USB 2.0 interface (1.8 m USB cable with Type-A plugs provided)

Wireless LAN Standards
- 802.11b
- 802.11b+
- 802.11g

Data Rates
- 802.11g: up to 54Mbps (6/9/12/18/24/36/48/54Mbps)
- 802.11b: up to 11Mbps (1/2/5.5/11Mbps)

Transmission Technology
DSSS

RF Frequency Range
2.4 to 2.4835GHz

Operating Channels
- 1 to 11 channels (FCC)
- 1 to 13 channels (ETSI)

Data Modulation Type
DBPSK, DQPSK, CCK, OFDM

Antenna
2dBi Gain adjustable built-in antenna

Transmit Output Power
16dBm (typical)

Receive Sensitivity (for 802.11b)
(typically @PER < 8% packet size 1024 @ 25 °C +/- 5 °C)
- 11Mbps (CCK): -82 dBm
- 5.5Mbps (CCK): -86 dBm
- 2Mbps (QPSK): -90 dBm
- 1Mbps (BPSK): -90 dBm

Receive Sensitivity (for 802.11g)
(typically @PER < 8% packet size 1024 @ 25 °C +/- 5 °C)
- 54Mbps (OFDM): -66 dBm
- 48Mbps (OFDM): -64 dBm
- 36Mbps (OFDM): -70 dBm
- 24Mbps (OFDM): -72 dBm
- 18Mbps (OFDM): -80 dBm
- 12Mbps (OFDM): -84 dBm
- 9Mbps (OFDM): -86 dBm
- 6Mbps (OFDM): -88 dBm

Operating Range *
- Indoors: 100 meters (328 feet)
- Outdoors: 400 meters (1,312 feet)

* Environmental factors may adversely affect range

Diagnostic LEDs
- Power
- Link

Security
- WEP 64/128-bit data encryption (user-selectable)
- Wi-Fi Protected Access

Physical & Environmental

Operating Voltage
3.3V DC +/- 5%

Power Consumption
- Transmission: 450mA max.
- Reception: 300mA max.
- Sleep mode: 80mA max.

Power Input
USB bus power, no external AC power adapter required

Dimensions
84 x 56 x 14 mm

Operating Temperature
0° to 55 °C

Storage Temperature
-20° to 75 °C

Humidity
5% to 95% non-condensing

Emission Certification
- FCC Part 15b (Class B)
- CE Class B

Package Includes
- DWL-G120 USB adapter
- USB 2.0 cable (1.8 meters)
- Software driver & User’s Manual on CD
- Quick Installation Guide

Ordering Information

DWL-G120/NA
North America frequency

DWL-G120/EU
EU frequency

DWL-G120/CN
For use in China (China packaging)

TDWL-G120
For use in Taiwan (Taiwan packaging)