





2.4GHz Enhanced Performance Wireless LAN PCI Card

The D-Link AirPlus[™] DWL-520+ is an enhanced speed wireless network PCI card desktop PCs. This card connects you to a 2.4GHz wireless LAN, giving you fast, secured mobile access to the network. It provides enhanced transmission speeds at up to 22Mbps, industry standard interoperability, strong 256-bit data security and ease of use for desktop PC users requiring fast, secure wireless network connection.

Enhanced Speed Transmission

At 22 Megabits per second, the DWL-520+ delivers high data transfer rate within the industry standard. This speed is double the 11Mbps normally found among IEEE 802.11b 2.4GHz wireless LAN devices.

Industry-standard Interoperability

With both WiFi[™] certification compatibility and IEEE 802.11b wireless LAN industry standard compliance, the DWL-520+ adapter provides you with excellent network interoperability.

Network Security

Security is an issue when data is transmitted without the wires. In the air, transmitted data can be easily intercepted if not well protected by a security scheme. The DWL-520+ provides the necessary security, using the enhanced 64/128/256-bit industry-standard WEP (Wired Equivalent

Privacy) encryption protocol. Data privacy mechanism is based on a shared key algorithm, as described in the wireless LAN standard.

Easy Installation

With PCI plug-and-play installation, the DWL-520+ can be easily installed into a desktop PC to provide connectivity directly to another 802.11b wireless enabled device (ad-hoc mode) or through an 802.11b Access Point (infra-structure mode).

Detachable Antenna

The DWL-520+ is equipped with an SMA reverse detachable dipole antenna with an effective range of 100 meters indoors, or 400 meters outdoors. Where a longer range is required, you can easily remove this antenna and replace it with a higher Gain antenna.

Features

- 802.11b+ industry standard compliance
- 2.4GHz frequency band Direct Sequence Spread Spectrum (DSSS)
- Up to 22Mbps enhanced data transfer rate
- 32-bit Bus Master data transfer with PC host
- Detachable SMA reverse dipole antenna

- Enterprise-level security with 64/128/256-bit WEP data encryption
- Supports Windows 98, 2000, ME, XP
- Wi-FiTM compatibility certified
- 802.1x client authentication support in Windows XP environment

Technical Specifications

Standards & Hardware Specifications

LAN Standard

- IEEE 802.11b wireless LAN

Bus Type

- PCI 2.2 specifications
- 32-bit Bus Master data transfer mode

Media Access Control Protocol

CSMA/CA

Network Architecture Types

- Supports Ad-Hoc and Infrastructure Modes
- Cell to cell roaming (IEEE 802.11b compliant)

Data Rates

- 22 Mbps
- 11 Mbps
- 5.5 Mbps
- 2 Mbps
- 1 Mbps
- Auto fallback

Data Rate & Modulation

- 22Mbps: PBCC
- 11Mbps: PBCC or CCK
- 5.5Mbps: PBCC or CCK
- 2Mbps: Barker

Operating Channels

- North America (FCC): 11
- Canada (DOC): 11
- Europe (ETSI): 13 (Except Spain and France)
- Japan (MKK): 14

Sensitivity @ PER< 0.08

- 22Mbps< -80dBm (PBCC)
- 11Mbps< -84dBm (PBCC)
- 5.5Mbps < -86dBm (CCK)
- 2 Mbps < -89dBm (CCK) - 1 Mbps < -91dBm (CCK)

Frequency Range

2.4 - 2.4835 GHz

Modulation Techniques

- Direct Sequence Spread Spectrum (DSSS)
- Packet Binary Convolutional Coding (PBCC)
- 11-chip Barker Sequence

Key Management

Automatic Dynamic Key Allocation (ADKA) through public key

64, 128, 256-bit WEP (Wired Equivalent Privacy) encryption

Detachable 2dBi Gain dipole antenna (reverse SMA connector)

Seamless roaming across cell boundaries within access point range

Transmitter Output Power

15dBm + 2dB

Over-Driving Levels

Tolerates up to +17dBm at the Antenna

Range Coverage (Open Environment)

- Indoors: Up to 100 meters (328 feet)
- Outdoors: Up to 400 meters (1,312 feet)*
- * Environmental factors may adversely affect operating range

Physical & Environmental

Diagnostic LEDs

- Power
- Link/Activity

Operating Voltage

3.3V +/-10%

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Power Consumption

- Transmission: 650 mA (max.)
- Reception: 350 mA (max.)

Dimensions

133 (L) x 121 (W) x 18 (H) mm (5.24 x 4.76 x 0.71 inches)

Weight

77 grams (0.17 lb.)

Operating Temperature

0°- 55°C (32° - 131°F)

Storage Temperature

 $-30^{\circ} - 70^{\circ} \text{C} (-22^{\circ} - 158^{\circ} \text{F})$

Humidity

Up to 95%, non-condensing

Emission Certification

- FCC Class B
- CE Class B

Compatibility Certification

MBTF (Mean Time Between Failure)

 \geq 30 000 hours

Software

O.S. Support

Windows 98, 2000, ME, XP







Ordering Information

DWL-520+

802.11b+ Wireless LAN PCI Card

Please specify your order as follows:

DWL-520+/NA DWL-520+/EU DWL-520+/CN

For North America frequency channels (worldwide type packaging) For EU frequency channels (worldwide type packaging) For EU frequency channels (packaging for China)



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