



Wireless LAN PC card with 22Mbps enhanced network speed and built-in antenna.

2.4GHz Enhanced Performance Wireless LAN CardBus Adapter

The D-Link AirPlus™ DWL-650+ is a powerful CardBus adapter for notebook PCs. This adapter connects you to a 2.4GHz wireless LAN, giving you fast, secured mobile access to the network. With fast 32-bit PC Card Type II interface, the DWL-650+ provides enhanced transmission speeds at up to 22Mbps, industry standard interoperability, strong 256-bit data security and ease of use ideal for notebook PC users requiring fast, secure wireless network connection.

Enhanced Speed Transmission

At 22 Megabits per second, the DWL-650+ 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 Wi-Fi™ certification compatibility and IEEE 802.11b wireless LAN industry standard compliance, the DWL-650+ 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-650+

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 hot swap and plug-and-play capabilities, the DWL-650+ adapter can be easily installed into a notebook 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).

Features

- 32-bit high-performance CardBus (PC Card Type II) adapter for notebook PC
- 802.11b+ industry standard compliance
- 2.4GHz frequency band Direct Sequence Spread Spectrum (DSSS)
- Up to 22Mbps enhanced data transfer rate
- Enterprise-level security with 64/128/256-bit WEP data encryption
- Supports Windows 98, 2000, ME, XP
- Wi-Fi™ compatibility certified
- 802.1x client authentication support in Windows XP environment

DWL-650+

Technical Specifications

Standards & Hardware Specifications

LAN Standard

IEEE 802.11b wireless LAN

Adapter Type

PC Card Type II CardBus

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 fall-back

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 (MKG): 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

Data Security

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

Antenna

2dBi Gain internal patch antenna supporting diversity

Transmitter Output Power

15dBm \pm 2dBm

Mobility

Seamless roaming across cell boundaries within access point range

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%

Power Consumption

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

2.4 GHz Wireless LAN PC Card

Dimensions

114 (L) x 54 (W) x 6 (H) mm
(4.5 x 2.25 x 0.25 inches)

Weight

43 grams (0.095 lb.)

Operating Temperature

-10° - 55°C (14° - 131°F)

Storage Temperature

-20° - 75°C (-4° - 167°F)

Humidity

Up to 95%, non-condensing

Emission Certification

- FCC Class B
- CE Class B

Compatibility Certification

Wi-Fi™

MBTF (Mean Time Between Failure)

> 30,000 hours

Software

O.S. Support

Windows 98, 2000, ME, XP



Ordering Information

DWL-650+ 802.11b+ Wireless LAN
CardBus Adapter

Please specify your order as follows:

DWL-650+/NA For North America frequency channels
(worldwide type packaging)

DWL-650+/EU For EU frequency channels
(worldwide type packaging)

DWL-650+/CN For EU frequency channels (packaging for China)

IEEE 802.11b Wireless Starter Kit

DWL-905+ 2 Wireless LAN CardBus Adapters (DWL-650+)
1 Access Point (DWL-900AP+)

D-Link®

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