







— DWL-AB650

Dualband wireless LAN PC card equipped with dual integrated antennas for 5GHz and 2.4GHz frequency band access.

# **Dualband 802.11a/b Wireless CardBus Adapter**

The D-Link AirPro DWL-AB650 is a powerful dualband wireless LAN adapter for notebook PCs. This 32-bit PC Card connects you to networks operating on both 5GHz and 2.4GHz frequency bands, giving you flexible access to both 802.11a and 802.11b types of networks. Transmission speeds are up to 11Mbps for 802.11b, and 54Mbps for 802.11a. With industry standard interoperability, strong data encryption security and flexible frequency band support, this adapter gives you the true mobility and fast, secure connection to wireless networks.

### **Dual-band Wireless Access**

The DWL-AB650 connects you to wireless Access Points, Internet gateways, servers, wireless users and peripherals no matter if they operate on 5GHz or 2.4GHz frequency band. Communication with 802.11a and 802.11b networks is transparent, with transmission and reception dynamically matching the available speed of the connecting node. The adapter strictly complies with IEEE 802.11a and 802.11b standards and interoperates with all 802.11a and 802.11b compliant devices.

### Flexible High-speed Connection

In a predominantly 802.11b environment, the DWL-AB650's dualband capability allows you to plan for future network growth to immediately tap into 802.11a resources when available wireless channels become available. The additional high-bandwidth channels available with 802.11a also offer you a robust way to transmit large data files much quicker than possible with 802.11b.

### **Network Security**

Your data transmitted and received in the air is well protected by a security scheme. The DWL-AB650 provides 64/128/152-bit industry-standard WEP (Wired Equivalent Privacy) data encryption. Data privacy mechanism is based on a shared key algorithm, as described in the wireless LAN standard. In addition, AES enhanced security and 802.1x for user authentication provide a much more formidable barrier to hackers and sniffers, allowing you to securely share data over the network.

### Easy Installation

With hot swap and plug-and-play capabilities, the DWL-AB650 adapter can be easily installed into a notebook PC to provide connectivity directly to any wireless device in the ad-hoc mode or infra-structure mode. Access to wired Ethernet servers is also provided through wireless LAN Access Points.

### **Key Features**

- 32-bit high-performance CardBus (PC Card Type II) adapter for notebook PC
- IEEE 802.11a/b industry standards compliant
- 2.4GHz and 5GHz dualband support
- Up to 54Mbps (108Mbps Turbo mode for FCC regulation) speed for 802.11a, 11Mbps for 802.11b
- 64/128/152-bit WEP data encryption & Advanced Encryption Security (AES)
- Supports Windows 98, 2000, ME, XP
- DFS/TPC for European operation support
- Easy-to-use configuration and diagnostic utilities
- Wi-Fi<sup>™</sup>& Wi-Fi<sup>5™</sup>compliant

# *DWL-AB650*

# **Technical Specifications**

# 5GHz & 2.4GHz Wireless LAN

### **Standards**

- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.1x

### **Adapter Type**

PC Card Type II CardBus

### **Media Access Control Protocol**

CSMA/CA with ACK

### **Network Architecture Types**

- Ad-Hoc mode
- Infrastructure mode

### Frequency Range (802.11a)

- US & Canada: 5.15 5.350GHz & 5.725 5.825GHz
- Japan: 5.15 5.25GHz
- Europe: 5.15 5.35GHz & 5.47 5.725GHz

### Frequency Range (802.11b)

2400 - 2.497GHz

### Operating Channels (802.11a)

- US & Canada: 12
- Europe: 19
- Japan: 4

### Operating Channels (802.11b)

- Europe: 13 (Except Spain and France)
- Japan: 14

### **Data Rates**

- 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
- 802.11b: 1, 2, 5.5, 11 Mbps

### Encryption

- Advanced Encryption Security (AES)
- 64/128/152-bit WEP (Wired Equivalent Privacy)

### Radio & Modulation Technology

- 802.11a: OFDM (Orthogonal Frequency Division Multiplexing)
- 802.11b: DSSS (Direct Sequence Spread Spectrum)

Max. 1.9 dBi Gain dual diversity integrated antennas

### **Transmitter Output Power**

- 802.11a: +10 14 dBm (54Mbps)
- 802.11b: +18 dBm (11Mbps)

### **Receiver Sensitivity**

- 802.11a: -66 dBm (54Mbps)
- 802.11b: -84 dBm (11Mbps)

### Range Coverage (Open Environment)

- Indoors: Up to 100 meters (328 feet)
- Outdoors: Up to 400 meters (1,312 feet)

### Physical & Environmental

### **Diagnostic LEDs**

- Power
- Link/Activity

### **Operating Voltage**

3.3V +/- 10%

### **Power Consumption**

- Transmission: 500 mA (max.)
- Reception: 380 mA (max.)

### **Dimensions**

118 (L) x 54 (W) x 13 (H) mm (4.6 x 2.25 x 0.51 inches)

### Weight

40 grams (0.09 lb.)

## **Operating Temperature**

0°- 55°C (32°- 131°F)

### Storage Temperature

-20° - 75°C (-4° - 167°F)

### **Non-Operating Humidity**

5% - 95% non-condensing

### **Operating Humidity**

10% - 90% non-condensing

### **Emission (EMI)**

- FCC Class B
- CE Class B

### Compliance

- Wi-Fi™
- Wi-Fi5™

### **OS Support**

Windows 98SE, ME, 2000, XP









# **Ordering Information**

DWL-AB650

IEEE 802.11a/b Dualband Wireless LAN CardBus Adapter



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