

### 2.4GHz Wireless LAN



# **802.11g High-Speed Wireless Access Point**

The AirPlusXtreme $G^{\text{TM}}$  DWL-2000AP is an enhanced high-performance 802.11g wireless Access Point for use indoors. This device supports wireless networking speeds of up to 108Mbps Turbo mode, while providing seamless interoperability with all existing 802.11b wireless equipment. With high data transfer rates, better security and built-in bridge function, this device is the ideal wireless solution that offers an upgrade to a fast, new technology while protecting your past investments through interoperability with your current network equipment.

#### Up to 108Mbps Speed on 2.4GHz Frequency Band

Providing transmission speeds of up to 108Mbps Turbo mode, the DWL-2000AP compares favorably with 802.11b devices that offer 11Mbps speed. This enhanced speed and adoption of 2.4GHz frequency, now available for public use in most countries, plus the mobility and convenience inherent in a wireless LAN, make this device an ideal solution for bandwidth intensive WLAN applications.

#### Compatible With 802.11b

AirPlusXtremeG 802.11g's compatibility with existing wireless LAN standards means that you do not need to change your entire network to maintain connectivity. The DWL-2000AP can transmit data at up to 108Mbps when used with other D-Link AirPlusXtremeG products.

#### **Built-in Bridge Functions**

The DWL-2000AP can be configured to operate in any one of the 4 modes: (1) as a wireless access point, (2) a point-to-point bridge with another access point, (3) a point-to-multi-point wireless bridge, or (4) a wireless client. With the built-in bridge functions, the DWL-2000AP gives you the flexibility to configure the device to meet your environment's requirements.

#### Easy Migration to Higher Bandwidth

By maintaining compatibility with your existing wireless network equipment, the DWL-2000AP lets you upgrade to a higher speed at the pace you want. The DWL-2000AP and other 802.11g standard devices can be gradually added to your network, while the rest of your older network remains perfectly connected.

### Wi-Fi<sup>™</sup> Protected Access

Enhanced security is provided with Wi-Fi Protected Access to authorize and identify users based on a secret key that changes automatically at a regular interval. Used in conjunction with a RADIUS server, WPA employs 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.

#### 802.1x Authentication

The DWL-2000AP supports 802.1x authentication for protection against network intrusion. Used in conjunction with a RADIUS server, this function provides a means to verify the identity of the client before an access to the network is granted.

#### **Pre-Shared Key**

This function brings a lot of convenience (when used in conjunction with other 802.11g products) for users that do not incorporate a RADIUS server in their networks. Utilizing the Pre Shared Key mode of WPA, the DWL-2000AP gives each user a new security key every time he connects to the 802.11g network. Users only need to input their encryption information once in the configuration menu. With the DWL-2000AP, each user will automatically receive a new key every time he connects, the inconvenience of manual WEP key input is eliminated.

#### **Embedded DHCP Server**

The DWL-2000AP includes an embedded DHCP server that once enabled will automatically assign IP addresses to wireless clients. This unique feature makes the DWL-2000AP an ideal solution for quickly creating and extending a wireless local area network (WLAN) in offices or other workplaces, and at trade shows and other special events.

### Features

- 802.11g 2.4GHz standard
- Up to 108Mbps Turbo mode high-speed transmission
- 10/100Mbps port for connection to Fast Ethernet or DSL/cable modem router
- Compatible with existing 802.11b wireless devices
- Seamless roaming from cell to cell and across Access Points
- Built-in DHCP server

- 4 operation modes: AP, AP-to-AP bridge, AP-to-multi-point bridge, wireless client
- Detachable reverse SMA dipole antenna
- 64/128/152-bit WEP data encryption
- Advanced security with WPA, 802.1x authentication, TKIP and Pre-Shared Key
- Web-based configuration & management

### DWL-2000AP

## **Technical Specifications**

#### **Standards**

- IEEE 802.11g wireless LAN
- IEEE 802.3 Ethernet/IEEE 802.3u Fast Ethernet

#### Wireless Data Rates

(With Automatic Fallback) 54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 11 Mbps, 9 Mbps, 6 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps

#### Security

- 64/128/152-bit-WEP data encryption
- 802.1x authentication
- WPA -- Wi-Fi Protected Access (64-, 128-, 152-bit WEP with TKIP, MIC, IV Expansion, Shared Key Authentication)

#### Media Access Control

CSMA/CA with ACK

#### Wireless Frequency Range

2.4 - 2.4835 GHz

#### **Modulation Technology**

- Orthogonal Frequency Division Multiplexing (OFDM)
- Complementary Code Keying (CCK)

#### **Receiver Sensitivity**

- 54 Mbps OFDM, 10% PER, -68 dBm
- 48 Mbps OFDM, 10% PER, -68 dBm 36 Mbps OFDM, 10% PER, -75 dBm
- 24 Mbps OFDM, 10% PER, -79 dBm
- 18 Mbps OFDM, 10% PER, -82 dBm
- 12 Mbps OFDM, 10% PER, -84 dBm
- 11 Mbps CCK, 8% PER, -82 dBm - 9 Mbps OFDM, 10% PER, -87 dBm
- 6 Mbps OFDM, 10% PER, -88 dBm
- 5.5 Mbps CCK, 8% PER, -85 dBm
- 2 Mbps QPSK, 8% PER, -86 dBm
- 1 Mbps BPSK, 8% PER, -89 dBm

#### **Transmit Output Power**

15 dBm (32 mW) +/- 2dB

#### Antenna

2dBi Gain detachable dipole antenna with reverse SMA connector

#### Wireless Operating Range \*

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

#### **Device Management**

- Web-Based: Internet Explorer v6 or later; Netscape Navigator v6 or later; or other Java- enabled browsers
- DHCP Server and Client

#### **LEDs Power**

- WAN
- LAN (10/100Mbps)
- WLAN

#### Physical & Environmental

#### **Power Input**

- DC 5V, 2.0A
- Through external power adapter

#### **Dimensions**

142 (L) x 109 (W) x 31 (H) mm (5.6 x 4.3 x 1.2 inches)

#### Weight

200 grams (0.44 lbs)

#### **Operating Temperature**

0° - 55° C (32° - 149° F)

#### Storage Temperature

-20° - 75° C (4° - 167° F)

95% maximum (non-condensing)

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#### **Emissions**

- FCC Class B
- CE Class B

#### Safety

UL.











### **Ordering Information**

802.11g Access Point

DWL-2000AP 1 RJ-45 10BASE-T/100BASE-TX port

(for connection to Ethernet)

Please specify your model number as follows:

DWL-2000AP/ANA US power adapter, North America frequency DWL-2000AP/EEU EU power adapter, EU frequency

DWL-2000AP/ENA EU power adapter, North America frequency DWL-2000AP/BEU UK power adapter, EU frequency DWL-2000AP/NEU Australia power adapter, EU frequency

DWL-2000AP/CN China power adapter, China frequency, China packaging

TDWL-2000AP US power adapter, North America frequency,

Taiwan packaging

BDWL-2000AP US power adapter, North America frequency,

USA packaging

Rev. 02 (Aug. 2004)

TEL: 1-714-885-6000 TEL: 1-905-8295033 Europe TEL: 44-20-8731-5555 TEL: 49-6196-77990 Germany France TEL: 33-1-30238688 Netherlands Belgium Italy Iberia Sweden Norway Denmark Finland Singapore Australia Japan China India TEL: 91-022-652-6696 Middle East (Dubai) TEL: 9714-8834234 India Turkey Egypt LatinAmerica Brasil

South Africa

D-Link Corp.

Russia

TEL: 31-10-282-1445 TEL: 32(0)2-517-7111 TEL: 39-2-2900-0676 TEL: 34-93-4090770 TEL: 46-(0)8564-61900 TEL: 47-22-309075 TEL: 45-43-969040 TEL: 358-9-2707-5080 TEL: 65-6774-6233 TEL: 61-2-8899-1800 TEL: 81-3-5434-9678 TEL: 86-10-8518-2533 TEL: 90-212-335-2553 TEL: 202-414-4295 TEL: 972-9-9715700 TEL: 56-2-232-3185 TEL: 55-11-55039320 TEL: 27(0)1266-52165 TEL: 7-095-744-0099 TEL: 886-2-2916-1600

FAX: 1-866-743-4905 FAX: 1-905-8295223 FAX: 44-20-8731-5511 FAX: 49-6196-7799300 FAX: 33-1-30238689 FAX: 31-10-282-1331 FAX: 32(0)2-517-6500 FAX: 39-2-2900-1723 FAX: 34-93-4910795 FAX: 46-(0)8564-61901 FAX: 47-22-309085 FAX: 45-43-424347 FAX: 358-9-2707-5081 FAX: 65-6774-6322 FAX: 61-2-8899-1868 FAX: 81-3-5434-9868 FAX: 86-10-8518-2250 FAX: 91-022-652-8914 FAX: 9714-8834394 FAX: 90-212-335-2500 FAX: 202-415-6704 FAX: 972-9-9715601 FAX: 56-2-232-0923 FAX: 55-11-55039321 FAX: 27(0)1266-52186 FAX: 7-095-744-0099#350 FAX: 886-2-2914-6299