



— DWL-2000AP+

## 802.11g High-Speed Wireless Access Point

The AirPlusXtremeG+™ DWL-2000AP+ is an enhanced high-performance 802.11g wireless Access Point for use indoors. This device supports wireless networking speeds of up to 54Mbps, while providing seamless interoperability with all existing 802.11b and 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 54Mbps Speed on 2.4GHz Frequency Band

Providing transmission speeds of up to 54Mbps, the DWL-2000AP+ compares favorably with 802.11b devices that offer 11Mbps speed, and with 802.11b+ equipment that gives 22Mbps transmission. 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.

### 8 Times Faster Than 802.11b Wireless LAN

Apart from the higher theoretical network data transfer speed of 54Mbps for 802.11g against the 11Mbps for 802.11b, the DWL-2000AP+ also delivers a much faster data transmission than other wireless LAN devices. In a typical working environment with multiple users accessing the network at the same time, the DWL-2000AP+ operates at 8 times the speed of the normal 802.11b wireless LAN equipment, which is made possible by means of a turbo engine embedded inside this AP.

### Compatible With 802.11b and 802.11b+

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 54Mbps when used with D-Link AirPlusXtremeG+™ and other 802.11g products. You may sacrifice some of this speed when you mix 802.11b and 802.11b+ with this device, but you will not lose the ability to communicate.

### 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 (AP), (2) a point to point wireless bridge, (3) a point to multi point wireless bridge, or (4) a wireless client. With these built-in 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.

### 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.

## Key Features

- 802.11g wireless LAN standard
- Up to 54Mbps data rate \*
- 8 times faster than 802.11b devices \*
- Compatible with 802.11b/b+ standards
- Dynamic data rate scaling at 1, 2, 5.5, 6, 9, 11, 12, 18, 22, 24, 36, 48, and 54Mbps
- Maximum reliability, throughput and connectivity with automatic data rate switching
- Stronger user-selectable 64 /128/256-bit WEP data encryption
- 4 operation modes: access point, point to point wireless bridge, point to multipoint wireless bridge, wireless client
- 10/100BASE-TX LAN port with auto MDI/MDIX
- DHCP client/server
- Web-based configuration
- Driver support for Windows 98 SE, 2000, XP, ME

\* When used with other AirPlusXtremeG+™ devices

# DWL-2000AP+

## Technical Specifications

## 2.4GHz Wireless LAN

### Hardware

#### 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 22Mbps
- 802.11b: up to 11Mbps (1/2/5.5/11Mbps)

#### Transmission Technology

DSSS

#### RF Frequency Range

2.4 to 2.4835GHz

#### Frequency Stability

Within +/- 25ppm

#### Operating Channels

- 1 to 11 channels (North America)
- 1 to 13 channels (Europe)

#### Data Modulation Type

DBPSK, DQPSK, CCK, PBCC and OFDM (BPSK/QPSK/16-QAM/ 64-QAM)

#### Antennas

- 1 external dipole antenna, 2dBi Gain
- 1 internal embedded antenna

#### Transmit Output Power

- 802.11b: 16dBm (typical)
- 802.11g: 14dBm (typical)

#### Receive Sensitivity (for 802.11b)

- (typically @PER < 8% packet size 1024 @ 25°C +/- 5 °C)
- 22Mbps (PBCC): -80dBm
  - 11Mbps (PBCC): -85dBm
  - 11Mbps (CCK): -84 dBm
  - 5.5Mbps (CCK): -87 dBm
  - 2Mbps (QPSK): -90 dBm
  - 1Mbps (BPSK): -92 dBm

#### Receive Sensitivity (for 802.11g)

- (typically @PER < 8% packet size 1024 @ 25 °C +/- 5 °C)
- 54Mbps (OFDM): -71 dBm
  - 48Mbps (OFDM): -72 dBm
  - 36Mbps (OFDM): -77 dBm
  - 24Mbps (OFDM): -80 dBm
  - 12Mbps (OFDM): -86 dBm
  - 9Mbps (OFDM): -87 dBm
  - 6Mbps (OFDM): -89 dBm

#### Operating Range \*

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

\* Environmental factors may adversely affect range

#### Ethernet Interface

10/100BASE-TX port with auto MDI/MDIX support

#### Diagnostic LEDs

- Power
- LAN
- WLAN

### Software Features

#### Operating Modes

- Standard Access Point
- AP Client
- Bridge: Point-to-Point, Point-to-Multi Point

#### Security

- WEP user-selectable 64/128/256-bit data encryption
- Password protect
- 802.1x security (MD5 and TLS)
- MAC filtering
- SSID broadcast disable
- Wi-Fi™ Protected Access \*

\* Feature supported in future software upgrade

#### Configuration & Management

- DHCP client/server
- Management Utility supports Windows 98SE, ME, 2000, XP
- Status log

#### Configuration Reset

Default reset button

### Physical & Environmental

#### Power Supply

- 5 VDC +/- 5%, 2.5A
- Through external power adapter

#### Dimensions

142 x 109 x 31 mm (device only)

#### Operating Temperature

0 ° to 55 °C

#### Storage Temperature

-20° to 65 °C

#### Humidity

5% to 95% non-condensing

#### Regulation Compliance

- US: FCC Part 15 Class B
- Europe: CE/R&TTE

#### Box Includes

- DWL-2000AP+ wireless LAN AP
- CD (includes AP Manager software, user's manual, Quick Installation Guide, Acrobat Reader 5.0)
- Quick Installation Guide (printed)
- 1.8 m Ethernet cable
- External power adapter
- Mounting kit
- Rubber feet



### Ordering Information

**DWL-2000AP+** 802.11g Wireless LAN Access Point

Please specify your model number as follows:

<b>DWL-2000AP+/ANA</b>	US power adapter, North America frequency
<b>DWL-2000AP+/EEU</b>	EU power adapter, EU frequency
<b>DWL-2000AP+/ENA</b>	EU power adapter, North America frequency
<b>DWL-2000AP+/BEU</b>	UK power adapter, EU frequency
<b>DWL-2000AP+/NEU</b>	Australia power adapter, EU frequency
<b>DWL-2000AP+/CN</b>	For use in China
<b>TDWL-2000AP+</b>	For use in Taiwan

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<b>Iberia</b>	TEL: 34-93-4090770	FAX: 34-93-4910795
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<b>Finland</b>	TEL: 358-9-2707-5080	FAX: 358-9-2707-5081
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<b>Brasil</b>	TEL: 55-11-3094-2910	FAX: 55-11-3094-2921
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Rev. 01 (Aug. 2003)