



**AirPlusXtremeG™**



— DWL-2100AP

## 802.11g High-Speed Wireless Access Point

The AirPlusXtremeG DWL-2100AP 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 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 \*

With transmission speeds of up to 108Mbps (Turbo mode) on the popular 2.4GHz public frequency, the DWL-2100AP is an ideal solution for bandwidth intensive WLAN applications. In a typical working environment with multiple users accessing the network at the same time, the DWL-2100AP can operate at 15 times the throughput of the normal 802.11b wireless LAN equipment.

### WDS (Wireless Distribution System) Support

To maximize total return on investment, the DWL-2100AP can be configured to operate as a wireless bridge/access point (WDS with AP), a wireless bridge (WDS), an AP client or a wireless repeater. In the WDS-only mode, the DWL-2100AP communicates only with wireless bridges, without allowing for wireless clients or stations to access them.

### Increased Network Flexibility and Efficiency

The DWL-2100AP supports 4 SSIDs, allowing you to separate applications based on security and performance requirements. You can enable encryption and authentication on one SSID to protect private applications and no security on another SSID to maximize open connectivity for public usage. Multiple SSIDs means you can mix and match the broadcasting of SSIDs. For public Internet access applications, you can broadcast the SSID to enable user radio cards to automatically find available access points. For private applications, you can disable SSID broadcast to prevent intruders from identifying your network. You can set the number of users that can associate via a particular SSID to control usage of particular applications. This can help provide a somewhat limited form of bandwidth control for particular applications.

### Cost Saving and Mobile Applications

By supporting multiple SSIDs, the DWL-2100AP allows you to logically divide your access point into several virtual access points all within a single hardware platform. Rather than having two separate WLANs, you can deploy one access point to support more than one application, such as public Internet access and internal network control to increase flexibility and keep costs down.

### WPA EAP Support

Enhanced security is provided with Wi-Fi Protected Access (WPA) 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. The DWL-2100AP supports WPA-EAP (Extensible Authentication Protocol) for authentication of 802.11 clients using server-side digital certificates. EAP creates a SSL/TLS tunnel between each client and the authentication server, which protects subsequent user authentication exchange.

### WPA PSK Support

This function brings a lot of convenience (when used in conjunction with other 802.11g products) for users who do not incorporate a RADIUS server in their networks. Utilizing the Pre Shared Key (PSK) mode of WPA, the DWL-2100AP 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-2100AP, each user will automatically receive a new key every time he connects, the inconvenience of manual WEP key input is eliminated.

### Wireless Station Partition

The DWL-2100AP provides WLAN STA partitioning, a function useful for deployments like at hot spots. With station-to-station partitioning enabled, security is enhanced, since wireless users cannot peek at each other, and the possibility for data thievery is reduced. You can, however, disable this function, so wireless users at an office can share hard disks and information, and peripherals such as wireless printers. In addition to WLAN STA partitioning, the DWL-2100AP also supports Ethernet to WLAN partition enable/disable. When disabled, information sent from the Ethernet side will not be passed to the wireless clients, although wireless users can still transmit data across Ethernet for Internet browsing, for example.

### Embedded DHCP Server

The DWL-2100AP includes an embedded DHCP server that once enabled will automatically assign IP addresses to wireless clients. This unique feature makes the DWL-2100AP 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 2.4GHz standard
- Up to 108Mbps (Turbo mode) high-speed transmission
- Real throughput 15X faster than 802.11b
- 10/100BASE-TX port for connection to Ethernet or DSL/cable modem
- Compatible with existing 802.11b wireless devices
- Built-in DHCP server for multiple user access
- 4 operation modes: WDS (Bridge) AP with WDS, AP client, Repeater
- 64/128/152-bit WEP data encryption
- WPA security with 802.1x RADIUS user authentication
- WLAN STA partition enable/disable
- Multiple SSIDs

\* 108Mbps Turbo mode when operating with other AirPlusXtremeG products.

# DWL-2100AP

## Technical Specifications

## 2.4GHz Wireless LAN

### Standards

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

### Device Configuration/Management

- Web-Based: Internet Explorer v.6 or later; Netscape Navigator v.7 or later; or other Java-enabled browsers
- SNMP v.1, v.3
- MIB-I, MIB-II
- Telnet
- Windows-based AP management program included
- DHCP Server and Client
- Factory reset button

### 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

### Operation Modes

- WDS (Bridge)
- AP with WDS
- AP Client
- Repeater

### Security

- 64/128/152-bit WEP data encryption
- WPAEAP, WPA PSK
- WLAN STA partitioning
- 4 SSIDs

### Media Access Control

CSMA/CA with ACK

### Wireless Frequency Range

- 802.11b: 2400 to 2483.5MHz ISM band
- 802.11g: 2400 to 2483.5MHz ISM band

### RF Modulation Schemes

- 802.11b: DQPSK, DBPSK and CCK
- 802.11g: BPSK, QPSK, 16QAM, 64QAM, OFDM

### Receive Sensitivity (802.11b)

- @ 8% PER (packet error rate)
- 11 Mbps: -83 dBm
- 2 Mbps: -89 dBm

### Receive Sensitivity (802.11g)

- Frame: 1000byte PDUs, @ 10% PER (packet error rate)
- 54 Mbps: -66 dBm
- 48 Mbps: -71 dBm
- 36 Mbps: -76 dBm
- 24 Mbps: -80 dBm
- 18 Mbps: -83 dBm
- 12 Mbps: -85 dBm
- 9 Mbps: -86 dBm
- 6 Mbps: -87 dBm

### Transmit Output Power (802.11b)

18 dBm @ 11Mbps, 5.5Mbps, 2Mbps, 1Mbps

### Transmit Output Power (802.11g)

- 14 to 15 dBm @ 54Mbps, 108Mbps,
- 14 to 16 dBm @ 48Mbps
- 16 to 18 dBm @ 36Mbps, 24Mbps, 18Mbps, 12Mbps, 9Mbps, 6Mbps

### Antenna

- 2dBi Gain detachable dipole antenna with reverse SMA connector
- 2dBi Gain internal antenna

### Wireless Operating Range \*

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

\* Environmental factors may adversely affect operation range.

### LEDs

- Power
- LAN
- WLAN

### Physical & Environmental

#### Power Input

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

#### Power Consumption

5 watts (max.)

#### Dimensions

142 (L) x 109 (W) x 31 (H) mm

#### Operating Temperature

0° to 55 °C

#### Storage Temperature

-20° to 75 °C

#### Humidity

95% maximum (non-condensing)

#### EMI Certification

- FCC Class B
- CE Class B



## Ordering Information

DWL-2100AP

802.11g Access Point

Please specify your order as follows:

DWL-2100AP/ANA	US power adapter, North America frequency
DWL-2100AP/EEU	EU power adapter, EU frequency
DWL-2100AP/ENA	EU power adapter, North America frequency
DWL-2100AP/BEU	UK power adapter, EU frequency
DWL-2100AP/NEU	Australia power adapter, EU frequency
NDWL-2100AP	China power adapter, China frequency
TDWL-2000AP	For Taiwan
CDWL-2100AP	For Canada
DWL-2100AP/IS	For Israel

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TEL: 1-800-326-1688

TEL: 1-905-8295033

TEL: 44-20-8731-5555

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TEL: 33-1-30238688

TEL: 31-10-282-1445

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TEL: 30-210-9914 512

TEL: 32-(0)2-517-7111

TEL: 48-(0)-22-583-92-75

TEL: 36-(0)-1-461-30-00

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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: 39-02-2900-1723

FAX: 46-(0)8564-61901

FAX: 45-43-424347

FAX: 47-22-309580

FAX: 358-9-2707-5081

FAX: 34-93-4910795

FAX: 41(0)-1-832-11-01

FAX: 30-210-9916902

FAX: 32-(0)2-517-6500

FAX: 48-(0)-22-583-92-76

FAX: 36-(0)-1-461-30-09

FAX: 65-6774-6322

FAX: 61-2-8899-1868

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FAX: 56-2-232-0923

FAX: 55-11-218-59322

FAX: 27-12-665-2186

FAX: 7-095-744-0099 #350

FAX: 86-10-58635799

FAX: 886-2-2910-1515

FAX: 886-2-2914-6299