





— DWL-2000AP+

802.11g High-Speed Wireless Access Point

The AirPlusXtremeG+ $^{\text{TM}}$ DWL-2000AP+ is an enhanced high-performance 802.11g wireless Access Point for use indoors. This device supports wireless networking speeds of up to 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.

Real Throughput 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+ TM 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 *
- Real throughput 8x 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
 - Management utility supports Windows 98 SE, 2000, XP, ME
 - * When used with other 802.11g devices
 - ** When used with other AirPlusXtremeG+TM devices

DWL-2000AP+

Technical Specifications

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

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

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

2.4GHz Wireless LAN

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:

DWL-2000AP+/ANA

DWL-2000AP+/EEU DWL-2000AP+/ENA

DWL-2000AP+/BEU DWL-2000AP+/NEU DWL-2000AP+/CN

TDWL-2000AP+

US power adapter, North America

frequency

EU power adapter, EU frequency EU power adapter, North America frequency UK power adapter, EU frequency

Australia power adapter, EU frequency For use in China For use in Taiwan



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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: 91-22-652-6696 TEL: 9714-8834234 TEL: 90-212-335-2553

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^{*} Feature supported in future software upgrade