



802.11a/g Tri-Mode Dualband Wireless Access Point

The D-Link AirPremier AG DWL-7100AP is a tri-mode, dualband wireless Access Point that provides the most expanded user bandwidth available in an AP. Hundreds of wireless clients can connect to this AP using any one of its 19 non-overlapping channels to transfer data at speeds never before achievable in a wireless device.

Dualband Operation

The DWL-7100AP operates seamlessly and simultaneously in both the 2.4GHz and 5GHz frequency spectrums supporting the 802.11b and the newer, faster 802.11a and 802.11g wireless standards. For offices, schools or public hotspots that already use 802.11b devices, the DWL-7100AP is a great way to expand an existing network. It enables more users to communicate with one another, access data and the Internet. Now, you can have an AP that will compliment your existing network and protect the investment you made when you provided the convenience of wireless networking.

Fast, Unobstructed Data Transfer

The DWL-7100AP offers transfer rates up to 108Mbps Turbo mode in the 2.4GHz band, large data packets travel from the router to a remote desktop or roaming laptop PC at up to five times the speed of previous wireless devices. Everyone can work faster and more efficiently or watch a streaming video smoothly. The additional (802.11a) 5GHz band also offers a way to quickly transfer data without the interference produced by other devices operating in the 2.4GHz frequency.

Network Segmentation by Frequency Channels

Network administrators can partition the usage of the dualband DWL-7100AP by segmenting the users on the wireless network by frequency band. Users who require special networking privileges access to sensitive information, specific departments or video conferencing may use just the 802.11a channels; while other employees may just use the 802.11b and 802.11g channels. This type of user segmentation optimizes the AP's performance and delivers the best network experience to each set of users.

Enhanced Network Security

The DWL-7100AP is ideal for network administrators who require additional network security features. All of the AP's settings are easily accessible in the web-based software user interface that features a step-by-step Setup Wizard to get your AP up and running in just a matter of minutes. The DWL-7100AP incorporates the 802.1x standard for wireless user authentication and WPA (Wi-Fi™ Protected Access) which dynamically encrypts data as it's being sent.

Key Features

- 802.11a/g industry standard
- Dual 5GHz and 2.4GHz frequency bands
- Up to 108Mbps Turbo mode network data transfer rate on 2,4GHz band
- Compatible with existing 802.11b wireless devices
- Strong 64/128/152-bit WEP data encryption
- WPA security

- Enhanced security: AES (*), 802.1x authentication, RADIUS client, and Cipher negotiation
- DFS/TPC support for European operation
- 10/100Mbps Fast Ethernet port to bridge wireless LAN with Ethernet-based network & servers
- Web-based configuration/management

*AES feature available as a driver/firmware upgrade in the near future. Turbo mode operation on 5GHz is not allowed in the EC(European Community).

DWL-7100AP

Technical Specifications

Standards

- IEEE 802.11g IEEE 802.11b
- IEEE 802.11a
- IEEE 802.3
- IEEE 802.3u

Media Access Control

CSMA/CA with ACK

Ethernet Port

10/100BASE-TX Ethernet port

Wireless Frequency Range *

- 802.11b/g: 2.4 to 2.4835GHz 802.11a: 5.150 to 5.8750GHz
- Software configurable as allowable frequency will vary among different countries in the

Wireless Data Rates

(With automatic fallback)

54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 11Mbps, 9Mbps, 6Mbps, 5.5Mbps, 2Mbps, 1Mbps

Modulation Technology

- 802.11a/g: BPSK, QPSK, 16QAM, 64QAM, OFDM 802.11b: DQPSK, DBPSK, DSSS, CCK

Security

- 64/128/152-bit WEP
- 802.1x
- WPA: Wi-Fi Protected Access (64/128/152-bit WEP with TKIP, MIC, IV
- Expansion, Shared Key Authentication)
- Advanced Encryption Standard (AES) support

Antennas

Dual non-detachable dipole external antennas:

- For 2.4GHz: 2dBi Gain antenna
 For 5GHz: 2dBi Gain antenna

Dual PIFA internal antennas:

- For 2.4GHz: 2dBi Gain antenna
- For 5GHz: 2dBi Gain antenna

Wireless Operating Range

- Indoors: up to 100 m (328 feet) - Outdoors: up to 400 m (1,312 feet)
- * Environmental conditions may adversely affect wireless signal range

Receive Sensitivity

- 802.11a (1000-byte PDUs @ 10% PER):
- -87dBm for 6Mbps -86dBm for 9Mbps
- -85dBm for 12Mbps
- -83dBm for 18Mbps
- -80dBm for 24Mbps
- -76dBm for 36Mbps -71dBm for 48Mbps
- -66dBm for 54Mbps
- -73dBm for 108Mbps (Turbo Mode)
- 802.11b (@ 8% PER): -83dBm for 11Mbps
- -89dBm for 2Mbps
- 802.11g (1000-byte PDUs @ 10% PER):
- -87dBm for 6Mbps -86dBm for 9Mbps
- -85dBm for 12Mbps
- -83dBm for 18Mbps
- -80dBm for 24Mbps -76dBm for 36Mbps
- -71dBm for 48Mbps
- -66dBm for 54Mbps

Transmit Output Power

- 802.11a:
- +14 to 15dBm @ 54Mbps
- +14 to 16dBm @t 48Mbps
- +16 to 18dBm @t 36Mbps, 24Mbps, 18Mbps, 12Mbps, 9Mbps, 6Mbps
- 802.11b:
- +18dBm @ 11Mbps, 5.5Mbps, 2Mbps, 1Mbps
- 802.11g: +14 to 15dBm @ 54Mbps, 108Mbps
- +14 to 16dBm @ 48Mbps
- +16 to 18dBm @ 36Mbps, 24Mbps, 18Mbps, 12Mbps, 9Mbps, 6Mbps

Diagnostic LEDs

- Power
- 10Mbps (Link/Act)
- 100Mbps (Link/Act) - WLAN 802.11b/g
- WLAN 802.11a

5GHz & 2.4GHz Wireless LAN

Device Management

- Web-based: Internet Explorer v6 or later; Netscape Navigator v6 or later; or other Javaenabled browsers
- DHCP client
- Factory reset button

Physical & Environmental

Power Input DC 5V, 2A

Through external power adapter

192 mm (W) x 118 mm (D) x 31 mm (H) (device only)

Weight

280 grams (device only)

Operating Temperature

0° to 55 °C (32° to 149 °F)

Storage Temperature

-20° to 75 °C (4° to 167 °F)

Humidity

95% maximum (non-condensing)

Emission (EMI)

- FCC Class B
- CE Class B
- C-Tick

Safety

CSA International







Ordering Information

DWL-7100AP 802.11a/g Wireless LAN Access Point

Please specify your model number as follows:

DWL-7100AP/BEU For UK, Ireland

For Denmark, Germany, Iceland, Finland, Netherlands, Norway, Sweden, Poland, Slovenia, Luxembourg, DWL-7100AP/EEU

South Africa

For Australia

DWL-7100AP/EFR For France DWL-7100AP/ALA DWL-7100AP/ELA For Latin America (with US standard power adapter) For Latin America (with EU standard power adapter) DWL-7100AP/NAU

BDWL-7100AP For USA (US packaging)

NDWL-7100AP For China DWL-7100AP/ESG For Singapore TDWL-7100AP For Taiwan



TEL: 1-714-885-6000 Canada TEL: 1-905-8295033 TEL: 44-20-8731-5555 Europe Germany France Benelux Italy Iberia Sweden Norway Denmark Finland Singapore Australia China India Middle East (Dubai) Turkey Egypt Israel LatinAmerica Brasil South Africa Russia

D-Link Corp.

TEL: 49-6196-77990 TEL: 33-1-30238688 TEL: 31-10-282-1445 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: 86-10-8518-2533 TEL: 91-022-652-6696 TEL: 9714-8834234 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: 886-2-2910-2626 TEL: 886-2-2916-1600

FAX: 49-6196-7799300 FAX: 33-1-30238689 FAX: 31-10-282-1331 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: 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: 270)1266-52186 FAX: 7-095-744-0099#350 FAX: 886-2-2910-1515 FAX: 886-2-2914-6299

FAX: 1-866-743-4905

FAX: 1-905-8295223

FAX: 44-20-8731-5511



Rev. 01 (Mar. 2004)