D-Link®
Building Networks for People

Creates Multimode Wireless Networks

DWL-7100AP

- **Now Up to 108Mbps[1] with D-Link 108AG Technology**
- **Assign Users to 2.4GHz or 5GHz Frequency Bands**
- **Enhanced Security Features with WPA and 802.1x**
- **Multimode Operation for Versatility in Setup**
- **Supports Wireless Distribution System for Seamless Roaming**
- **Advanced Network Management Options**

AG
802.11a/802.11g
108Mbps

WPA SECURITY

FREE 24/7 TECH SUPPORT (USA ONLY)[1]

*Air*Premier™ AG
11a/11g Dualband Wireless
108Mbps[1] Access Point

D-Link, the industry pioneer in wireless networking, introduces a performance breakthrough in wireless connectivity – The D-Link *Air*Premier AG™ DWL-7100AP Access Point, designed for multimode network deployments capable of up to delivering 15x faster data rates than standard 802.11b in both 802.11a and 802.11g bands.

The DWL-7100AP is an ideal solution for creating a wireless backbone infrastructure or for extending an existing wireless network. For advanced configuration, network administrators can deploy multimode operation such as using the DWL-7100AP as a 5GHz 802.11a wireless bridge while simultaneously providing Access Point functionality for 2.4GHz 802.11b/g networks. The DWL-7100AP can operate as an Access Point, Point-to-Point Bridge, Point-to-Multipoint Bridge, and Repeater. For compatibility with other D-Link *Air*Premier AG hardware, the DWL-7100AP uses Wireless Distribution System (WDS) technology when running in Repeater mode.

The DWL-7100AP provides maximum wireless security by supporting WPA (Wi-Fi Protected Access), 802.1x, and three levels of WEP Encryption (64/128/152-bit). Other security features include MAC Address Filtering, Wireless LAN segmentation, Disable SSID Broadcast, and support for Advanced Encryption Standard (AES) Encryption.

The DWL-7100AP delivers extremely fast wireless performance with maximum wireless signal rates reaching up to 108Mbps[1] when set in Turbo mode for both 802.11g and 802.11a networks, while still remaining backwards compatible to 802.11b. With the ability to deliver blazing transfer speeds, network administrators have ample bandwidth to distribute amongst multiple workgroups and avoid network bottlenecks.

Network administrators can manage the DWL-7100AP settings via its Web-based configuration utility or though Telnet. For advanced network management, administrators can use D-Link's AP Manager or D-View SNMP management module to configure multiple access points from a single location.

With versatile dualband operation modes, solid security features, and extremely fast data transfer speeds, the D-Link *Air*Premier AG DWL-7100AP Wireless Access Point offers a high return on investment and provides SMB and Enterprise network administrators an ideal solution for establishing a new wireless network or for extending the range of an existing one.

[1] Maximum wireless signal rate derived from IEEE Standard 802.11a/11b/11g specifications. Actual data throughput will vary. Network conditions and environmental factors lower actual data throughput rate.

Air Premier™ AG

11a/11g Dualband Wireless
108Mbps[1] Access Point

DWL-7100AP

SPECIFICATIONS

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

Device Management
- Web-Based – Internet Explorer v6 or later; Netscape Navigator v6 or later; or other Java-enabled browsers.
- Telnet
- AP Manager
- SNMP v.3

Security
- 64/128/152-bit WEP
- WPA – Wi-Fi Protected Access (WPA – TKIP/AES PSK)
- 802.1x (EAP-MD5/TLS/TTLS/PEAP)
- MAC Address Access Control List

Wireless Frequency Range
- 2.4GHz to 2.4835GHz
- 5.15GHz to 5.35GHz and 5.725GHz to 5.825GHz

Radio and Modulation Type[1]
For 802.11b:
DSSS:
- DBPSK @ 1Mbps
- DQPSK @ 2Mbps
- CCK @ 5.5 and 11Mbps
For 802.11a/g:
OFDM:
- BPSK @ 6 and 9Mbps
- QPSK @ 12 and 18Mbps
- 16QAM @ 24 and 36Mbps
- 64QAM @ 48, 54 and 108Mbps
DSSS:
- DBPSK @ 1Mbps
- DQPSK @ 2Mbps
- CCK @ 5.5 and 11Mbps

Receiver Sensitivity

For 802.11a:	For 802.11g:
• 6Mbps: -87dBm	• 1Mbps: -95dBm
• 9Mbps: -86dBm	• 2Mbps: -91dBm
• 11Mbps: -88dBm	• 5.5Mbps: -89dBm
• 12Mbps: -85dBm	• 6Mbps: -87dBm
• 18Mbps: -83dBm	• 9Mbps: -85dBm
• 24Mbps: -80dBm	• 11Mbps: -88dBm
• 36Mbps: -76dBm	• 12Mbps: -80dBm
• 48Mbps: -71dBm	• 18Mbps: -80dBm
• 54Mbps: -71dBm	• 24Mbps: -77dBm
• 108Mbps: -73dBm	• 36Mbps: -73dBm
For 802.11b:	• 48Mbps: -72dBm
• 1Mbps: -92dBm	• 54Mbps: -72dBm
• 2Mbps: -89dBm	• 108Mbps: -73dBm
• 5.5Mbps: -88dBm	
• 11Mbps: -83dBm	

Transmit Output Power

For 802.11a:	
• 63mW (18dBm)	• 23mW (13dBm)
• 40mW (16dBm)	• 10mW (10dBm)
• 32mW (15dBm)	• 6mW (7dBm)
• 6mW (7dBm)	• 1mW (0dBm)
• 1mW (0dBm)	For 802.11g:
For 802.11b:	• 63mW (18dBm)
• 63mW (18dBm)	• 40mW (16dBm)
• 40mW (16dBm)	• 32mW (15dBm)
• 32mW (15dBm)	• 6mW (7dBm)
	• 1mW (0dBm)

Wireless Operating Range[2]
802.11g (Full Power with 2.0dBi gain diversity dipole antenna)
Indoor:
- 98ft (30m) @ 54Mbps
- 105ft (32m) @ 48Mbps
- 121ft (37m) @ 36Mbps
- 148ft (45m) @ 24Mbps
- 197ft (60m) @ 18Mbps
- 223ft (68m) @ 12Mbps
- 253ft (77m) @ 9Mbps
- 2951ft (90m) @ 6Mbps
Outdoor:
- 312ft (95m) @ 54Mbps
- 951ft (290m) @ 18Mbps
- 1,378ft (420m) @ 6Mbps

Antenna Type
- Dual Non-Detachable Dipole Antennas

LEDs
- Power
- 10M
- 100M
- 802.11a
- 802.11b/g

Operating Voltage
- 5VDC +/- 10%

Temperature
- Operating: 32ºF to 104ºF (0ºC to 40ºC)
- Storing: -4ºF to 149ºF (-20ºC to 65ºC)

Humidity
- Operating: 10%~90% (non-condensing)
- Storing: 5%~95% (non-condensing)

Certifications
- FCC Part 15
- UL
- CSA

Dimensions
- L = 6.89 inches (175mm)
- W = 4.13 inches (105mm)
- H = 0.79 inches (20mm)

Weight
- 0.44 lbs (200g)

Warranty
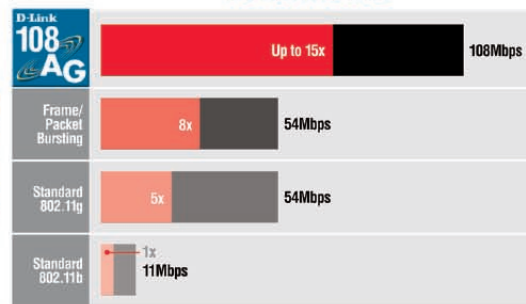- 3 Year

[1] Maximum wireless signal rate derived from IEEE Standard 802.11a/11b/11g specifications. Actual data throughput will vary. Network conditions and environmental factors lower actual data throughput rate.
[2] Environmental conditions may adversely affect wireless signal range.

Performance [1]

- **Actual Throughput**
- **Data Rate**

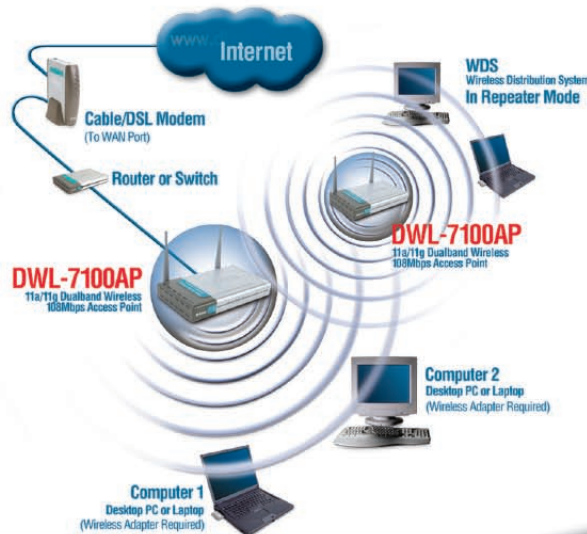|		
108AG	Up to 15x	108Mbps
Frame/Packet Bursting	8x	54Mbps
Standard 802.11g	5x	54Mbps
Standard 802.11b	1x	11Mbps

D-Link 108AG performance results are based on testing with other D-Link 108AG enabled devices utilizing Packet Bursting, FastFrames, Turbo Mode and Compression techniques. Data already compressed may not benefit from the D-Link 108AG compression technique.

Four Operational Modes

Operation Mode	Function
Access Point (AP)	Create a Wireless LAN
AP - to - AP Bridging	Wirelessly Connect 2 Networks
Point - to - Multipoint Bridging	Wirelessly Connect Multi-Networks
Wireless Repeater (WDS)*	Wireless Repeats 11a/11g AP Gateways (Atheros Based)

*WDS Includes Bridge/Repeating

WDS Wireless Distribution System In Repeater Mode

Cable/DSL Modem (To WAN Port)

Router or Switch

DWL-7100AP 11a/11g Dualband Wireless 108Mbps Access Point

DWL-7100AP 11a/11g Dualband Wireless 108Mbps Access Point

Computer 2 Desktop PC or Laptop (Wireless Adapter Required)

Computer 1 Desktop PC or Laptop (Wireless Adapter Required)

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