



**AirPremier AG™**

**Up to 15X Faster**  
**Dualband**

**WiFi™**  
The Standard for  
Wireless Fidelity.

**Total 802.11  
Super  
AG™  
ATHEROS**

**108  
Mbps**

— DWL-AG530

## 802.11a/g Tri-Mode Dualband Wireless PCI Card

The D-Link AirPremierAG DWL-AG530 wireless PCI card is a high-performance, versatile and necessary desktop PC networking solution for companies that need to quickly expand or reconfigure their wireless networks as their organization grows. This tri-mode, dualband network card inserts into your desktop PC to provide you a versatile way to wirelessly connect to any one of three available wireless networks -- 802.11b and the newer, faster 802.11g and 802.11a that operate in two discrete, non-interfering frequency bands, 2.4GHz and 5GHz.

### Easiest Way to Expand

If you're a network administrator, the versatile 802.11a/b/g-compatible DWL-AG530 card gives you an immediate way to expand your existing 802.11b network and protect your overall wireless network investment. By installing DWL-AG530 network cards in desktops throughout your organization, your employees can access wireless Access Points and routers from their desktop PCs. And as your company expands or reorganizes, you won't have to keep pulling and plugging Ethernet cables because no matter where the workstation is relocated, it's still connected to the network.

### End-to-End Wireless Solution

When you add an 802.11a/b/g access point (D-Link AirPremierAG DWL-7100AP) or router (D-Link AirPremierAG DI-784) to your wireless network, you will have an end-to-end wireless solution capable of handling up to 15 times the user load of your current 802.11b network.

### 108Mbps SuperG High Speed

In addition to its compatibility with earlier 802.11b networks, the DWL-AG530 offers the robust speed, up to 108Mbps (Turbo mode), of the newer 802.11g standard, so everyone can work faster and more efficiently. In addition to the 2.4GHz frequency band operated by 802.11b and g, the 54Mbps 5GHz band used by 802.11a also offers a way to quickly transfer data in a frequency range that does not experience interference or interruptions from cordless phones, microwave ovens and other devices utilizing the 2.4GHz frequency.

### WPA Enhanced Security

Wi-Fi™ Protected Access in the DWL-AG530 provides the necessary security protocols and tools, so employees can communicate with colleagues confidentially, access sensitive company information or send data that is dynamically encrypted as it's sent. Wi-Fi™ Protected Access lets you authorize and identify users based on a secret key that changes automatically at a regular interval. Used in conjunction with a RADIUS server, WPA uses 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.

### 802.1x Authentication

The DWL-AG530 supports 802.1x authentication for protection against network intrusion. Used in conjunction with a RADIUS server, this function provides a means to verify the identity of the client before an access to the network is granted.

### Pre-Shared Key

This function brings a lot of convenience (when used in conjunction with other 802.11g products) for users that do not incorporate a RADIUS server in their networks. Utilizing the Pre Shared Key mode of WPA, the DWL-AG530 will obtain a new security key every time it connects to the 802.11g network. You only need to input your encryption information once in the configuration menu. With the DWL-AG530, you will automatically receive a new key every time you connect, doing away with the inconvenience of manual WEP key input.

### Key Features

- 802.11a/g industry standard
- Dual 5GHz and 2.4GHz frequency bands
- Up to 108Mbps (Turbo mode) network data transfer rate on 11g frequency band, 15 times faster than 802.11b
- Strong 64/128/152-bit WEP data encryption security
- Compatible with existing 802.11b wireless devices
- Advanced security with WPA, 802.1x authentication, TKIP and Pre-Shared Key function support
- Powerful integrated antenna provides 100-meter indoor, 400-meter outdoor operation range \*
- Runs Windows 98 SE, 2000, ME, XP

\* Environmental factors may adversely affect range

# DWL-AG530

## Technical Specifications

## 5GHz & 2.4GHz Wireless LAN

### Standards

- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.11g

### Bus Type

- PCI 2.2
- PCI 32-bit interface

### Media Access Control

CSMA/CA with ACK

### Data Rates

(With automatic fallback)  
54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 11Mbps,  
9Mbps, 6Mbps, 5.5Mbps, 2Mbps, 1Mbps

### Modulation Technology

- Orthogonal Frequency Division Multiplexing (OFDM)
- Complementary Code Keying (CCK)
- Direct Sequence Spread Spectrum (DSSS)

### Frequency Range \*

- 2.4GHz to 2.4835GHz
- 5.15GHz to 5.250GHz
- 5.725GHz to 5.850GHz

\* Software configurable as allowable frequency will vary from country to country in the European region.

### Transmit Output Power

- 802.11a:
  - +10 to 14dBm for 54Mbps
  - +11 to 15dBm for 48Mbps
  - +13 to 15dBm for 36Mbps
  - +17 to 18dBm for 24, 18, 12, 9 and 6Mbps
- 802.11b:
  - +18dBm for 11, 5.5, 2 and 1Mbps
- 802.11g:
  - +10 to 14dBm for 54Mbps
  - +11 to 15dBm for 48Mbps
  - +13 to 15dBm for 36Mbps
  - +17 to 18dBm for 24, 18, 12, 9 and 6Mbps

### Receive Sensitivity

- 802.11a (@ 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
- 802.11b (@ 8% PER):
  - 84dBm for 11Mbps
  - 90dBm for 2Mbps
- 802.11g (@ 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

### Antenna

2dBi to 4dBi Gain omni-directional dipole antenna

### Operation Range

- Indoors: up to 100 meters (328 feet)\*
- Outdoors: up to 400 meters (1,312 feet)\*

\* Environmental factors may adversely affect range

### Security

- 64/128/152-bit WEP data encryption
- 802.1x authentication
- WPA (Wi-Fi Protected Access): 802.1x, Pre Share Key, WEP, TKIP, AES

### Physical & Environmental

#### LED Indicators

- Power
- Network

#### Operating Voltage

5 VDC +/- 10%

#### Power Consumption

- Transmit mode: 1650mW
- Receive mode: 1250mW
- Sleep mode: 40mW

#### Dimensions

133 (L) x 120 (W) x 22 (H) mm

#### Weight

63grams

#### Operating Temperature

0° to 45°C

#### Storage Temperature

-10° to 60 °C

#### Humidity

95% maximum (non-condensing)

#### EMI Certification

- FCC Class B
- CE Class B

#### O.S. Support

Windows 98 SE, ME, 2000, XP



## Ordering Information

**DWL-AG530** 802.11a/g Wireless LAN PCI Card

Please specify your order as follows:

**DWL-AG530/AU** For Australia  
**DWL-AG530/SG** For Singapore  
**DWL-AG530/LA** For Latin America  
**DWL-AG530/FR** For France  
**DWL-AG530/EU** For Europe  
**TDWL-AG530** For Taiwan

# D-Link®

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<b>Europe</b>	TEL: 44-20-8731-5555	FAX: 44-20-8731-5511
<b>Germany</b>	TEL: 49-6196-77990	FAX: 49-6196-7799300
<b>France</b>	TEL: 33-1-30238688	FAX: 33-1-30238689
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<b>Norway</b>	TEL: 47-22-309075	FAX: 47-22-309085
<b>Denmark</b>	TEL: 45-43-969040	FAX: 45-43-424347
<b>Finland</b>	TEL: 358-9-2707-5080	FAX: 358-9-2707-5081
<b>Singapore</b>	TEL: 65-6774-6233	FAX: 65-6774-6322
<b>Australia</b>	TEL: 61-2-8899-1800	FAX: 61-2-8899-1868
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<b>India</b>	TEL: 91-022-652-6696	FAX: 91-022-652-8914
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<b>Turkey</b>	TEL: 90-212-335-2553	FAX: 90-212-335-2500
<b>Egypt</b>	TEL: 202-414-4295	FAX: 202-415-6704
<b>Israel</b>	TEL: 972-9-9715700	FAX: 972-9-9715601
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<b>Brasil</b>	TEL: 55-11-55039320	FAX: 55-11-55039321
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<b>Russia</b>	TEL: 7-095-744-0099	FAX: 7-095-744-0099#350
<b>Taiwan</b>	TEL: 886-2-2910-2626	FAX: 886-2-2910-1515
<b>D-Link Corp.</b>	TEL: 886-2-2916-1600	FAX: 886-2-2914-6299



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