D-Link®
Building Networks for People

DWL-7700AP

*Air*Premier®
Wireless AG Outdoor AP/Bridge

Robust Network Options
- Simultaneous 802.11a/g Dualband Wireless Connectivity
- Operates Concurrently in Both 2.4GHz and 5GHz
- Detachable Dualband Antennas

Outdoor-Friendly Housing
- Die-Cast Watertight Housing
- Built-in Heater Monitored via Temperature Sensor
- Supports Integrated 802.3af PoE

Multiple Operation Mode Support
- Access Point
- Point-to-Point Bridge
- Point-to-MultiPoint Bridge
- Wireless Client

Maximum Security Features
- WPA-Enterprise
- WPA-Personal
- 64/128/152-bit WEP Encryption
- MAC Address Filtering
- AES

Advanced Options
- Load Balancing
- Redundancy

Easy Management
- Web Browser
- Telnet
- SNMP v3
- AP Manager

D-Link, the industry pioneer in wireless networking, introduces a reliable high-performance wireless outdoor solution—The D-Link *Air*Premier DWL-7700AP Wireless AG Outdoor AP/Bridge. The dualband DWL-7700AP is capable of delivering maximum wireless signal rates of up to 54Mbps[1] in both 802.11a and 802.11g wireless bands in any outdoor environment – at the same time.

This Outdoor Wireless AP/Bridge is an ideal addition to businesses seeking to extend dualband wireless signal coverage over outdoor real estate. Hotspot operators can use this rugged outdoor access point to support and deliver 802.11a and 802.11g wireless connectivity to their customers—whether they are out on the patio or deck, by the swimming pool, in the terrace, or on the golf course. By offering concurrent dualband connectivity, total aggregate bandwidth available on the network increases.

Another ideal application includes bridging together networks which are located in separate buildings. And with the DWL-7700AP's dualband capability, network administrators can bridge the networks on the 802.11a band while simultaneously providing 802.11g coverage for public wireless access.

Enclosed in a die-cast watertight housing and equipped with a built-in heater monitored by a temperature sensor, the DWL-7700AP is designed to endure almost any outdoor condition. For advanced installations, this Access Point has an integrated 802.3af Power over Ethernet (PoE) port that allows you to install the device in areas where power outlets are not readily available. Both antennas are also detachable and can be replaced with higher gain ones for greater wireless signal coverage.

In addition to convenient installation, the DWL-7700AP can be configured to operate in any of four modes: Access Point (AP), Point-to-Point (PtP) bridge, Point-to-MultiPoint (PtMP) Bridge, or Wireless Client.

When used in any operation mode, the DWL-7700AP provides maximum security by supporting standard WEP Encryption (64/128/152-bit), WPA-Personal, and WPA-Enterprise which includes 802.1x user authentication. MAC Address Filtering, Wireless LAN segmentation, Disable SSID Broadcast, and AES encryption support are some other highlights of this Wireless AP/Bridge's security features.

Network administrators can manage all the DWL-7700AP's settings via its Web-based configuration utility or with Telnet. For advanced network management, administrators can use D-Link's AP Manager or the D-View SNMP v3 management module to configure multiple access points from a single location.

With its dualband functionality, integrated PoE support, extensive manageability, versatile operation modes, and solid security enhancements all in one box, the new D-Link *Air*Premier DWL-7700AP Wireless AG Outdoor Access Point provides everything network administrators need to extend a robust wireless network to the outdoors.

Product Data Sheet

Air Premier®

Wireless AG Outdoor AP/Bridge

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 v7 or later; or other Java-enabled browsers.
• Telnet
• AP Manager
• SNMP v.3

Data Rate[1]
For 802.11a/g:
• 54, 48, 36, 24, 18, 12, 9 and 6Mbps
For 802.11b:
• 11, 5.5, 2, and1Mbps

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

Wireless Operating Range[2]
802.11a/g (Full Power with 5dBi gain diversity dualband dipole antenna)
Indoors:
• 98ft (30m) @ 54Mbps
• 112ft (34m) @ 48Mbps
• 128ft (39m) @ 36Mbps
• 154ft (47m) @ 24Mbps
• 184ft (56m) @ 18Mbps
• 217ft (66m) @ 12Mbps
• 259ft (79m) @ 9Mbps
• 325ft (99m) @ 6Mbps
Outdoors:
• 367ft (112m) @ 54Mbps
• 820ft (250m) @ 18Mbps
• 1640ft (500m) @ 6Mbps

Operating Voltage
• 48VDC +/- 10% for PoE

Radio and Modulation Type
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 and 54Mbps
DSSS:
• DBPSK @ 1Mbps
• DQPSK @ 2Mbps
• CCK @ 5.5 and 11Mbps

Transmit Output Power
For 802.11a:
• 100mW (20dBm)
• 50mW (17dBm)
• 30mW (15dBm)
• 20mW (13dBm)
• 10mW (10dBm)
• 5mW (7dBm)
• 1mW (0dBm)
For 802.11b:
• 200mW (23dBm)
• 63mW (18dBm)
• 30mW (15dBm)
• 20mW (13dBm)
• 10mW (10dBm)
• 5mW (7dBm)
• 1mW (0dBm)
For 802.11g:
• 200mW (23dBm)
• 63mW (18dBm)
• 30mW (15dBm)
• 20mW (13dBm)
• 10mW (10dBm)
• 5mW (7dBm)
• 1mW (0dBm)

Receiver Sensitivity
For 802.11a:
• 6Mbps: -85dBm
• 9Mbps: -84dBm
• 12Mbps: -82dBm
• 18Mbps: -80dBm
• 24Mbps: -77dBm
• 36Mbps: -73dBm
• 48Mbps: -69dBm
• 54Mbps: -68dBm
For 802.11b:
• 1Mbps: -94dBm
• 2Mbps: -91dBm
• 5.5Mbps: -89dBm
• 11Mbps: -85dBm
For 802.11g:
• 1Mbps: -95dBm
• 2Mbps: -91dBm
• 5.5Mbps: -89dBm
• 6Mbps: -90dBm
• 9Mbps: -84dBm
• 11Mbps: -88dBm
• 12Mbps: -82dBm
• 18Mbps: -80dBm
• 24Mbps: -77dBm
• 36Mbps: -73dBm
• 48Mbps: -72dBm
• 54Mbps: -72dBm

Current Consumption
• Max.7W without PoE (without heater)
• Max.8.5W with PoE (without heater)
• Max.27W without PoE (with heater)
• Max.28.5W without PoE (with heater)

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

Temperature
• Operating: -40ºF to 140ºF (-40ºC to 60ºC)
• Storing: -40ºF to 149ºF (-40ºC to 65ºC)

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

Certifications
• FCC Part 15
• UL
• CSA

Dimensions
• L = 10.93 inches (277.7mm)
• W = 6.10 inches (155mm)
• H = 1.77 inches (45mm)

Warranty
• 1-Year

[1] Maximum wireless signal rate based on IEEE Standard 802.11a and 802.11g specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead lower actual data throughput rate.
[2] Environmental conditions may adversely affect wireless signal range.

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