D-Link®

Product Highlights

Enterprise Class Concurrent Dual Band Wireless Radio
Supports 2x2 MIMO 2.4/5Ghz 802.11a/b/g/n with throughput speeds up to 300Mbps.

Flexible Housing Design
External antennas with rugged die cast metal housing for indoor applications

Wireless Management Support
Works with DWC-1000 Wireless Controller and DWS-3160/4026 Unified Wireless Switch for larger AP installations that require centralized configuration and management.

DWL-8600AP

Unified Wireless 802.11n Access Point

Features

Ideal for Business

- Dual band connectivity for increased network capacity
- Concurrent operation in both 802.11a/n & 802.11b/g/n at full bandwidth speeds
- Solid die cast metal housing design for indoor deployment

High-Performance Connectivity

- Four detachable antennas ensure maximum coverage
- Self-tuning features to adjust and optimize RF settings
- Load balancing among neighbor AP
- Supports auto fallback data rates

Trusted Security Features

- 64/128-bit WEP Data Encryption
- WPA/WPA2 Personal/Enterprise
- 802.1X User Authentication

Overview

The D-Link® DWL-8600AP is the next generation Unified Access Point supporting the IEEE 802.11n standard with Plenum-rated metal chassis. Versatile and powerful, this device can be flexibly deployed as a standalone wireless Access Point or as a managed Access Point (AP) managable from a wireless controller or unified wireless switch. Businesses can start with an intelligent DWL-8600AP that provides many advanced Wireless LAN functions, then migrate to a centrally managed system anytime later by integrating the same DWL-8600AP with a D-Link unified wireless switch or controller.

Blazing Wireless Speeds

IEEE 802.11n offers up to six times increased throughput when compared with existing 802.11a/g networks. The DWL-8600AP is also fully backwards compatible with 802.11a/b/g clients. While operating at 802.11n it allows for a 2x2 configuration with two Tx and Rx streams for each radio. Multiple In Multiple Out (MIMO) and wider bandwidth channels increase physical transfer rates while using 802.11. MIMO allows for more information to be coherently resolved by using several antennas instead of a single antenna. By employing the DWL-8600AP today, you can prepare your business for the future generation of wireless devices and mobile applications.

DWL-8600AP Unified Wireless 802.11n Access Point

- 802.1Q VLAN Tagging for network segmentation
- MAC address filtering
- Rogue AP Detection
- 16 SSID Per Frequency Band, 32 Total Per AP

Convenient Installation and Configuration

- 802.3af Power over Ethernet
- Locking brackets included
- Standalone AP: Web-based Management and CLI
- Managed AP: via DWS-4026, DWS-3160, DWC-1000 Unified Wireless Switch or Controller
- Supports AP Clustering
- Supports Wireless Distribution System (WDS)

Quality of Service

- WMM (Wi-Fi Multimedia)
- SVP (SpectraLink Voice Priority)

Advanced Power Saving

The DWL-8600AP features scheduled and unscheduled Automatic Power Save Delivery (APSD). Unscheduled APSD (U-APSD) is a power management method that is more efficient than older 802.11 Power Save Polling. The primary benefit of U-APSD is that it allows for the voice client to synchronize the transmission and reception of voice frames with the AP, thereby allowing the client to go into power saving mode when not sending or receiving packets. The DWL-8600AP is fully compliant with 802.3af even when operating at maximum power.

Centrally Managed From Unified Wired/Wireless Switch

The DWL-8600AP can operate in conjunction with a D-Link unified wireless switch or controller. In this mode, multiple DWL-8600APs can connect directly or indirectly to a DWS-4026 to provide unparalleled security and wireless mobility for wireless clients. Each DWL-8600AP can be tuned by these switches to provide optimal Radio Frequency (RF) channels and transmission power for all mobile clients, giving them the best wireless signals in both 2.4GHz and 5.0GHz bands for uninterrupted connectivity.

When operating in conjunction with a Unified Wireless Switch or Controller, the switch automatically configures every reachable DWL-8600AP in it's AP database so no configuration is necessary during installation. If a DWL-8600AP needs to be replaced, the replacement DWL-8600AP automatically inherits the same configuration, making the replacement process a simpler one.

Intelligent Standalone Access Point

The DWL-8600AP has everything on board that enables network administrators to set up a secure wireless network and to connect to any Ethernet-compliant switch and router. Advanced wireless functions that the DWL-8600AP supports include: WEP data encryption, WPA/WPA2 security, client MAC address filtering, AP load balancing, QoS/WMM (Wireless Multimedia), and Rogue AP Detection. Security configuration settings can be locally stored on the DWL-8600AP itself. Wireless connections can easily be expanded by adding more DWL-8600APs or other 802.11a/g/n compliant APs to the site. With AP Clustering, up to eight APs can form a cluster for convenient management and configuration of all APs. Businesses without complicated network requirements can use the DWL-8600AP to get a wireless network set up and running without the need for any additional special hardware.

Flexible Dual Band Wireless LAN Connectivity

The DWL-8600AP delivers concurrent wireless performance and maximum wireless signal rates in both frequency bands simultaneously. With dual band connectivity, two wireless networks are created both running at full bandwidth speeds, offering a significant increase in total network capacity. At the same time, the DWL-8600AP remains fully backward compatible with the 802.11b standard in the 2.4GHz frequency

Optimal Wireless Performance

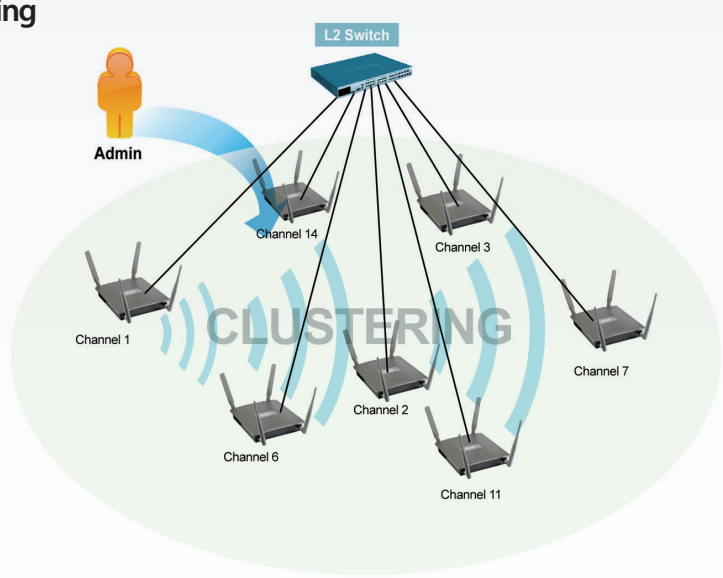
The architecture of most current wireless LAN controllers requires wireless traffic to return to the controller for centralized processing, providing unnecessary traffic delay. The DWL-8600AP, when operating with a D-Link Wireless Switch or Controller, offers administrators extra options. Depending on the wireless application, wireless traffic can either be tunneled back to the switch for better security control or locally forwarded at the Access Point for optimal performance. This device offers administrators maximized flexibility with options to tunnel guest traffic to the switch for centralized security control, and forward VoIP traffic delivery from the Access Point for optimal performance.

The DWL-8600AP furthermore supports AP Clustering and Wireless Distribution System (WDS). WDS allows for the AP to act as a wireless bridge, connecting two different networks to each other without the need for a cable.

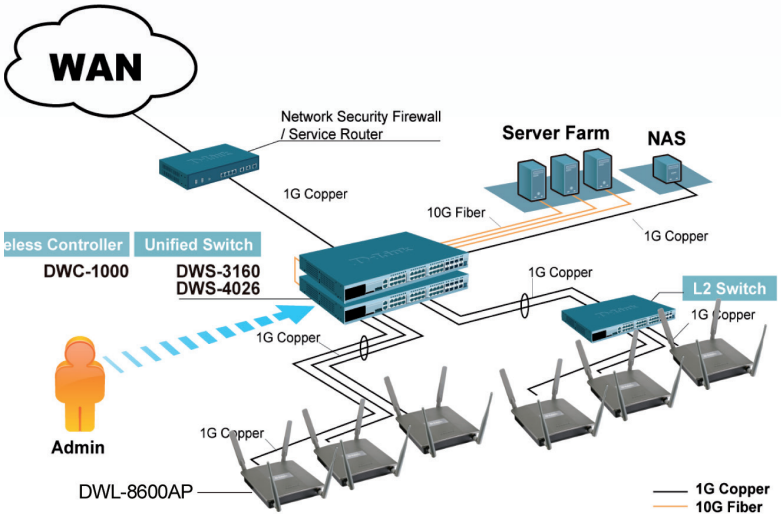
Total Security & Quality of Service

The DWL-8600AP can continuously scan both frequency bands and their associated channels to detect rogues while simultaneously providing wireless connectivity to mobile clients. If a rogue is detected, it reports the result to the Unified wireless switch or controller that manages it. From a management console, administrators can identify the rogue AP and take appropriate action. The DWL-8600AP supports 64/128-bit WEP data encryption, WPA/WPA2 security and multiple SSID per RF band. Connected to the Unified wireless switch or controller, these functions along with wireless user MAC Address Filtering and SSID Broadcast Disable can be used to set up security and limit outsiders' access to the internal network. The DWL-8600AP supports 802.1Q VLAN Tagging and WMM (Wi-Fi Multimedia) for important wireless transmissions such as VoIP and streaming media applications, delivering critical user-based services, such as prioritized delivery of voice traffic.

Deployment Scenario: AP Clustering



Deployment Scenario: Unified Management



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DWL-8600AP Unified Wireless 802.11n Access Point

Technical Specifications

System

Standards	• IEEE 802.11a, 802.11b, 802.11g, 802.11n Wireless LAN • IEEE 802.3, 802.3u Ethernet • IEEE 802.11d Regulatory Domain Selection	• IEEE 802.11h • IEEE 802.3x Flow Control • IEEE 802.3af Power over Ethernet (PoE)
Antenna	• 4 single detachable omnidirectional antennas with reverse SMA connectors (two for each band) • Antenna Gain: 6dBi for 5GHz frequency band, 4dBi for 2.4GHz frequency band	
Ethernet Interface	• 10/100/1000BASE-T Port with 802.3af PoE	
Configurable Operation Mode	• Access Point only • Access Point with Wireless Distribution System	• Wireless Distribution System
Security	• 64/128-bit WEP Data Encryption • MAC Address Filtering: Local or RADIUS database • WPA/WPA2 EAP • WPA/WPA2 PSK • TKIP/AES • 802.11i/WPA2: Supports pre-authentication and key caching for WPA2 Enterprise • 802.1Q SSID broadcast enable/disable	• 16 SSID per frequency band, 32 SSID per AP • RADIUS (RFC 2865, 3580): Supports authentication with RADIUS, up to 4 external RADIUS servers • Isolated security for each SSID (Different security settings for each SSID) • Station Isolation • IEEE 802.1X Supplicant
Supported Management Methods/ Protocol	• Uses protocols supported in DWS-4026 Unified Switch • HTTP/HTTPS • SSH	• SNMP • Syslog • Telnet

Physical & Environmental

Diagnostic LEDs	• Power	• LAN	• 2.4GHz	• 5.0GHz
External Power Adapter	• Input: 100-240VAC; 50/60Hz • Output: 48VDC; 0.4A • Power consumption: Max. 11W			
Power over Ethernet	• 48VDC +/- 10% • Power consumption: Max. 12W			
Stand-Alone Mode	• WEP/WPA/WPA2 Security • Rogue AP Detection • WIDS • Station Isolation • MAC Address Filtering		• AP Load Balancing Setup • WDS • AP Clustering • QoS/WMM • Local Storage Configuration	
Managed Mode (Managed by DWS-4026 switch)	• Centralized Management • Centralized Firmware Dispatch • Visualized AP Management Tool • Auto-Power Adjustment • Dynamic Auto-Channel Selection • L2 Fast Roaming • L3 Fast Roaming • Captive Portal		• WEP/WPA/WPA2 Security • Rogue AP Detection • Rogue AP Mitigation • Station Isolation • MAC Address Filtering • AP Load Balancing Setup • QoS/WMM	
Dimensions	• 7.5" x 7.83" x 1.45" (190.5 x 198.8 x 36.8mm)			
Weight	• 2.25lbs (1.02kg)			
Operating Temperature	• 32°F to 104°F (0° to 40°C)			
Storage Temperature	• -4° to 149°F (-20° to 65°C)			
Operating Humidity	• 10% to 90% non-condensing			

Storage Humidity	• 5% to 95% non-condensing			
Certifications	• FCC Class B • VCCI • TELEC	• Wi-Fi • ICES-003	• EN60601-1-2 • NCC	• CSA International • UL2043
MTBF	• 523,721 hours			
Warranty				
Warranty	• Limited Lifetime[1]			
Ordering Information				
Part Number	*Description*			
DWL-8600AP	Unified Wireless 802.11n Access Point			
Optional products				
Part Number	*Description*			
DWS-4026	L2+ Unified Wired/Wireless Switch with 24 gigabit Ports and 2 10G modules			
DWC-1000	Unified Wireless Controller			
DWS-3160-24TC	L2 Unified Wireless Switch with 24 gigabit Ports			
DWS-3160-24PC	L2 Unified Wireless Switch with 24 PoE gigabit Ports			

[1] Limited Lifetime Warranty available only in the USA and Canada.

All references to speed and range are for comparison purposes only. Product specifications, size and shape are subject to change without notice, and actual product appearance may differ from that depicted herein.

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For more information

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