Ideal for Business
- Dualband 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 & 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
- WPA/WPA2 Enterprise
- 802.1X User Authentication
- 802.1Q VLAN Tagging for Network Segmentation
- MAC Address Filtering
- Rogue AP Detection & Mitigation
- 16 SSID Per Frequency Band, 32 Total Per AP

Convenient Installation and Configuration
- 802.3af Power Over Ethernet to Facilitate Physical Setup
- Zero-Configuration Installation
- Supports Variety of External High-Gain Antennas
- Locking Brackets Included
- "Fit" (Stand-Alone) AP: Web-Based Management and CLI
- "Thin" Managed AP: Via DWS-4026 Unified Wired/Wireless Switch
- Supports AP Clustering
- Supports Wireless Distribution System (WDS)

Quality of Service
- WMM (Wi-Fi Multimedia)
- SVP (SpectraLink Voice Priority)

Wireless Unified 802.11n Access Point

The DWL-8600AP is D-Link's next generation Unified Access Point supporting the IEEE 802.11n standard. Versatile and powerful, this device can be flexibly deployed as a stand-alone "fit" wireless Access Point or as a "thin" managed Access Point (AP) manageable from a 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 to a D-Link unified wired/wireless switch.

Blazing Wireless Speeds
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 802.1a/b/g clients and allows for a 2x2:2* 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.

Green Technology & Advanced Power Saving
The DWL-8600 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. Unlike 802.11n Access Points from other manufacturers that require PoE+ or 802.3at when enabling both radios, the DWL-8600AP thus showcases D-Link's continuous commitment to green technology.

Self Configuration and Easy Installation
When operating in conjunction with a DWS-4026 switch, the switch automatically configures every connected "thin" DWL-8600AP, 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 simple one

Intelligent "Fit" 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 8 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 run without the need for any additional special hardware.

"Thin" AP Centrally Managed From Unified Wired/Wireless Switch
Alternatively, the DWL-8600AP can operate in conjunction with a D-Link DWS-4026 unified wired/wireless switch. In this mode, multiple DWL-8600APs can connect directly or indirectly to one of these switches to provide unparalleled security and wireless mobility for wireless clients. Each DWL-8600AP will be continually tuned by these switches to provide optimal RF channels and transmission power for all mobile clients, giving them the best wireless signals in both 2.4GHz and 5.0GHz bands and uninterrupted wireless connectivity.

Flexible Dualband Wireless LAN Connectivity
The DWL-8600AP delivers concurrent wireless performance with maximum wireless signal rates in both frequency bands simultaneously. With dualband 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.

* AxB:C; A=max. number of transmitting antennas, B=max. number of receiving antennas, and C=max. number of data streams.

Wireless Unified 802.11n Access Point

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 DWS-4026 switch – 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 directly 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 continuously scans 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 DWS-4026 wireless switch that manages it. From a management console, administrators can identify the rogue AP and take appropriate action. The DWL-8600AP supports 64/128/152-bit WEP data encryption, WPA/WPA2 security and multiple SSID per RF frequency band. Connected to the DWS-4026 switch, 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.

Technical Specifications

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)

Data Transfer Rates[1]

- For 802.11a/g: 54, 48, 36, 24, 18, 12, 9 and 6Mbps
- For 802.11b: 11, 5.5, 2 and 1Mbps
- For 802.11n: see below table

MCS Index[2]	GI[3] = 800ns		GI = 400ns	
	20MHz (Mbps)	40MHz (Mbps)	20MHz (Mbps)	40MHz (Mbps)
0	6.5	13.5	7.2	15
1	13	27	14.4	30
2	19.5	40.5	21.7	45
3	26	54	28.9	60
4	39	81	43.3	90
5	52	108	57.8	120
6	58.5	121.5	65	135
7	65	135	72.2	150
8	13	27	14.4	30
9	26	54	28.9	60
10	39	81	43.3	90
11	52	108	57.8	120
12	78	162	86.7	180
13	104	216	115.6	240
14	117	243	130	270
15	130	270	144.4	300

Wireless Unified 802.11n Access Point

Wireless Frequency Range	▪ 802.11a: 5.15GHz to 5.35GHz and 5.725GHz to 5.825GHz ▪ 802.11b/g: 2.4GHz to 2.4835GHz ▪ 802.11n: 2.4 GHz-2.497 GHz and 4.9 GHz – 5.85 GHz			
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, 54Mbps ▪ For 802.11a/g (DSSS): DBPSK @ 1Mbps, DQPSK @ 2Mbps, CCK @ 5.5 and 11Mbps ▪ For 802.11n: PSK/CCK, DQPSK, DBPSK, OFDM			
RF Channels	5GHz	12 Non-Overlapping Channels for US and Canada, 8 Non-Overlapping Channels for Japan, 19 Non-Overlapping Channels for EU, 5 Non-Overlapping Channels for China		
	2.4GHz	11 Channels for US, 13 Channels for EU, 13 Channels for Japan		
Transmit Output Power[4] (Typical at Each Throughput Rate)	802.11a	17dBm at 6/9/12/18Mbps, 15dBm at 24/36Mbps, 14dBm at 48Mbps, 13dBm at 54Mbps		
	802.11b	17dBm at 1/2/5.5/11Mbps		
	802.11g	17dBm at 6/9/12/18Mbps, 16dBm at 24/36Mbps, 15dBm at 48Mbps, 14dBm at 54Mbps		
	802.11n	5GHz Band/HT-20	5GHz Band/HT-40	2.4GHz Band/HT-20	2.4GHz Band/HT-40
		17 dBm at MCS0/8 17 dBm at MCS1/9 17 dBm at MCS2/10 15 dBm at MCS3/11 15 dBm at MCS4/12 14 dBm at MCS5/13 13 dBm at MCS6/14 12 dBm at MCS7/15	16 dBm at MCS0/8 16 dBm at MCS1/9 16 dBm at MCS2/10 14 dBm at MCS3/11 14 dBm at MCS4/12 13 dBm at MCS5/13 12 dBm at MCS6/14 11 dBm at MCS7/15	17 dBm at MCS0/8 17 dBm at MCS1/9 17 dBm at MCS2/10 16 dBm at MCS3/11 16 dBm at MCS4/12 15 dBm at MCS5/13 14 dBm at MCS6/14 13 dBm at MCS7/15	16 dBm at MCS0/8 16 dBm at MCS1/9 16 dBm at MCS2/10 15 dBm at MCS3/11 15 dBm at MCS4/12 14 dBm at MCS5/13 13 dBm at MCS6/14 12 dBm at MCS7/15
Receiver Sensitivity	802.11a	-87dBm at 6Mbps, -86dBm at 9Mbps, -84dBm at 12Mbps, -81dBm at 18Mbps, -77dBm at 24Mbps, -75dBm at 36Mbps, -68dBm at 48Mbps, -67dBm at 54Mbps		
	802.11b	-92dBm at 1Mbps, -90dBm at 2Mbps, -88dBm at 5.5Mbps, -84dBm at 11Mbps		
	802.11g	-87dBm at 6Mbps, -87dBm at 9Mbps, -85dBm at 12Mbps, -82dBm at 18Mbps, -79dBm at 24Mbps, -76dBm at 36Mbps, -71dBm at 48Mbps, -70dBm at 64Mbps		
	802.11n	5GHz Band/HT-20	5GHz Band/HT-40	2.4GHz Band/HT-20	2.4GHz Band/HT-40
		−82 dBm at MCS0/8 −79 dBm at MCS1/9 −77 dBm at MCS2/10 −74 dBm at MCS3/11 −70 dBm at MCS4/12 −66 dBm at MCS5/13 −65 dBm at MCS6/14 −64 dBm at MCS7/15	−79 dBm at MCS0/8 −76 dBm at MCS1/9 −74 dBm at MCS2/10 −71 dBm at MCS3/11 −67 dBm at MCS4/12 −63 dBm at MCS5/13 −62 dBm at MCS6/14 −61 dBm at MCS7/15	-85 dBm at MCS0/8 -82 dBm at MCS1/9 -80 dBm at MCS2/10 -77 dBm at MCS3/11 -74 dBm at MCS4/12 -69 dBm at MCS5/13 -68 dBm at MCS6/14 -67 dBm at MCS7/15	-82 dBm at MCS0/8 -79 dBm at MCS1/9 -77 dBm at MCS2/10 -74 dBm at MCS3/11 -71 dBm at MCS4/12 -66 dBm at MCS5/13 -65 dBm at MCS6/14 -63 dBm at MCS7/15
Antennas	▪ 4 Dualband detachable omnidirectional antennas with reverse SMA connectors ▪ 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			

Wireless Unified 802.11n Access Point

Security	▪ 64/128/152-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/Protocols	▪ Uses protocols supported in DWS-4026 Unified Switch ▪ HTTP/HTTPS ▪ SSH ▪ SNMP ▪ Syslog ▪ Telnet
Diagnostic LEDs	▪ Power ▪ LAN ▪ 2.4GHz ▪ 5.0GHz
Power	▪ Operating voltage: 48VDC +/- 10% for PoE ▪ Power supply: Through 48VDC, 0.4A external power adapter ▪ Power consumption: Max.11W without POE, Max.12W with POE
Dimensions	190.5 mm (L) x 198.8 mm (W) x 36.8 mm (H) (7.50 x 7.83 x 1.45 inches)
Weight	1.02 kg (2.25 lbs)
Operating Temperature	0˚ to 40˚C (32˚ to 104˚F)
Storage Temperature	-20˚ to 65˚C (-4˚ to 149˚F)
Operating Humidity	10% to 90% (Non-Condensing)
Storage Humidity	5% to 95% (Non-Condensing)
MTBF	523,721 hours
Certifications	▪ FCC Class B ▪ CE ▪ C-Tick ▪ VCCI ▪ TELEC ▪ Wi-Fi ▪ ICES-003 ▪ EN60601-1-2 ▪ NCC ▪ CSA International

Wireless Unified 802.11n Access Point

	Stand-Alone Mode	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	-	√
WIDS	-	√
Station Isolation	√	√
MAC Address Filtering	√	√
AP Load Balancing Setup	√	√
WDS	√	-
AP Clustering	√	-
QoS/WMM	√	√
Local Storage of Configuration	√	-

[1] Maximum wireless signal rate 300Mbps and 54Mbps is based on IEEE 802.11n and 802.11a/g specifications, respectively. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead can lower actual data throughput rate.
[2] MCS Index: The Modulation and Coding Scheme (MCS) index determines the number of spatial streams, the modulation, the coding rate, and data rate values. MCS Index is only available for 802.11n standard.
[3] GI: A Guard Interval (GI) between symbols helps receivers overcome the effects of multipath delays. A GI of 400ns is also called Short Guard Interval (SGI).
[4] Maximum power setting will vary according to individual country regulations.

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