

Ideal for Business

- + Dualband Connectivity for Increased Network Capacity
- + Concurrent Operation in Both 802.11a & 802.11b/g at Full Bandwidth Speeds
- + Solid Die Cast Metal Housing Design for Indoor Deployment

High-Performance Connectivity

- + Up to 108Mbps (Turbo Mode) in Both Frequency Bands¹
- + Dual Detachable Dipole Antennas Ensure Maximum Coverage
- + Self-Tuning Features to Adjust & Optimize RF Settings

Trusted Security Features

- + 64/128/152-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
- + 8 SSID Per Frequency Band
- + WMM (Wi-Fi Multimedia) Certified

Convenient Installation

- + 802.3af Power Over Ethernet to Facilitate Physical Setup
- + Zero-Configuration Installation
- + Supports Variety of External High-Gain Antennas
- + Locking Brackets Included
- + Easy Management Via DWS-3024/3026 WLAN Controller Switch

Wireless Switching 108 AG Access Point

The DWL-8500AP Wireless Switching 108 AG Access Point is a high-performance wireless access device that provides up to 108Mbps transmission rates¹ and flexible dualband wireless connectivity. This AP provides unparallel wireless mobility, dualband WLAN connectivity and client access to the functions of the DWS-3024/3026 wireless switches. Connected to these switches, each DWL-8500AP continually tunes itself for optimal RF channel and transmits power to provide all mobile clients with the best wireless signal in both the 802.11a and 802.11g bands.

Flexible Dualband Wireless LAN Connectivity

The DWL-8500AP 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-8500AP remains fully backward compatible with the 802.11b standard in the 2.4GHz frequency.

Up to 108Mbps Speed

With transmission speeds of up to 108Mbps (Turbo mode) on both frequency bands,¹ the DWL-8500AP is an ideal solution for bandwidth intensive WLAN application. In a typical working environment with multiple users accessing the network at the same time, the DWL-8500AP can operate at double times the throughput of regular 802.11g wireless LAN equipment.

Sensitive Information Not Stored Locally

Individual DWL-8500AP access points have no local storing of any data so they can be safely installed in unsecured areas without fear of hacking or theft. The DWS-3024/3026 switch is the hardware that stores vital network and user information in plain site and is typically stored in a secure location. DWL-8500AP can link to the DWS-3024/3026 directly or through the existing wired network, and roam in high speed within a single DWS-3024/3026 or even across Layer 3 boundaries (between several cascaded DWS-3024/3026 switches).

Self Configuration and Easy Installation

The DWS-3024/3026 switch automatically configures every connected DWL-8500AP, so no configuration is necessary during installation. If a DWL-8500AP needs to be replaced, the replacement DWL-8500AP automatically inherits the same configuration, making the replacement process as simple as a child's game.

PoE Facilitates Wireless Deployment

For maximum coverage, the DWL-8500AP can be placed at out-of-the-way locations such as on a ceiling or a high wall, where AC outlets are inaccessible and providing



power to these locations is difficult and expensive. The DWL-8500AP can easily obtain power from a DWS-3024/3026 switch located as far as 100 meters away through the unused pairs of the existing network cable, doing away with the need to install separate power wiring. With industry-standard 802.3af PoE support, this wireless access point does not even require a PoE injector.

Continuous Channel Scanning To Prevent RogueAP

DWL-8500AP plays a key role in rogue detection. It continuously scans both frequency bands and their associated channels to root out rogues while simultaneously providing wireless connectivity to mobile clients. If a rogue is detected, the closest DWL-8500AP can launch RF counter measures by spoofing 802.11 control messages. This prevents clients from communicating, associating and authenticating with a rogue.

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Total Security & Quality of Service

The DWL-8500AP supports 64/128/152-bit WEP data encryption, WPA/WPA2 security and multiple SSID per RF frequency band. Connected to the DWS-3024/3026 switch, these function along with wireless user MAC Address Filtering and SSID Broadcast Disable can be configured to set up security and limit outsiders' access to the internal network. The DWL-8500AP 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.

¹ Maximum wireless signal rate 54Mbps 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 can lower actual data throughput rate. 108Mbps Turbo mode operation in 5GHz frequency band is not allowed in EU countries.



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Technical Specifications

Standards	+ IEEE 802.11a, 802.11b, 802.11g Wireless LAN + IEEE 802.3x Flow Control		+ IEEE 802.3, 802.3u Ethernet + IEEE 802.3af Power over Ethernet (PoE)
Data Transfer Rates ¹	For 802.11a/g: + 108, 54, 48, 36, 24, 18, 12, 9 and 6Mbps For 802.11b: + 11, 5.5, 2 and 1Mbps		
Wireless Frequency Range	+ 802.11a: 5.15GHz to 5.35GHz and 5.725GHz to 5.825GHz + 802.11b/g: 2.4GHz to 2.4835GHz		
RF Channels	802.11a: + 12 Non-Overlapping Channels for US and Canada + 19 Non-Overlapping Channels for EU 802.11b: + 11 Channels for United States + 13 Channels for Japan 802.11g: + 11 Channels for United States + 13 Channels for Japan		+ 4 Non-Overlapping Channels for Japan + 4 Non-Overlapping Channels for China + 13 Channels for EU + 13 Channels for Europe Countries
Radio and Modulation Type	For 802.11b (DSSS): + DBPSK @ 1Mbps + DQPSK @ 2Mbps For 802.11a/g (OFDM): + BPSK @ 6 and 9Mbps + QPSK @ 12 and 18Mbps + 64QAM @ 48, 54 and 108Mbps For 802.11a/g (DSSS): + DBPSK @ 1Mbps + DQPSK @ 2Mbps		+ CCK @ 5.5 and 11Mbps + 16QAM @ 24 and 36Mbps + CCK @ 5.5 and 11Mbps
Transmit Output Power ² (Typical at Each Throughput Rate)	For 802.11a: + 16dBm at 6, 9, 12 and 18Mbps + 12dBm at 54 and 48Mbps For 802.11b: + 18dBm at 11, 5.5, 2 and 1Mbps For 802.11g: + 18dBm at 6, 9, 12 and 18Mbps + 14dBm at 48 and 54Mbps		+ 14dBm at 24 and 36Mbps + 16dBm at 24 and 36Mbps



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EIRP	+ Typical EIRP Using 5dBi Antennas: 63mW (18dBm)		
Receiver Sensitivity	For 802.11a: + -87dBm at 6Mbps + -86dBm at 9Mbps + -85dBm at 12Mbps + -83dBm at 18Mbps + -80dBm at 24Mbps + -76dBm at 36Mbps + -71dBm at 48Mbps + -71dBm at 54Mbps + -68dBm at 108Mbps For 802.11b: + -83dBm at 11Mbps + -88dBm at 5.5Mbps + -89dBm at 2Mbps + -92dBm at 1Mbps For 802.11g: + -87dBm at 6Mbps + -86dBm at 9Mbps + -85dBm at 12Mbps + -83dBm at 18Mbps + -80dBm at 24Mbps + -76dBm at 36Mbps + -71dBm at 48Mbps + -71dBm at 54Mbps + -68dBm at 108Mbps		
Antennas	+ 2 Dualband Detachable Dipole Antennas With Reverse SMA Connectors + Antenna Gain: 5dBi for 5GHz frequency band, 2.5dBi for 2.4GHz frequency band		
Ethernet Interface	10/100BASE-TX Port With 802.3af PoE		
Configurable Operation Mode	+ Access Point Only		
Security	+ 64/128/152-bit WEP Data Encryption + MAC Address Filtering + WPA/WPA2 EAP + WPA/WPA2 PSK + AES + 802.11i-ready + 802.1Q SSID Broadcast Enable/Disable + 8 SSID per Frequency Band + Isolated Security for Each SSID (Different Security Setting for Each SSID)		
Supported Management Methods/Protocols	+ Uses Protocols Supported in DWS-3024/3026 Wireless Switches		
Diagnostic LEDs	+ Power + 802.11b/g	+ Status + 802.11a	+ LAN
Power	+ Operating Voltage: 48VDC +/- 10% for PoE + Power Supply: Through 48VDC, 0.4A External Power Adapter + Power Consumption: 9 watts (max.)		
Dimensions	277.7 mm (L) x 155 mm (W) x 45 mm (H) (10.93 x 6.10 x 1.77 inches)		
Weight	800 grams (1.76 lbs)		
Temperature	+ Operating Temperature: 0° to 40°C (32° to 104°F) + Storage Temperature: -20° to 65°C (-4° to 149°F)		
Humidity	+ Operating Humidity: 10% to 90% (Non-Condensing) + Storage Humidity: 5% to 95% (Non-Condensing)		
Certification	+ FCC Class B + C-Tick + TELEC	+ CE + VCCI + UL	

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² Maximum power setting will vary according to individual country regulations.

