

### Ideal for Business

- + 802.11b/g WLAN Standard
- + Solid Die Cast Metal Housing Design for Indoor Deployment

### High-Performance Connectivity

- + Up to 108Mbps (Turbo Mode)<sup>1</sup>
- + 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
- + WMM (Wi-Fi Multimedia) Certified

### Convenient Installation

- + 802.3af Power Over Ethernet Facilitates 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 G Access Point

The DWL-3500AP Wireless Switching 108 G Access Point is a high-performance wireless access device that provides up to 108Mbps transmission rates<sup>1</sup> on the 2.4GHz frequency band. This AP provides unparalleled wireless mobility and client access to the functions of the DWS-3024/3026 wireless switches. Connected to these switches, each DWL-3500AP 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.

#### Up to 108Mbps Speed

With transmission speeds of up to 108Mbps (Turbo mode)<sup>1</sup>, the DWL-3500AP 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-3500AP can operate at double times the throughput of regular 802.11g wireless LAN equipment.

#### Sensitive Information Not Stored Locally

Individual DWL-3500AP 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-3500AP 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 & Easy Installation

The DWS-3024/3026 switch automatically configures every connected DWL-3500AP, so no configuration is necessary during installation. If a DWL-3500AP needs to be replaced, the replacement DWL-3500AP 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-3500AP 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-3500AP 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 Rogue AP

DWL-3500AP 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-3500AP can launch RF counter measures by spoofing



802.11 control messages. This prevents clients from communicating, associating and authenticating with a rogue.

#### Total Security & Quality of Service

The DWL-3500AP 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-3500AP 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.

<sup>1</sup> Maximum wireless signal rate 54Mbps based on IEEE standard 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.



### Wireless Switching 108 G Access Point

#### Technical Specifications

Standards	<ul style="list-style-type: none"> <li>+ IEEE 802.11b, 802.11g Wireless LAN</li> <li>+ IEEE 802.3, 802.3u Ethernet</li> <li>+ IEEE 802.3x Flow Control</li> <li>+ IEEE 802.3af Power over Ethernet (PoE)</li> </ul>												
Data Transfer Rates <sup>1</sup>	<p>For 802.11g:</p> <ul style="list-style-type: none"> <li>+ 108, 54, 48, 36, 24, 18, 12, 9 and 6Mbps+</li> </ul> <p>For 802.11b:</p> <ul style="list-style-type: none"> <li>+ 11, 5.5, 2 and 1Mbps</li> </ul>												
Wireless Frequency Range	+ 2.4GHz to 2.4835GHz												
RF Channels	<p>802.11b:</p> <ul style="list-style-type: none"> <li>+ 11 Channels for United States</li> <li>+ 13 Channels for EU</li> <li>+ 13 Channels for Japan</li> </ul> <p>802.11g:</p> <ul style="list-style-type: none"> <li>+ 11 Channels for United States</li> <li>+ 13 Channels for Europe Countries</li> <li>+ 13 Channels for Japan</li> </ul>												
Radio and Modulation Type	<p>For 802.11b (DSSS):</p> <ul style="list-style-type: none"> <li>+ DBPSK @ 1Mbps</li> <li>+ DQPSK @ 2Mbps</li> <li>+ CCK @ 5.5 and 11Mbps</li> </ul> <p>For 802.11a/g (OFDM):</p> <ul style="list-style-type: none"> <li>+ BPSK @ 6 and 9Mbps</li> <li>+ QPSK @ 12 and 18Mbps</li> <li>+ 16QAM @ 24 and 36Mbps</li> <li>+ 64QAM @ 48, 54 and 108Mbps</li> </ul> <p>For 802.11a/g (DSSS):</p> <ul style="list-style-type: none"> <li>+ DBPSK @ 1Mbps</li> <li>+ DQPSK @ 2Mbps</li> <li>+ CCK @ 5.5 and 11Mbps</li> </ul>												
Transmit Output Power <sup>2</sup> (Typical at Each Throughput Rate)	<p>For 802.11b:</p> <ul style="list-style-type: none"> <li>+ 18dBm at 11, 5.5, 2 and 1Mbps</li> </ul> <p>For 802.11g:</p> <ul style="list-style-type: none"> <li>+ 18dBm at 6, 9, 12 and 18Mbps</li> <li>+ 16dBm at 24 and 36Mbps</li> <li>+ 14dBm at 48 and 54Mbps</li> </ul>												
EIRP	Typical EIRP Using 5dBi Antennas: 63mW (18dBm)												
Receiver Sensitivity	<p>For 802.11b:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">+ -83dBm at 11Mbps</td> <td style="width: 50%;">+ -88dBm at 5.5Mbps</td> </tr> <tr> <td>+ -89dBm at 2Mbps</td> <td>+ -92dBm at 1Mbps</td> </tr> </table> <p>For 802.11g:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">+ -87dBm at 6Mbps</td> <td style="width: 50%;">+ -86dBm at 9Mbps</td> </tr> <tr> <td>+ -85dBm at 12Mbps</td> <td>+ -83dBm at 18Mbps</td> </tr> <tr> <td>+ -80dBm at 24Mbps</td> <td>+ -76dBm at 36Mbps</td> </tr> <tr> <td>+ -71dBm at 48Mbps</td> <td>+ -66dBm at 54Mbps</td> </tr> </table>	+ -83dBm at 11Mbps	+ -88dBm at 5.5Mbps	+ -89dBm at 2Mbps	+ -92dBm at 1Mbps	+ -87dBm at 6Mbps	+ -86dBm at 9Mbps	+ -85dBm at 12Mbps	+ -83dBm at 18Mbps	+ -80dBm at 24Mbps	+ -76dBm at 36Mbps	+ -71dBm at 48Mbps	+ -66dBm at 54Mbps
+ -83dBm at 11Mbps	+ -88dBm at 5.5Mbps												
+ -89dBm at 2Mbps	+ -92dBm at 1Mbps												
+ -87dBm at 6Mbps	+ -86dBm at 9Mbps												
+ -85dBm at 12Mbps	+ -83dBm at 18Mbps												
+ -80dBm at 24Mbps	+ -76dBm at 36Mbps												
+ -71dBm at 48Mbps	+ -66dBm at 54Mbps												



### Wireless Switching 108 G Access Point

Antennas	Dual 5dBi Gain Detachable Dipole 2.4GHz Antennas With Reverse SMA Connectors
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 + 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 + Status + LAN + WLAN
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 + CE + C-Tick + VCCI + TELEC + UL

<sup>1</sup> Maximum wireless signal rate 54Mbps based on IEEE standard 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.  
<sup>2</sup> Maximum power setting will vary according to individual country regulations.

