

### L2+ Gigabit Wireless Switches

#### Centralized Management of Wireless Network

- + Tracks & Maintains User Authentication As Users Roam Throughout the Network
- + Intelligently Designates Users to Virtual Groups Based on User's Authenticated Identity
- + Provides Scaled, Resilient, Integrated Management Infrastructure
- + Centrally Manages User Authentication/Security Policies
- + Provides Key Management for Each Security Protocol
- + Configures and Controls All Connected Access Points

#### Scalable Unified Wired / Wireless Network Architecture

- + 24 10/100/1000BASE-T Gigabit Ports
- + Up to 48 Wireless AP Direct/Indirect Connections
- + Mixed Wired/Wireless Connection From Any Port
- + 4 Combo SFP for Flexible Fiber Connection
- + 2 Open Slots for Optional 10-Gigabit Attachment to Fiber Backbone<sup>1</sup>
- + Expandable to 4 Peer Switches

#### Simplified & Resilient Network Deployment

- + 802.3af Power Over Ethernet Simplifies AP Installation
- + Gigabit Connection Ready for Future Wireless Speed Upgrade
- + Redundant Power Supply Support Maximizes Network Uptime

#### Security Management

- + 64/128/152-Bit WEP Data Encryption
- + WPA/WPA2 Personal
- + WPA/WPA2 Enterprise
- + MAC Address Filtering
- + Rouge AP Classification & Detection



The D-Link DWS-3024/DWS-3026 L2+ Gigabit Wireless Switches are optimized for wireless network deployment in business environments. With these devices, business can install high-performance, secure, manageable and scalable unified wired/wireless LAN switching. With combo SFP, open slots for optional 10-Gigabit connection<sup>1</sup>, Power over Ethernet and redundant power supply (RPS) support, these Gigabit wireless switches provide enterprises with easy upgrade to next-generation 802.11n wireless LAN, simple deployment of wireless devices regardless of physical locations, and centralized management of secure wireless mobility and policy enforcement.

#### Core Units Controlling Entire Wireless Network.

The DWS-3024/DWS-3026 Gigabit Wireless Switches are core units that consolidate the security, manage the bandwidth and maintain the intelligence of the entire wireless network. In addition to monitoring users' identities and maintaining their authentication as they roam, these wireless switches can configure and control all aspects of the wireless access points, including: RF channel and power management, wireless traffic segmentation, AP roaming and load balancing, rouge AP detection and AP access security.

#### High Performance, Easy Deployment.

Designed for distributed deployments in the wiring closet, each wireless switch can support up to 48 wireless access points. AP connection can be directly to the wireless switch ports, or indirectly through a LAN switch. With 802.3af PoE integrated into every port, these switches allow connected AP to be located at places difficult to access from AC power sources. Gigabit transmission future-proof hardware investments when the network is installed with next-generation higher-speed 802.11n wireless standard devices.

#### 24 Gigabit Ports, No Restriction on Port Usage.

Each DWS-3024/DWS-3026 provides 24 10/100/1000BASE-T Gigabit ports and 4 combo SFP. Each of the 10/100/1000BASE-T ports can connect to a wireless access point, or to a wired LAN device, such as a server, a network storage device, or simply another LAN switch. The combo SFP allows for flexible fiber connection, while optional 10-Gigabit modules<sup>1</sup> enable bottleneck-free switch-to-switch cascading or attachment to a high-speed fiber backbone.

#### Scalable Expansion & Unified Wired/Wireless Deployment.

Small to Medium Enterprises (SMB) may require only one wireless switch to manage a few AP or to use for mixed wired/wireless LAN purposes. When the number of AP is augmented, up to 4 switches can be added to form a large centralized management system. With easy expansion, Gigabit speed to support next-generation high-speed AP, and L3 routing to support enterprise-wide inter-subnet roaming, the DWS-3024/3026 provide an architecture that unifies and simplifies an otherwise complex WLAN environment, readily prepare an existing network for future technology upgrades.

#### Authentication, Security & Power Management.

The DWS-3024/DWS-3026 provide user-based services such as virtual private group (SSID) membership, encryption type, authentication, location tracking and associated network statistics. Authorizations stay with users wherever they roam because all deployed DWS-3024/DWS-3026 share stored information, ensuring secure access and connectivity to the right services. In addition to checking the identity of a connecting user from the switch's local database, user authentication policies can be sent back to an external RADIUS server for complete verification. This offloading capability ensures that the wireless switch will not overload when clients are simultaneously connecting to the network.

### Bandwidth & Power Management

- + Auto-Adjusts RF Channels for AP
- + Provides Fast Intra-Switch Roaming
- + Advanced for Inter-Subnet Roaming
- + Auto-Adjusts Transmit Output Power for AP
- + Allows Remote Boot of AP

### LAN Management

- + L2+ Features: Spanning Tree, 802.3ad Link Aggregation, Port Mirroring, Jumbo Frames
- + IPv4 Packet Routing
- + QoS With 802.1p Priority Queues, Granular Bandwidth Control
- + LAN Security With ACL, RADIUS, TACACS+ Authentication, DoS Prevention, Broadcast Storm Control

### Secure & Versatile Management

- + Web Access Using HTTP
- + Telnet Server/Client
- + SSH v2, SSL v3
- + SNMP v1, v2c, v3, RMON
- + SYSLOG, Dual Image

<sup>1</sup> Available on DWS-3026 only.

## L2+ Gigabit Wireless Switches

For power management, the DWS-3024/ DWS-3026 allow administrators to set the AP transmit output power to meet individual country regulations, and perform AP reboot from a remote place when required.

#### Simplified Configuration & Deployment.

Through a centralized management platform, network maintenance and configuration become a more efficient process. If any access point were to fail, administrators can instantly identify the location of the failed AP and immediately swap it out with another AP. The DWS-3024/ DWS-3026 switches will automatically configure the new AP with the same configuration as the previous unit.

#### Maximum Performance.

In addition to performing enhanced Layer 2+ forwarding, the DWS-3024/ DWS-3026 also provides Layer 3/4 and identity-tracking capabilities. Through centralized RF policies, auto-selection of the least utilized channels and AP load balancing, the DWS-3024/ DWS-3026 can effectively manage the wireless bandwidth to optimize WLAN traffic. Roaming across different AP is fast due to intra-switch roaming, inter-subnet roaming and the Gigabit speed transmission from the AP to the switch. These switches also offer resilient functions such as redundant load-sharing Gigabit links, 802.1q VLAN traffic segmentation, and IGMP snooping vital to supporting IP multicast streams.

#### Maximum Network Protection.

Each client connecting to the wireless network goes through a strict authentication process to ensure maximum security. Whether the client is an assigned user, visiting guest, or just has department access, the DWS-3024/ DWS-3026 protect the entire network infrastructure with its vast array of security protocols. These protocols include WPA/WPA2, 802.1x user authentication, and 802.11i standard security.

#### Maximum Investment Protection.

With integrated Gigabit transmission, the DWS-3024/ DWS-3026 provide enterprises with an easy upgrade to future speed wireless LAN technologies by incorporating next-generation high-speed AP. Optional 10-Gigabit support<sup>1</sup> allows the network to integrate with future high-speed servers and the network backbone, further protecting current investments in network hardware.





## L2+ Gigabit Wireless Switches

### Technical Specifications

Device Interfaces	<ul style="list-style-type: none"> <li>+ 24 10/100/1000BASE-T Gigabit Ports With Integrated 802.3af PoE</li> <li>+ 4 Combo SFP Slots</li> <li>+ RS-232 Console Port</li> <li>+ 2 Open Slots for Optional 10-Gigabit Module <sup>1</sup></li> </ul>
Redundant Power Supply	<ul style="list-style-type: none"> <li>+ Connector for Optional External DP-600 RPS</li> </ul>
Power over Ethernet	<ul style="list-style-type: none"> <li>+ Standard: 802.3af</li> <li>+ Per Port Voltage Output: 15.4 W</li> <li>+ Total Voltage Output: 370 W</li> <li>+ Auto Disable If Port Current Over 350mA</li> <li>+ Cable Requirements: PoE on RJ-45 Ports Using Pins 4, 5 (Node) and 7, 8 (Return) on Category 5 UTP or STP</li> </ul>
Performance	<ul style="list-style-type: none"> <li>+ Switch Capacity:                             <ul style="list-style-type: none"> <li>DWS-3024: 48Gbps</li> <li>DWS-3026: 88Gbps</li> </ul> </li> <li>+ Maximum Forwarding Rate:                             <ul style="list-style-type: none"> <li>DWS-3024: 35.71Mpps</li> <li>DWS-3026: 65.47Mpps</li> </ul> </li> <li>+ Switching Method: Store and Forward</li> <li>+ Packet Buffer Memory Size: 750KBytes</li> </ul>
Flow Control	<ul style="list-style-type: none"> <li>+ 802.3x Standard in Full Duplex Mode</li> <li>+ Back Pressure in Half Duplex Mode</li> </ul>
Optional 10-Gigabit Uplink Modules <sup>1</sup>	<ul style="list-style-type: none"> <li>+ DEM-410X 1-Slot 10-Gigabit XFP Module (For Fiber Backbone Attachment)</li> <li>+ DEM-410CX 1-Port 10-Gigabit CX4 Module (For Switch Cascading)</li> </ul>
Optional 10-Gigabit XFP Transceivers <sup>1</sup>	<ul style="list-style-type: none"> <li>+ DEM-421XT XFP Transceiver (10GBASE-SR Standard, Up to 300 m Multi-Mode Fiber Distance, 3.3/5V Operating Voltage)</li> <li>+ DEM-422XT XFP Transceiver (10GBASE-LR Standard, Up to 10 km Single-Mode Fiber Distance, 3.3/5V Operating Voltage)</li> <li>+ DEM-423XT XFP Transceiver (10GBASE-ER Standard, Up to 40 km Single-Mode Fiber. Distance, 3.3/5V Operating Voltage)</li> </ul>
WLAN Management Capability	<ul style="list-style-type: none"> <li>+ Up to 48 AP (Directly Connected and Indirectly Connected Through LAN Switch)</li> <li>+ Up to 512 Wireless Users</li> </ul>
Roaming	<ul style="list-style-type: none"> <li>+ Fast Roaming</li> <li>+ Intra-Switch Roaming</li> <li>+ Inter-Subnet Roaming</li> </ul>
Access Control & Bandwidth Management	<ul style="list-style-type: none"> <li>+ Up to 16 SSID per AP (8 SSID per RF Frequency Band)</li> <li>+ AP Load Balancing</li> </ul>
AP Management	<ul style="list-style-type: none"> <li>+ AP Auto-Discovery</li> <li>+ Remote AP Reboot</li> <li>+ AP Monitoring: List Managed AP, Rogue AP, Authentication Failed AP</li> <li>+ Client Monitoring: List Clients Associated with Each Managed AP</li> <li>+ Ad-hoc Clients Monitoring</li> <li>+ AP Authentication Supporting Local Database and External RADIUS Server</li> <li>+ Centralized RF/Security Policy Management</li> </ul>



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WLAN Security	<ul style="list-style-type: none"> <li>+ WPA Personal/Enterprise</li> <li>+ WPA2 Personal/Enterprise</li> <li>+ 64/128/152-bit WEP Data Encryption</li> <li>+ Wireless Station and AP Classification Based on RF Channel, MAC Address, SSID, Time</li> <li>+ Rogue and Valid AP Classification Based on MAC Address</li> <li>+ Encryption Type Support: WEP, WPA, Dynamic WEP, TKIP, AES-CCMP, EAP-TLS, TTLS, PEAP-GTC, PEAP-MS-CHAPv2, EAP-FAST</li> </ul>	
L2 Features	<ul style="list-style-type: none"> <li>+ MAC Address Table Size: 8K Entries</li> <li>+ IGMP Snooping: 1K Multicast Groups</li> <li>+ Spanning Tree: <ul style="list-style-type: none"> <li>802.1D Spanning Tree</li> <li>802.1w Rapid Spanning Tree</li> <li>802.1s Multiple Spanning Tree</li> </ul> </li> <li>+ 802.3ad Link Aggregation: <ul style="list-style-type: none"> <li>Up to 32 Groups</li> <li>Up to 8 Ports per Group</li> </ul> </li> <li>+ Port Mirroring: <ul style="list-style-type: none"> <li>One-to-One Port Mirroring</li> <li>Many to One Port Mirroring</li> </ul> </li> <li>+ Jumbo Frame Size: Up to 9KBytes</li> </ul>	
VLAN	<ul style="list-style-type: none"> <li>+ 802.1Q VLAN Tagging</li> <li>+ VLAN Groups: Up to 4094</li> <li>+ GVRP</li> </ul>	
L3 Features	<ul style="list-style-type: none"> <li>+ IPv4 Static Route</li> <li>+ Routing Table Size: Up to 128 Static Routes</li> <li>+ Floating Static Route</li> <li>+ VRRP</li> </ul>	
Quality of Service	<ul style="list-style-type: none"> <li>+ 802.1p Priority Queues (Up to 8 Queues per Port)</li> <li>+ CoS Based on: Switch Port, VLAN, DSCP, TCP/UDP Port, TOS, Destination/Source MAC Address, Destination/Source IP Address</li> <li>+ Bandwidth Control: 64Kb/s Granularity</li> </ul>	
ACL (Access Control List)	<ul style="list-style-type: none"> <li>ACL Based on: Switch Port, MAC Address, 802.1p Priority Queues, VLAN, Ethertype, DSCP, IP Address, Protocol Type, TCP/UDP Port</li> </ul>	
LAN Security	<ul style="list-style-type: none"> <li>+ RADIUS Authentication for Management Access</li> <li>+ TACACS+ Authentication for Management Access</li> <li>+ SSH v1, v2</li> <li>+ SSL v3</li> <li>+ Port Security: <ul style="list-style-type: none"> <li>20 MAC Addresses per Port</li> <li>Trap Violation Notification</li> </ul> </li> <li>+ 802.1x Port-Based Access Control</li> <li>+ Denial of Service Protection</li> <li>+ Broadcast Storm Control in Granularity From 0 to 255Kpps</li> </ul>	
Management Methods	<ul style="list-style-type: none"> <li>+ Web-Based GUI</li> <li>+ Telnet Server: Up to 5 Sessions</li> <li>+ TFTP Client</li> <li>+ Multiple Configuration Files</li> <li>+ BOOTP/DHCP Client</li> <li>+ SNTP</li> <li>+ Dual Images</li> </ul>	<ul style="list-style-type: none"> <li>+ CLI</li> <li>+ Telnet Client</li> <li>+ SNMP v1, v2c, v3</li> <li>+ RMON v1: 4 Groups (Statistics, History, Alarms, Events)</li> <li>+ DHCP Server</li> <li>+ SYSLOG</li> </ul>



### L2+ Gigabit Wireless Switches

Diagnostic LEDs	+ Per Device: Power, Console, RPS + Per 10/100/1000BASE-T Port: Link/Activity/Speed, PoE Mode + Per SFP Slot: Link/Activity + Per 10-Gigabit Slot: Link/Activity <sup>1</sup>
Power	+ AC Input Power: 100 to 240 VAC, 50/60 Hz Internal Universal Power Supply + Power Consumption: + DWS-3024: 450 Watts (max. with all PoE ports in operation) + DWS-3026: 460 Watts (max. with all PoE ports in operation)
Heat Dissipation	+ Heat Dissipation: DWS-3024: 1535.49 BTU/hr DWS-3026: 1569.61 BTU/hr - Ventilation DC Fans: DWS-3024: 4 40 x 40 mm DC Fans DWS-3026: 4 40 x 40 mm DC Fans
Dimensions	+ 440 (W) x 389 (D) x 44 (H) mm (17.32 x 15.31 x 1.73 inches) + 19-Inch Standard Equipment Rack Mount Width, 1U Height
Weight	+ DWS-3024: 6kg (13.23 lbs) + DWS-3026: 6kg (13.23 lbs)
Temperature	+ Operating Temperature: 0° to 40° C (32° to 104° F) + Storage Temperature: -10° to 70° C (14° to 158° F)
Humidity	+ Operating Humidity: 10% to 90% non-condensing + Storage Humidity: 5% to 90% non-condensing
EMI/EMC Certification	+ FCC Class A                      + ICES-003 + CE                                      + C-Tick
Safety Certification	+ UL/cUL                              + CB

<sup>1</sup> Applicable to DWS-3026 switch only.



### D-Link Worldwide Offices

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<b>Europe (U. K.)</b>	TEL: 44-20-8955-9000	FAX: 44-20-8955-9001	<b>Czech Republic</b>	TEL: 420-(603)-276-589		<b>Israel</b>	TEL: 972-9-9715700	FAX: 972-9-9715601
<b>Germany</b>	TEL: 49-6196-77990	FAX: 49-6196-7799300	<b>Switzerland</b>	TEL: 41-(0)-1-832-11-00	FAX: 41(0)-1-832-11-01	<b>LatinAmerica</b>	TEL: 56-2-232-3185	FAX: 56-2-232-0923
<b>France</b>	TEL: 33-1-30238688	FAX: 33-1-30238689	<b>Greece</b>	TEL: 30-210-9914 512	FAX: 30-210-9916902	<b>Brazil</b>	TEL: 55-11-218-59300	FAX: 55-11-218-59322
<b>Netherlands</b>	TEL: 31-10-282-1445	FAX: 31-10-282-1331	<b>Luxemburg</b>	TEL: 32-(0)2-517-7111	FAX: 32-(0)2-517-6500	<b>South Africa</b>	TEL: 27-12-665-2165	FAX: 27-12-665-2186
<b>Belgium</b>	TEL: 32(0)2-517-7111	FAX: 32(0)2-517-6500	<b>Poland</b>	TEL: 48-(0)-22-583-92-75	FAX: 48-(0)-22-583-92-76	<b>Russia</b>	TEL: 7-495-744-0099	FAX: 7-495-744-0099 #350
<b>Italy</b>	TEL: 39-02-2900-0676	FAX: 39-02-2900-1723	<b>Hungary</b>	TEL: 36-(0)-1-461-30-00	FAX: 36-(0)-1-461-30-09	<b>Japan</b>	TEL: 81-3-5781-0963	FAX: 81-3-5781-0965
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