D-Link®
Building Networks for People

Product Highlights

Reliable, Secure Network

Self-healing and self-optimizing technology combined with active-backup wireless controller redundancy ensures reliability and performance

Easy Guest Management

Features such as ticket generation, user monitoring, and session extension provide flexible guest management options

Scalable Network Architecture

To meet evolving network demands, access point management can be upgraded from 64 to 256 access points per controller

DWC-2000
Wireless Controller

Features

Network Architecture

• Manage up to 64 wireless access points (APs), upgradable to 256 APs[1] per controller

• Cluster up to 4 controllers, each upgraded to support 256 APs, to manage a maximum of 1,024 wireless APs

• Wireless controller redundancy with 8 units (4+4 active/backup) for optimal reliability

Robust Network Security

• Wireless Intrusion Detection System (WIDS)

• Rogue AP detection & classification

• Captive portal

• WPA Personal/Enterprise, WPA2 Personal/ Enterprise, WEP

• IEEE 802.1x port-based network access control

Guest Management

• Ticket generation

• Payment gateway

• Account monitoring and extension

The D-Link DWC-2000 Wireless Controller is a centralized wireless LAN manager designed specifically for campus, hospitality, and medium-to-large enterprise environments. With the ability to manage up to 64 (upgradable to 256[1]) wireless access points, and up to a maximum of 1,024 wireless access points in a controller cluster, the DWC-2000 is a cost-effective mobility solution suitable for medium-to-large scale deployments. Its auto-managed AP discovery and single point management allow customers to acquire an enterprise-class system without the burden of maintaining massive and complex configurations.

Simplified Deployment and Management

Using the intuitive setup wizard, the DWC-2000 can be easily configured for any network. Centralized management of remote access points via a simple interface provides administrators with the convenience of automatically discovering compatible D-Link wireless access points, adding them to the managed access point list, and performing one-time configurations. The network administrator can use the controller clustering feature to easily log into one wireless controller and apply configuration changes to other access points in the group.

The web interface dashboard displays real-time status information of all access points and associated client stations, allowing for efficient network resource management. Furthermore, the graphical widgets on the dashboard can be customized to provide various client and network statistics at a glance. Combined with system alarms and statistical reports on managed access points, the DWC-2000 provides a central platform that allows administrators to effectively optimize and manage their wireless network environment.

Guest Control and Management

The DWC-2000 integrates guest management features that deliver a secure and easy solution for managing guest access to a private or public network. Each issued temporary account (ticket) is accompanied by time or bandwidth-limited Internet access privileges. The guest management feature allows administrators to generate a batch of temporary accounts and provide account details to guests via printout. Administrators can monitor and manually adjust the bandwidth and time limit for each new issued account ticket. The DWC-2000 furthermore allows administrators to set up payment gateways, allowing users to purchase network access online using electronic payments.

Robust and Optimized Network

The DWC-2000 features self-organizing, self-optimizing, and self-healing network capabilities to increase the stability of the entire wireless network. A maximum of 4+4 wireless controller redundancy and AP provisioning automatically transfers AP management from a failed controller to the a backup controller in emergency scenarios, providing optimal reliability. Through regular radio scanning and performance analysis, the DWC-2000 automatically adjusts radio channels and transmitting power periodically to avoid interference and keep the wireless network optimized. In the event of a sudden loss of wireless signal caused by a "dead" access point, the DWC-2000 will increase the transmission output power of neighboring access points to expand RF coverage to maintain a reliable, high performance network.
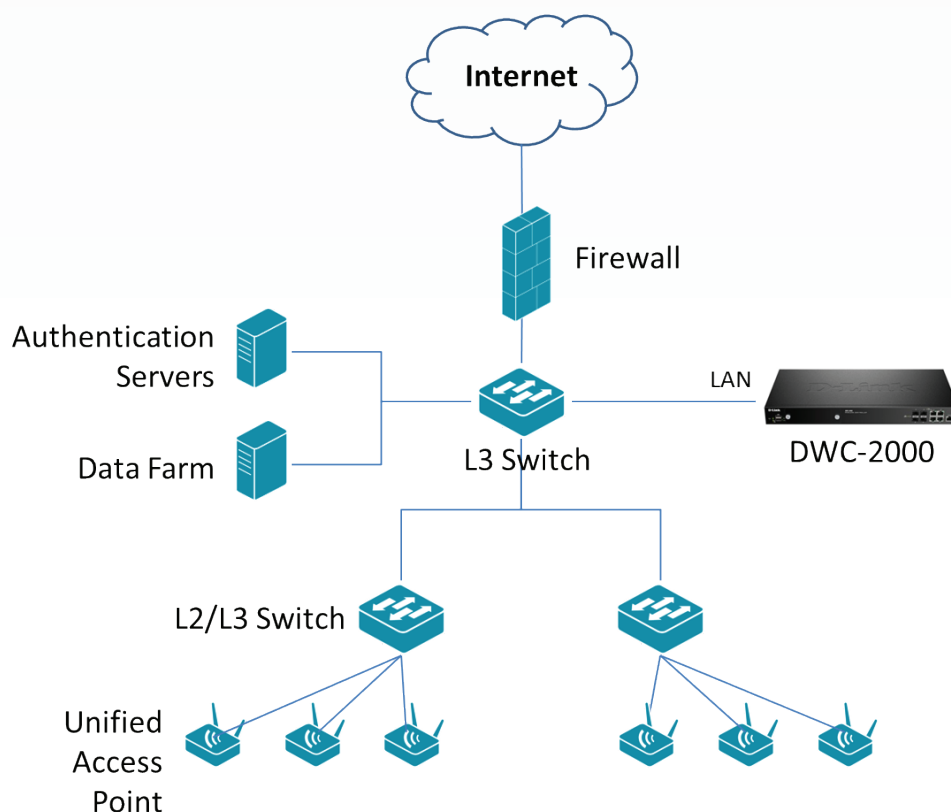
Comprehensive Security

The DWC-2000 provides a comprehensive wireless security solution for easy integration with any network. The Wireless Intrusion Detection System (WIDS) feature detects rogue access points, rogue clients, and can detect wireless threats, preventing potential breaches and illegal access before any damage is done to the network. In addition to fundamental wireless security, the captive portal feature allows administrators to block clients from accessing the network until their identities are verified. The captive portal authentication servers cover local, RADIUS, LDAP, POP3, and Microsoft Active Directory. These client authentication and authorization layers also create a robust security barrier to avoid attacks from within the network.

High Scalability, Availability, and Flexibility

To address the constantly growing scale and needs of business networks, the DWC-2000 offers several optional features to increase the capacity and flexibility of your wireless network. Administrators can purchase D-Link's Business Wireless Plus license packs to upgrade the DWC-2000 and increase the supported number of manageable access points, depending on the needs of the network. By default, the DWC-2000 can manage up to 64 access points, which can be expanded to 256 access points per controller. With the DWC-2000, administrators can scale their wireless network to meet higher demands as business grows.

Example of a L2/L3 network implementation in medium to large environments

Technical Specifications

Interface

Ports	• 4 x 10/100/1000 Mbps RJ-45 ports • 2 x USB 2.0 ports	• 4 x 100/1000 Mbps SFP combo ports • 1 x 10/100/1000 Mbps console port
Port Standards & Functions	• IEEE 802.3 Ethernet • IEEE 802.3u 100BASE-TX/FX Fast Ethernet • IEEE 802.3ab 1000BASE-T Gigabit Ethernet	
Maximum Access Points per Unit	• 64 (default)	• 256[1] (upgraded)
Maximum Access Points per Cluster	• 256 (default)	• 1,024[1] (upgraded)
Concurrent Captive Portal Authentication Users	• 2048	

Physical/Environmental

LED Indicators	• Speed (per 10/100/1000 Mbps port)	
Dimensions (W x D x H)	• 440 x 310 x 44 mm (17.3 x 12.2 x 1.73 in)	
Power Supply	• 100-240 V AC, 50-60 Hz internal power supply	
Max. Power Consumption	• 26.95 W	
Temperature	• Operating: 0 to 40 °C (32 to 104 °F)	• Storage: -20 to 70 °C (-4 to 158 °F)
Operating Humidity	• 5% to 95%, non-condensing	
Emission (EMI)	• FCC Class A • C-Tick	• CE Class A • IC
Safety	• cUL	• LVD (EN60950-1)

Software

VLAN	• VLAN group • Up to 255 entries • Subnet-based VLAN	• 802.1q VLAN tagging • Port-based VLAN
Roaming	• Fast roaming • Intra/inter-subnet roaming	• Intra/inter-controller roaming

Security	• Wireless security
	  • WEP
	  • Dynamic WEP
	  • WPA personal/enterprise
	  • WPA 2 personal/enterprise
	• LAN security
	  • 802.1x port-based access control and guest VLAN
		• Wireless Intrusion Detection System (WIDS)
		  • Rogue and valid AP classification
		  • Rogue AP mitigation
		• Authentication
		  • Captive portal
		  • MAC authentication

Management	• Web-based GUI • HTTP	• SNMP v1/v2c/v3

Access Point Management	• AP discovery & control
	  • Layer 2
	  • Layer 3
	• AP monitoring
	  • Managed AP
	  • Rogue AP
	  • Authentication Fail AP
	  • Standalone AP
		• Client monitoring
		  • Authenticated client
		  • Rogue client
		  • Authentication fail client
		  • Ad-hoc client
		• Centralized RF/security policy management

User Account Management	• Permanent account authentication method
	  • Local database
	  • External RADIUS
	  • External POP3
	  • External LDAP
	• Payment gateways
	  • Authorize.net
	  • Paypal
		• Temporary account authentication method
		  • Local database
		• Temporary account creation
		  • Single or batch account generation by system with customized active or usage expired time

Ordering Information

Part Number	Description
DWC-2000	Wireless Controller

Compatible D-Link Wireless Access Points

DWL-8620AP/ DWL-8620APE/ DWL-6620APS	802.11a/g/n/ac Wave 2 Unified Concurrent Dual-band Access Point
DWL-7620AP	802.11a/g/n/ac Wave 2 Unified Concurrent Tri-band Access Point
DWL-8710AP	802.11a/g/n/ac Unified Concurrent Dual-band Outdoor Access Point
DWL-8610AP	802.11a/g/n/ac Unified Concurrent Dual-band Access Point
DWL-6700AP	802.11a/g/n Unified Concurrent Dual-band Outdoor Access Point
DWL-6610AP/ DWL-6610APB1/ DWL-6610APE	802.11a/g/n/ac Unified Concurrent Dual-band Access Point
DWL-3610AP	802.11a/g/n/ac Unified Selectable Dual-band Access Point
DWL-8600AP/ DWL-6600AP	802.11a/g/n Unified Concurrent Dual-band Access Point
DWL-3600AP/ DWL-2600AP	802.11g/n Unified Access Point

Compatible D-Link Business Wireless Plus License

DWC-2000-AP32/DWC-2000-AP32-LIC	Enable management of 32 additional APs
DWC-2000-AP64/DWC-2000-AP64-LIC	Enable management of 64 additional APs
DWC-2000-AP128/DWC-2000-AP128-LIC	Enable management of 128 additional APs

[1]The number of additional APs available for management depends on your license type.

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