D-Link
Building Networks for People

Product Highlights

Reliable, Secure Network

Self-healing and self-optimizing technology combined with 4 + 4 wireless controller redundancy and RF scanning ensures reliability and performance

Easy Guest Management

Features such as account (ticket) generation, user monitoring, and session extension provide extensive guest management options

Scalable Network Architecture

To meet evolving network demands, access point management can be upgraded from 12 to 66 APs per controller

DWC-1000
Wireless Controller

Features

Networking Architecture

- Manage up to 12 wireless access points; upgradable to 66 APs[1] per controller
- Cluster up to 4 units to manage a maximum of 264 wireless APs with fully upgraded licenses[1]
- Wireless controller redundancy with 8 units (4+4 active/backup) for optimal reliability

Robust Security

- Wireless Intrusion Detection System (WIDS)
- Rogue AP detection and classification
- Captive portal
- WPA/2 Personal/Enterprise, WEP
- Firewall Policy[2]
- IPSec/PPTP/L2TP/SSL VPN server[2]
- Web content filtering[2]

Fault Tolerance

- Optional port traffic failover[2]
- Outbound load balancing[2]

The D-Link DWC-1000 Wireless Controller is a centralized wireless LAN manager developed specifically for campuses, branch offices, and small-to-medium businesses (SMBs). With the ability to manage up to 12 wireless access points (upgradable to 66) and a maximum of 264 wireless access points in a controller cluster, the DWC-1000 is a cost-effective mobility solution for small to medium-size 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.

Robust and Optimized Network

The DWC-1000 features a self-organizing, self-optimizing, and self-healing network capability to increase the stability of the entire wireless network. With interval-based radio scanning and performance analysis, the DWC-1000 automatically adjusts radio channels and output power periodically to avoid interference and keep the wireless network in an optimized state. In the event of a sudden loss of wireless signal caused by a "dead" access point in the network, the DWC-1000 will increase the transmit output power of neighboring access points to expand RF coverage.

Comprehensive Security

The DWC-1000 provides a comprehensive wireless security solution for any network. On the wireless side, the DWC-1000 detects rogue access points and rogue clients using a Wireless Intrusion Detection System (WIDS), as well as anticipating wireless threats, preventing any potential damage and unauthorized access to the network. Other fundamental wireless security features include WPA Personal/Enterprise, WPA2 Personal/Enterprise, WEP, and MAC authentication to determine the identity of wireless devices. The captive portal feature allows administrators to block clients from accessing the network until the clients verify their identities. These authentication and authorization layers also provide a robust security barrier to protect against attacks from within the network.

High Scalability, Availability, and Flexibility

To address the constantly growing scale and needs of business networks, the DWC-1000 offers a flexible selection of expansion features: administrators can purchase a Business Wireless Plus license to upgrade the capabilities of the DWC-1000. D-Link offers two types of Business Wireless Plus licenses: an AP license upgrade and a VPN license upgrade. The AP license upgrade increases the number of manageable access points. By default, the DWC-1000 can manage up to 12 access points. Purchasing an AP license will upgrade this to 66 access points per controller. The VPN license upgrade enables the DWC-1000 to provide VPN, router, and firewall functionality. The firewall function allows administrators to control network access by setting classification policies. The dual option ports provide link failover and provide Internet connection redundancy to ensure uninterrupted Internet connectivity. The virtual private network (VPN) features provide secure remote control to manage access points in branch offices. Site-to-site VPN tunnels use the IP Security (IPSec) Protocol, Point-to-Point Tunneling Protocol (PPTP), or Layer 2 Tunneling Protocol (L2TP) to facilitate branch office connectivity through encrypted virtual links. In addition, the Secure Sockets Layer (SSL) VPN tunnels empower your mobile users by providing remote access to a central corporate database.

Simplified Management

Centralized remote control of managed access points provides a simple way to automatically discover compatible D-Link wireless access points, add them to the managed access point list, and configure them with one-time deployment settings. With the controller clustering feature, the administrator can easily log into one wireless controller and perform essential configurations on other wireless controllers in the cluster group. The real-time monitoring of access points and associated client stations enable the efficient utilization of network resources. System alarm and statistics reports on managed access points also help the administrator to use the DWC-1000 to manage, control, and optimize network performance.

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DWC-1000 Wireless Controller

Technical Specifications		
Hardware Version	• A1/B1	• C1
General		
Number of Ports	• 4 x 10/100/1000 Mbps ports • 2 x USB 2.0 ports	• 2 x 10/100/1000 Mbps option ports[3] • 1 x 10/100/1000 Mbps console port
Port Standards & Functions	• IEEE 802.3 for 10BASE-T • IEEE 802.3u for 100BASE-TX/FX • IEEE 802.3ab for 1000BASE-T Gigabit Ethernet	
Maximum Access Points pet Unit	• Default: 6 • Upgraded:24	• Default: 12 • Upgraded: 66
Maximum Access Points per Cluster	• Default: 24 • Upgraded: 96	• Default: 66 • Upgraded: 264
Concurrent Captive Portal Authentication Users	• 512	• 1024
Dedicated IPSec VPN Tunnels[2]	• 70	
Dedicated PPTP/L2TP VPN Tunnels[2]	• 25	
Dedicated SSL VPN Tunnels[2]	• 20	
Physical		
LED Indicators	• Speed (per 10/100/1000 Mbps port)	
Dimensions (L x W x H)	• 280 x 180 x 44 mm (11.02 x 7.09 x 1.73 in)	
Power Supply	• Internal power supply 12 V DC/2.5 A	• External power supply 12 V DC/2.5 A
Max. Power Consumption	• 19.3 W	• 12.6 W
Temperature	• Operation: 0 to 40 °C (32 to 104 °F)	• Storage: -20 to 70 °C (-4 to 158 °F)
Humidity	• 5% to 95% non-condensing	
EMI	• FCC Class B • VCCI • IC	• CE Class B • C-Tick
Safety	• cUL	• LVD (EN60950-1)

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Software		

VPN & SSL VPN	• VPN encryption
	  • DES
	  • 3DES
	  • AES
	  • Twofish
	  • Blowfish
	  • Cast-128
	  • NULL
	• SSL VPN encryption
	  • DES
	  • 3DES
	  • AES
		• IPSec NAT Traversal
		• IP Encapsulating Security Payload (ESP)
		• VPN tunnel keep alive
		• Hub and spoke
		• Dead Peer Detection
		• IP Authentication Header (AH)
		• SSL VPN Message Integrity
		  • MD5
		  • SHA1

VLAN	• VLAN Group • Up to 64 entries • Subnet-based VLAN	• 802.1g VLAN tagging • Port-based VLAN
Networking	• Route failover	• Outbound load balancing
Roaming	• Fast Roaming • Intra-subnet/inter-subnet roaming	• Intra-controller/inter-controller roaming

Firewall System	• Policy
	  • Supports 100 rules per features
	  • Supports up to 600 firewall rules
	• Web content filtering
		• Dynamic route RIPv1/v2
		• Dynamic DNS
		• NAT, PAT

Security	• Wireless security
	  • WEP
	  • Dynamic WEP
	  • WPA personal/enterprise
	  • WPA 2 personal/enterprise
	• LAN Security
	  • 802.1x port-based access control & guest VLAN
	• Payment gateways
	  • Paypal
	  • Authorize.net
		• 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	• Command Line Interface (CLI)

Access Point Management	• Compatible Managed APs
	  • DWL-8710AP
	  • DWL-8610AP
	  • DWL-8600AP
	  • DWL-6700AP
	  • DWL-6610AP
	  • DWL-6600AP
	  • DWL-3610AP
	  • DWL-3600AP
	  • DWL-2600AP
	• 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

Order Information	
Part Number	*Description*
DWC-1000	Wireless Controller
Compatible Wireless Access Points	
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	802.11a/g/n/ac unified concurrent dual-band access point
DWL-8600AP	802.11a/g/n unified concurrent dual-band access point
DWL-6600AP	802.11a/g/n unified concurrent dual-band access point
DWL-3610AP	802.11a/g/n/ac unified selectable dual-band access point
DWL-3600AP	802.11g/n unified access point
DWL-2600AP	802.11g/n unified access point
Compatible Business Wireless Plus Licenses	
DWC-1000-AP6/AP6-LIC	Enables management of 6 additional access points
DWC-1000-AP18/AP18-LIC	Enables management of 18 additional access points
DWC-1000-VPN/VPN-LIC	Enables VPN, router, and firewall functions
DWC-1000-WCF-12/WCF-12-LIC	Enables the dynamic web content filtering (WCF) feature[4,5]

[1] The number of managed APs can be increased through purchase of license upgrades.
[2] Features enabled through purchase of the VPN/Router/Firewall license upgrade.
[3] The first option port is enabled by default. The second option port can be enabled by purchasing the VPN/Router/Firewall license upgrade.
[4] The DWC-1000 WCF-12 license is valid for one year.
[5] Ensure that the DWC-1000 VPN license is activated before activating the WCF license.

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