### **Product Highlights**

Scalable AP Support 6 AP support out of box, scalable to 24 with additional 6 AP licenses.

Self Optimizing Wireless Network Periodic RF and power adjustment avoids interference from other APs.

Upgradable VPN/Firewall features Additional VPN Firewall and Web Content Filtering licenses upgrade the DWC-1000 into an all-in-one Business Class Router and Wireless Controller.



## DWC-1000

# **Unified Wireless Controller**

### Features

Network Architecture

• Manage up to 6 wireless APs, upgradable to 24 APs<sup>1</sup> per controller maximum 96 APs<sup>1</sup> per Peer Group (up to 4 controllers)

#### **Robust Network Security**

- Wireless Instruction Detection System (WIDS)
- Rogue AP Detection & Classification
- Captive Portal
- WEP, WPA Personal/Enterprise, WPA2 Personal/Enterprise

#### Fault Tolerance

- Option ports WAN traffic failover<sup>2</sup>
- Outbound load sharing<sup>2</sup>

#### **Compatible D-Link Wireless Access Points**

- DWL-8600AP (802.11a/b/g/n)
- DWL-6600AP (802.11a/b/g/n)
- DWL-3600AP (802.11b/g/n)
- DWL-2600AP (802.11b/g/n)

### Overview

The D-Link DWC-1000 Unified 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 six wireless access points (upgradable to 24) and a maximum of 96 wireless access points in a Peer Group, the DWC-1000 is a cost-effective mobility solution for small to medium-scale environments. Its auto-managed AP discovery and single point management allow customers to acquire an enterprise class system without the burden of executing massive and complex configurations. With a robust and comprehensive security detection system, the DWC-1000 also enables managed APs to block potential attacks from unauthorized users and devices, especially for wireless environments.

### **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 periodic radio scanning and performance analyzing, the DWC-1000 automatically adjusts radio channels and power to avoid interference and keep the wireless network in an optimized state. To make up for a sudden RF signal vacuum created by any "dead" access point, 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, powered by a Wireless Instruction Detection System (WIDS), the DWC-1000 can detect rogue access points and rogue clients as well as anticipate wireless threats, preventing any potential damage and illegal access. In addition to other fundamental wireless security features including WEP, WPA Personal/Enterprise, WPA2

## **DWC-1000** Wireless Controller

Network Implementation within L2/L3 Network in an SMB Environment









### **Limited Lifetime Warranty**

D-Link offers a Limited Lifetime Warranty on the DWC-1000 Unified Wireless Controller to further its commitment to product quality and long-term customer confidence. The Limited Lifetime Warranty applies for as long as the original customer owns the product or five (5) years after product discontinuance, whichever occurs first. Personal/Enterprise, and MAC Authentication to determine the identity of wireless devices, the Captive Portal feature allows you to block clients from accessing the network until the clients verify their identities. This double-layer authentication and authorization provides a robust security fence to also protect against attacks from within the network.

### High Scalability, Availability, and Flexibility

Companies frequently change in terms of size and organizational structure. To address such changing needs, the DWC-1000 offers a new dimension in feature selections: administrators can purchase licenses to upgrade the DWC-1000's capabilities. D-Link offers three types of Business Wireless Plus licenses: an AP license upgrade, a VPN license upgrade, and a Web Content Filtering (WCF) license upgrade.

The AP license upgrade increases the number of manageable access points. The DWC-1000 Wireless Controller manages up to six access points by default. After adding AP license upgrades, it can manage up to 24 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 Internet access. The virtual private network (VPN) features provide secure remote control to manage access points in branch offices. Site-to-site VPN tunnels can 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.

Web traffic is one of the biggest sources for security issues and misuse of the Internet. Inappropriate surfing habits can expose a network to many security threats as well as legal and regulatory liabilities. Productivity and Internet bandwidth can also be impaired. The DWC-1000 supports various filtering mechanisms for removing web content that is deemed inappropriate according to a web usage policy. Active Content Handling can be used to "scrub" web pages of content that the administrator considers a potential threat, such as ActiveX objects and Java Applets. Static Content Filtering provides a means for manually classifying web sites as "good" or "bad". This is also known as URL blacklisting and whitelisting. And Dynamic Content Filtering<sup>4</sup> is a powerful feature that enables the administrator to allow or block access to web sites depending on the category they have been classified into by an automatic classification service. Dynamic content filtering requires a minimum of administration effort and has very high accuracy.

### **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 configuration dispatch settings. With the controller Peer Group feature, the administrator can easily log into one wireless controller and perform essential configurations on others within the group. The real-time monitoring of access points and associated client stations enables the efficient utilization of network resources. System alarms and statistics reports on managed access points also help the administrator use the DWC-1000 to manage, control, and optimize network performance.

## **Technical Specification**

Interface		
Ethernet	2 10/100/1000 Option Ports <sup>3</sup> 4 10/100/1000 LAN Ports	
USB	2 USB 2.0 Ports	
Console	RJ-45	
Capacity and Performance		
Maximum Access Points per unit (default/upgrade)	6/241	
Maximum Access Points per peer group (default/upgrade)	24/961	
Concurrent Captive Portal authentication users (Wired/Wireless)	124/200	
Dedicated IPSec VPN tunnels <sup>2</sup>	70	
Dedicated PPTP/L2TP VPN tunnels <sup>2</sup>	16	
Dedicated SSL VPN tunnels <sup>2</sup>	20	
Access Point Managment		
Compatible Managed APs	DWL-8600AP DWL-6600AP 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	Supported	
Roaming		
Fast Roaming	Supported	
Intra-controller/Inter-controller roaming	Supported	
AP Monitoring	Supported	
Intra-subnet/Inter-subnet roaming	Supported	

## DWC-1000 Wireless Controller

Security		
Wireless Security	WEP, Dynamic WEP WPA Personal/Enterprise WPA2 Personal/Enterprise	
Wireless Instruction Detection & Prevention System (WIDS)	Rogue and Valid AP Classification Rogue AP Mitigation	
LAN Security	802.1X port-based access control and guest VLAN	
Authentication	Captive Portal MAC Authentication	
VLAN		
VLAN Group	Up to 64 entries	
802.1q VLAN Tagging	Supported	
Subnet-based VLAN	Supported	
Port-based VLAN	Supported	
Firewall <sup>2</sup>		
Firewall Throughput (RFC2544)	130 Mbps	
AES Throughput	70 Mbps	
Concurrent Sessions	60,000	
New Sessions per second	600/s	
Policy	Each feature supports 100 rules. Supports up to 600 firewall rules.	
Dynamic Route	RIPv1, RIPv2, OSPF	
Dynamic DNS	Supported	
NAT, PAT	Supported	
Web Content Filtering	Static URL Keywords 32 Web content categories <sup>4</sup>	
Network <sup>2</sup>		
Route Failover	Supported	
Outbound Load Sharing	Supported	
Virtual Private Network (VPN)	2	
Encryption Methods	DES, 3DES, AES, Twofish, Blowfish, CAST-128, NULL	
IPSec NAT Traversal	Supported	
Dead Peer Detection	Supported	
IP Encapsulating Security Payload (ESP)	Supported	
IP Authentication Header (AH)	Supported	
VPN Tunnel Keep Alive	Supported	
Hub and Spoke	Supported	

# **DWC-1000** Wireless Controller

SSL Virtual Private Network (SSL VPN) <sup>2</sup>			
SSL Encryption Methods	S	DES, 3DES, AES	
SSL Message Integrity		MD5, SHA1	
System Manager	ment		
Web-based User Interface		НТТР	
Command Line Interface		Supported	
SNMP		v1, v2c, v3	
Physical & Envir	onment		
Power Supply		Internal power supply: 100-240 VAC, 50/60 Hz	
Max. Power Consumption		19.3 W	
Dimensions		7.09 x 11.02 x 1.73 inches, (180 x 280 x 44 mm)	
Weight		3.74 Lbs. (1.7 Kg)	
Operating Temperature		32 to 104 °F (0 to 40 °C)	
Storage Temperature		-4 to 158 °F (-20 to 70 °C)	
Operating Humidity		10% to 90%	
Storage Humidity		5% to 95%, Non-condensing	
EMI		FCC Class B, CE Class B, VCCI, C-tick, IC	
Safety		cUL, LVD (EN60950-1)	
Warranty		Limited Lifetime <sup>5</sup>	
Ordering Inform	ation		
Product Number	Product Description		
DWC-1000	Unified Wireless Controller		
DWL-8600AP	Unified Concurrent Dual-band Access Point 802.11a/b/g/n		
DWL-6600AP	Unified Concurrent Dual-band Access Point 802.11a/b/g/n		
DWL-3600AP	Unified Access Point 802.11b/g/n		
DWL-2600AP	Unified Access Point 802.11b/g/n		
DWC-1000-AP6-LIC	Enables management of 6 additional APs		
DWC-1000-WCF-12-LIC	Enables web content filtering (WCF), 12-month license		
DWC-1000-VPN-LIC	Enables VPN, router, and firewall functions		

<sup>1</sup> The number of managed APs can be increased through purchase of license upgrades.<sup>2</sup> Features enabled through purchase of the VPN/Router/Firewall license upgrade.<sup>3</sup> The first Option port is enabled by default. The second Option port is enabled through purchase of the VPN/Router/Firewall license upgrade.<sup>3</sup> Limited Lifetime Warranty available only in the U.S.A. and Canada.

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