D-Link®

Building Networks for People

DWC-1000
Wireless Controller

Features

Network Architecture
- Manage up to 6 wireless Access Points (APs), upgradable to 12 Access Points (APs)[1] per controller
- Control up to 24 wireless APs, maximum 48 Access Points (APs)[1] per cluster

Robust Network Security
- Wireless Instruction Detection System (WIDS)
- Rogue Access Points (APs) Detection & Classification
- Captive Portal
- Guest Management
- WEP, WPA Personal/Enterprise, WPA2 Personal/Enterprise
- 802.1X User authentication
- Firewall Policy, IPSec/PPTP/L2TP/SSL VPN[2]
- MAC address filtering

Fault Tolerance
- Option ports traffic failover
- Outbound load balancing

Sharing
- USB port for file and printer sharing

The D-Link DWC-1000 Wireless Controller is a centralised wireless LAN manager developed specifically for campuses, branch offices, and businesses that are looking for an easy to use, scalable solution to manage and configure their wireless network. The DWC-1000 is also an ideal solution for businesses that wants to provide guest wireless Internet access in public locations. With the ability to manage up to six wireless Access Points (upgradable to 12) and a maximum of 48 wireless Access Points in a Controller Cluster, 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 unauthorised users and devices, especially for wireless environments. The Guest Management service can generate accounts, control usage and manage access security to allow businesses to provide easy to set up yet secure wireless Internet access in public locations such as hotels, coffee shops or airports.

Robust and Optimised Network

The DWC-1000 features a self-organising, self-optimising, and self-healing network capability to increase the stability of the entire wireless network. With regular-based radio scanning and performance analysing, the DWC-1000 automatically adjusts radio channels and power periodically to avoid interference and keep the wireless network in an optimised state. To make up for a sudden Radio Frequency (RF) signal vacuum created by any faulty Access Point, the DWC-1000 will increase the transmit output power of neighbouring Access Points to expand RF coverage.

Comprehensive Security

The DWC-1000 provides a comprehensive wireless security solution for any network. On the wireless side, empowered by a Wireless Instruction Detection System (WIDS), the DWC-1000 detects rogue Access Points and rogue clients as well as anticipates wireless threats, preventing any potential damage and illegal access. In addition to other fundamental wireless security features including WEP, WPA Personal/ Enterprise, WPA2 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 authorisation provides a robust security fence to also protect against attacks from within the network.

High Scalability, Availability, and Flexibility

Many companies are frequently changing in terms of size and organisational structure. To address such changing needs, the DWC-1000 offers a new dimension in feature selections: administrators can purchase additional licenses to upgrade the DWC-1000's capabilities. D-Link offers two types of licenses: an AP license upgrade and a VPN license upgrade. Both license options offer scalability, flexibility and increased functionality for potential business growth.

The AP license upgrade increases the number of manageable Access Points. The DWC-1000 Wireless Controller manages up to six access points by default and after AP license upgrading, 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 use IP Security (IPSec) Protocol, Point-to-Point Tunneling Protocol (PPTP), or Layer 2 Tunneling Protocol (L2TP) to facilitate branch office

Simplified Management

Centralised remote control of managed Access Points provide a simple way to automatically discover compatible D-Link Wireless Access Points, add them into the managed access point list, and configure them with one-time configuration dispatch settings. With the controller clustering 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 enable the efficient utilisation of network resources. System alarms and statistics reports on managed Access Points also help the administrator to use the DWC-1000 to manage, control, and optimise network performance. Furthermore, the DWC-1000 supports various D-Link indoor managed Access Points, including dual band and single band.

If the worst should happen to your network you need the very best support and fast. Downtime costs your business money. D-Link Assist maximises your uptime by solving technical problems quickly and effectively. Our highly trained technicians are on standby around the clock, ensuring that award-winning support is only a phone call away.

With a choice of three affordable service offerings covering all D-Link business products, you can select the package that suits you best:

D-Link Assist Gold - for comprehensive 24-hour support

D-Link Assist Gold is perfect for mission-critical environments where maximum uptime is a high priority. It guarantees four hour around-the-clock response. Cover applies 24/7 for every day of the year including holidays.

### D-Link Assist Silver - for prompt same-day assistance

D-Link Assist Silver is designed for 'high availability' businesses that require rapid response within regular working hours. It provides a four hour response service Monday to Friday from 8am to 5pm, excluding holidays.

D-Link Assist Bronze - for guaranteed response on the next business day

D-Link Assist Bronze is a highly cost-effective support solution for less critical environments. Response is guaranteed within eight business hours Monday to Friday from 8am to 5pm, excluding holidays.

D-Link Assist can be purchased together with any D-Link business product. So whether you're buying switching, wireless, storage, security or IP Surveillance equipment from D-Link, your peace of mind is guaranteed. D-Link Assist also offers installation and configuration services to get your new hardware working quickly and correctly.

Network Implementation within L2/L3 Network in a business environment
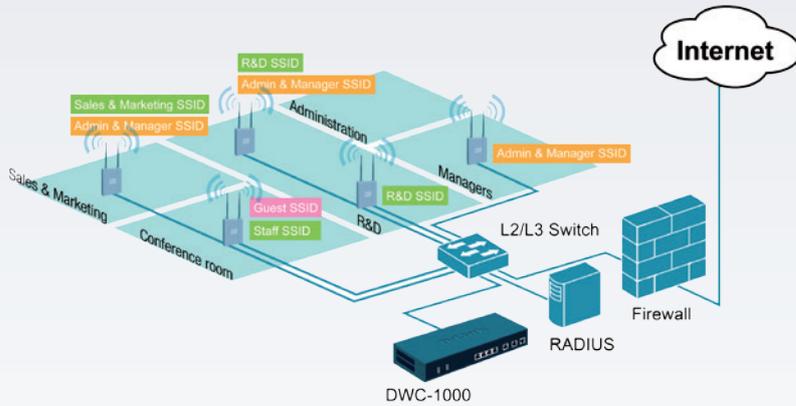
Remotely Managed AP Implementation

(VPN/Router/Firewall license upgrade required)
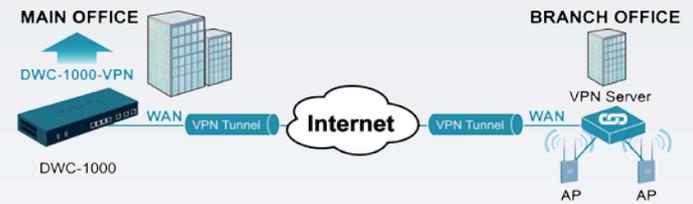
Technical Specifications

Interface

Ethernet	• 2 10/100/1000 Option (WAN) Ports[3]	• 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 / 12[1]
Maximum Access Points per cluster (default/ upgrade)	• 24 / 48[1]
Concurrent Captive Portal authentication users	• 512
Dedicated IPSec VPN tunnels[2]	• 70
Dedicated PPTP/ L2TP VPN tunnels[2]	• 25
Dedicated SSL VPN tunnels[2]	• 20

Access Point Management

Compatible Managed APs	• DWL-8610AP • DWL-8600AP • DWL-6700AP	• 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	
Centralised RF/Security Policy Management	• Supported	

Roaming

Fast Roaming	• Supported
Intra-controller/Inter-controller roaming	• Supported
Intra-subnet/Inter-subnet roaming	• Supported

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	• Guest Management[4]

VLAN		
VLAN Group	• Up to 255 entries	
802.1q VLAN Tagging	• Supported	
Subnet-based VLAN	• Supported	
Port-based VLAN	• Supported	

Firewall System[2]		
Policy	• Each feature supports 100 rules	• Supports up to 600 firewall rules
Dynamic Route	• RIPv1, RIPv2	
Dynamic DNS	• Supported	
NAT, PAT	• Supported	
Web Content Filtering	• Static URL	• Keywords

Networking	
Route Failover	• Supported
Outbound Load Balancing	• 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

SSL Virtual Private Network (SSL VPN)[2]	
SSL Encryption Methods	• DES, 3DES, AES
SSL Message Integrity	• MD5, SHA1

System Management	
Web-based User Interface	• HTTP
Command Line Interface	• Supported
SNMP	• v1, v2c, v3

Physical & Environment	
Power Supply	• Internal power supply: DC 12V/2.5A
Max. Power Consumption	• 19.3 W
Dimension	• 180 x 280 x 44 mm (7.09 x 11.02 x 1.73 inches)
Operation Temperature	• 0 to 40 °C (32 to 104 °F)
Storage Temperature	• -20 to 70 °C (-4 to 158 °F)
Operation Humidity	• 5% to 95%, Non-condensing
EMI	• FCC Class B, CE Class B, VCCI, C-tick, IC
Safety	• cUL, LVD (EN60950-1)

Compatible D-Link Wireless Access Points	
DWL-8610AP	Unified Wireless AC1750 Simultaneous Dual-Band PoE Access Point
DWL-8600AP	Unified Wireless N Simultaneous Dual-Band PoE Access Point
DWL-6700AP	Unified Wireless N Simultaneous Dual-Band PoE Outdoor Access Point
DWL-6600AP	Unified Wireless N Simultaneous Dual-Band PoE Access Point
DWL-3600AP	Unified Wireless N PoE Access Point
DWL-2600AP	Unified Wireless N PoE Access Point
Compatible Licenses	
DWC-1000-AP6-LIC	Enables management of 6 additional APs
DWC-1000-VPN-LIC	Enables VPN, router, and firewall functions

¹The number of managed APs can be increased through purchase of license upgrades. Only available in groups of 6 licenses per upgrade.
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 is enabled through purchase of the VPN/Router/Firewall license upgrade.

For more information: www.dlink.com

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