

Business Solutions Guide



Contents



1 Business Solution

- 2 Key Solution

5 Switches

- 6 Gigabit Ethernet Layer 3 Chassis Switches DES-7200 Series

xStack Switches

- 8 Gigabit Ethernet xStack Layer 3 Core Switches DGS-3600 Series
- 10 Fast Ethernet xStack Layer 3 Core Switches DES-3800 Series
- 12 Gigabit Ethernet xStack Layer 2 Edge Switches DGS-3400 Series
- 14 Gigabit Ethernet xStack Layer 2 Secure Switches DGS-3200 Series
- 16 Fast Ethernet xStack Layer 2 Edge Switches DES-3528/52 Series

Managed Switches

- 18 Fast Ethernet Metro Ethernet Edge Switches DES-3200 Series
- 20 Gigabit Ethernet Entry-Level Managed Switches DGS-3100 Series
- 22 Fast Ethernet Entry-Level Managed Switches DES-3028/52 Series
- 24 Fast Ethernet Entry-Level Managed Switches DES-3000 Series

Smart Switches

- 26 Gigabit Ethernet Web Smart Switches DGS-1210 Series
- 28 Gigabit Ethernet Web Smart Switches DGS-1200 Series
- 30 Fast Ethernet Web Smart Switches DES-1210 Series
- 32 Fast Ethernet Web Smart Switches DES-1200 Series

Unmanaged Switches

- 34 Gigabit Ethernet Unmanaged Switches DGS-1000 Series
- 36 Fast Ethernet Unmanaged Switches DES-1000 Series

Software & Accessories

- 38 Network Management D-View 6.0
- 40 Expansion Modules
- 42 SFP/XFP Transceivers
- 44 Redundant Power Supplies
- 46 Media Converters

Comparison Tables

- 47 Web Smart Switch Selection Matrix
- 48 Chassis Switch Selection Matrix
- 49 Managed Switch Selection Matrix

50 Business Wireless

- 51 Indoor Access Points
- 55 Outdoor Access Points
- 57 Unified Wired/Wireless Access System DWS-3000 Series
- 59 Unified Wired/Wireless Access System DWS-4000 Series

Comparison Tables

- 61 Access Point Selection Matrix
- 62 Unified Switch Selection Matrix

63 Security

- 64 IPS Firewalls
- 66 UTM Firewalls
- 68 Unified Services Routers

Comparison Table

- 70 NetDefend Firewall Selection Matrix

71 IP Surveillance - SecuriCam

- 72 Fixed Network Cameras
- 76 PTZ Network Cameras
- 78 Fixed Dome Network Cameras
- 80 PTZ Dome Network Cameras
- 82 Network Camera Outdoor Enclosures
- 83 Network Camera Accessories
- 84 Network Video Recorders
- 86 Video Encoders
- 88 D-ViewCam Video Management Software (VMS)

Comparison Table

- 90 Network Camera Selection Matrix

91 Network Storage

- 92 Storage Area Network (SAN) Arrays
- Comparison Table
- 94 Network Storage Selection Matrix

95 Network Peripherals

- 96 Power over Ethernet (PoE)

Think more performance, more reliability, more functionality



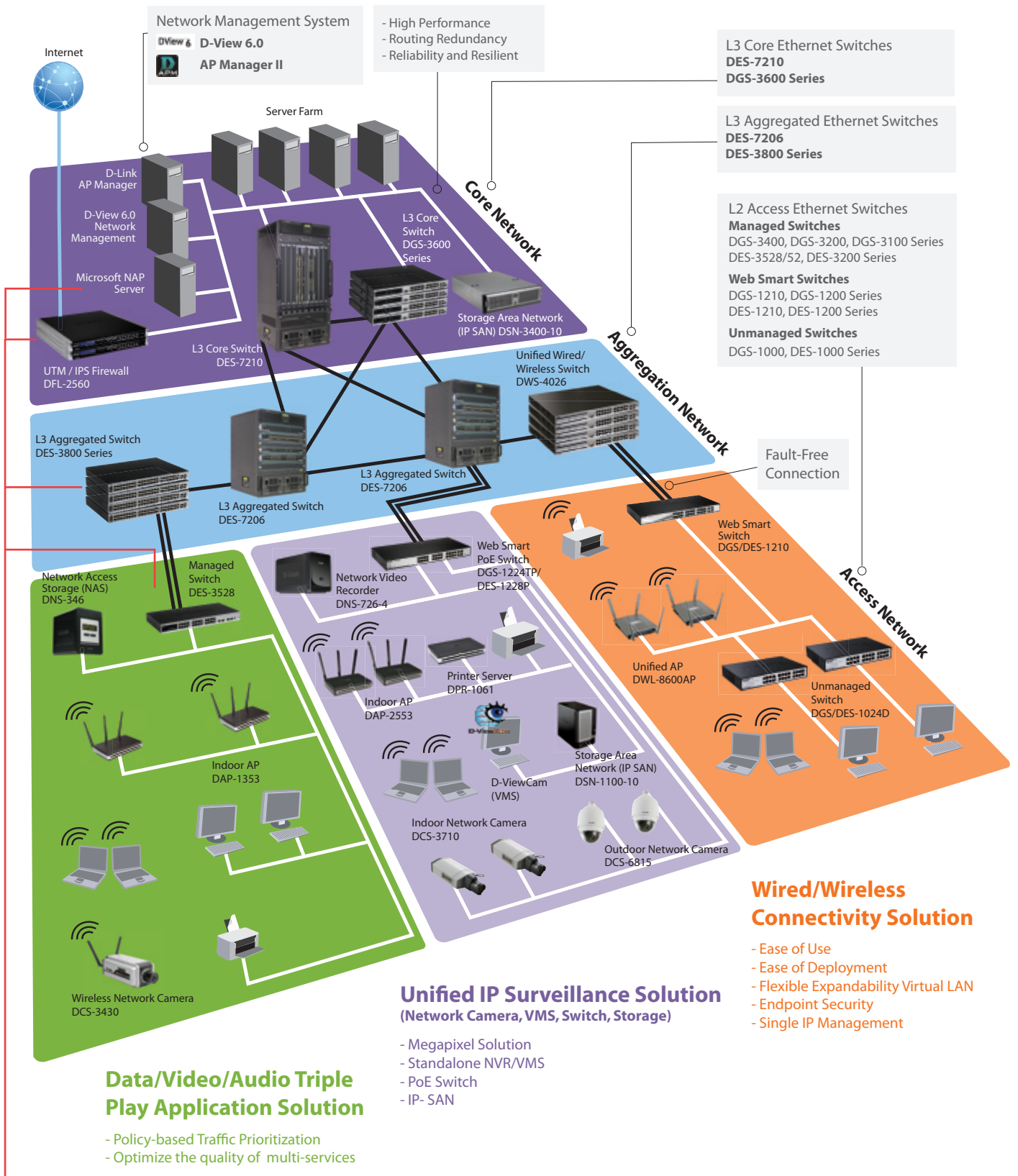
For over 20 years D-Link has been creating complete, end-to-end networking solutions that deliver just that, more. This fact is reflected in a track record of industry-beating growth.

Today D-Link is a billion dollar company with the scale, the resources, the experience and the expertise that the world's most demanding businesses look for.

How has this been achieved? We make sure we stay really close to our customers' businesses and then, because our R&D resources are geared to fast track product development, we provide them with early access to the most advanced solutions possible.

It all adds up to state-of-the-art answers that will really work for your business – D-Link's switching, wireless, security, surveillance, storage and management solutions deliver best-in-class performance. Standardised technology with industry leading functionality integrated into highly flexible, highly reliable and highly secure solutions that are easy to implement, at a price you can afford. Who could ask for more?

Key Solution



End to End Security (E2ES)

- Gateway Security
- Endpoint Security
- Joint Security

Key Solution

D-Link Business Solution provides end-to-end network solution to achieve secure, reliable, easy to manage and high performance network for small, medium to large enterprises.

Access Network

Over the past few years, enterprise access network has seen one of the fastest areas of growth. As technology evolves and user demand increases, enterprise access network is fast turning from a 'traditional' data network to a more complex network with integrated data, voice and multimedia services. D-Link, in meeting the needs of enterprises to have more productive business processes, is therefore providing the following solutions for their access network:

- **Wired/Wireless Connectivity Solution**

D-Link provides wired and wireless solutions for access network infrastructure as the foundation for data communication and other IP-based services in the enterprise network. Core functionalities of these solutions include consistent wireless connectivity, comprehensive network control and secure user authentication. With these solutions, businesses and organizations will be able to have greater flexibility and investment protection through scalable network expansion for future technologies through Gigabit connectivity, such as the 10-Gigabit fibre link connection.

D-Link offers a Unified Wired/Wireless Switching solution which consists of D-Link access point and unified switch. This solution offers premium wireless connectivity options with flexible and easy-to-deploy central management system.

D-Link's unified switch is the managing device for thin access point. It provides centralized AP management and features L2/L3 roaming, automatic wireless channel assignment, and automatic power output adjustment. It offers Wireless Intrusion Detection System (WIDS) which empowers network administrators to detect rogue access points and rogue client. On the wired side, D-Link's unified switch utilized Dynamic ARP Inspection (DAI) and DHCP Snooping to ensure maximum security.

D-Link's unified access points provide features such as Power-over-Ethernet (PoE), choices of operating modes, user authentication, and wireless security. Its high speed dual band wireless IEEE802.11n standard offers Multiple In Multiple Out (MIMO) and wider bandwidth channels that increases the physical transfer rates.

- **Unified IP Surveillance Solution**

D-Link provides a complete IP Surveillance solution which consists of network cameras, video management

software (VMS), storage and Power-over-Ethernet (PoE) switches for network connectivity.

D-Link has a wide range of network cameras and network video recorders (NVR) for this solution. D-Link network cameras consist of fixed, pan-tilt-zoom (PTZ), fixed dome, and PTZ dome cameras with capability for indoor/outdoor, day/night usage. D-Link network cameras support megapixel resolution, 2-way audio, wired or wireless connection, PoE, choices of video format, digital and optical zoom. D-Link network cameras and NVR, together with D-ViewCam software, offers functionalities such as video recording, live viewing, playback, and event management.

D-Link IP Storage Area Network (SAN) arrays provide a reliable network data storage solution using powerful System-on-a-Chip (SoC) design to handle over 80,000 I/Os per second and support terabytes of raw capacity using multiple 1TB hard drives. It can also be used as a backup and recovery device in the network. Large amount of videos and images captured from the network cameras can be stored in such storage devices securely.

D-Link Power-over-Ethernet (PoE) switches are equipped to inject up to 15.4 watts of power per port to network cameras. This eliminates the need to place the cameras within close proximity to a power outlet and minimizes cable clutter.

- **Data/Video/Audio Triple Play Application Solution**

D-Link Web Smart III switches are ideal for deployment in a Voice over IP (VoIP) environment. They support Auto Voice VLAN and Differentiated Services Code Point (DSCP) Quality of Service (QoS) for VoIP application. Auto Voice VLAN will automatically place voice traffic from an IP phone to an assigned VLAN and enhance the VoIP service. This feature can guarantee the quality and security of VoIP traffic.

Aggregation Network

Aggregation network is where each connection from the access network is gathered and terminated. Enterprise network needs reliable redundant, and high performance devices to perform the necessary traffic policing and intermediate routing. D-Link therefore offers a robust solution for the aggregation network with its Layer-3 managed switch and Layer-3 chassis switch. With these devices, D-Link provides fundamental functions for enterprise aggregation network, which include:

- **Intermediate Routing**

This feature is needed for interconnection between segments in the access network, and between the access network and core network. In order to perform this function, D-Link solution provides support for static route, RIP I/II, OSPF and RIPng for IPv6 implementation.

- **Bandwidth Management**

This feature allows the network administrator to allocate different amounts of bandwidth for each service and user, which will lead to more efficient bandwidth usage.

- **Traffic Policing - ACL**

Network traffic passing through the aggregation network will be filtered against defined access control list to eliminate unnecessary and malicious traffic.

- **High Availability**

D-Link provides high availability of aggregation network with redundancy power supply, stacking configuration and Virtual Router Redundancy Protocol (VRRP).

Core Network

As its name implies, core network is where enterprises place their critical information technology resources. Core network makes up the enterprise network backbone. Network connection from the enterprise network (access and aggregation network), server farm, Internet and network management system culminate in core network. Because of its critical role, enterprises need high performance and reliable infrastructure for the core network. In meeting this challenge, D-Link offers its **xStack** Layer-3 switches and Layer-3 chassis switches.

D-Link's core network solution provides high switching capacity with 10-Gigabit connections to ensure high speed and excellent core network performance. In addition, to provide an ideal core network infrastructure, D-Link also enrich this high performance infrastructure with features such as high availability (stacking configuration, VRRP), and routing for IPv4, IPv6 and multicast traffic. Besides providing excellent core network infrastructure, D-Link also provides network management and storage solution for comprehensive core network solution.

D-Link offers two solutions for Centralized Network Management, namely, the AP Manager II and D-View 6.0.

- **Centralized Network Management**

For large scale centralized network management, D-Link provides D-View 6.0 Simple Network Management Protocol (SNMP) software. D-View 6.0 is a centralized management system that covers a wide range of network devices such as access points, managed switches and SNMP capable routers. It allows the network administrator to manage and monitor critical network characteristic such as device configuration, network performance, security and fault tolerance.

- **Centralized Access Point Management**

AP Manager II provides centralized management for up to 20 fat wireless access points. Features supported by AP Manager II include mass configuration, mass firmware upgrade, fault management, real-time monitoring and real-time reporting. This software

provides network administrators with the means of verifying and conducting regular maintenance checks without the need of physical travel.

End-to-End Security (E2ES)

E2ES is a unique security solution from D-Link that covers the entire enterprise network from the access network to core network. This solution consists of three elements:

- **Gateway Security**

This carries out the security function for enterprise network at the gateway, the boundary between enterprise network and the Internet. It protects enterprise network from external security threats to ensure the secure operation of internal network. For this element of E2ES, D-Link present the **NetDefend** UTM/IPS firewall. This firewall is equipped with various advanced security features such as illegal traffic detection, intrusion detection prevention, anti-spam, anti-virus, web content filtering, high availability, VPN and more.

- **Endpoint Security**

This is the first line of defense within enterprise internal network. It protects enterprise network from security threats coming from inside the network. D-Link provides this solution by pushing intelligence to its **xStack** switch as an evolutionary endpoint security that performs authentication, authorization, traffic control, node address control and attack mitigation. Some of the endpoint security functions supported by the D-Link **xStack** switch are access control (802.1X, MAC-based, web-based), dynamic VLAN assignment, loopback detection, IP-MAC-Port binding, rogue DHCP server detection, Safeguard Engine, and broadcast storm control.

- **Joint Security**

Joint Security is a security solution formed with D-Link ZoneDefense and Microsoft Network Access Protection (NAP) to provide user access control and comprehensive security mechanism for enterprise network. D-Link ZoneDefense is a unique security technology that enables D-Link **NetDefend** firewall to work together with D-Link **xStack** switch to carry out an advanced defense mechanism. With this defense mechanism, the firewall will block any malicious traffic or security threat and inform the **xStack** switch within the enterprise network to block the suspected host. ZoneDefense, in this way, effectively stops security threats and virus/worm infections and outbreaks. D-Link Joint Security offers two important functions for user access control in enterprise network:

- **User Authentication**

Only users with valid access credentials are allowed to access the network.

- **Policy Enforcement and Remediation**

NAP will check and ensure system compliance of each user that has passed authentication process against enterprise security requirements such as updated anti-virus definition of network host, updated operating system patch of network host or personal firewall in active status. Only network hosts that meet the security requirements specified will be allowed to access the network.

SWITCHES

Wired networks offer quick communication channels between users, computers and network devices through switch connection within local area network. Products under this category include chassis, core, edge, secure switches, managed, Web Smart and unmanaged switches, transceivers, converters and adapters.

Unmanaged

- Simplest way to build a network and let it run itself
- Plug-and-play connectivity for small businesses
- Ideal for small networks that are sharing resources
- Green Ethernet

Smart

- Many of the benefits of managed, as outlined below, but without the complexity or cost
- Ease of configuration through web-management
- Ideal for users wishing to build small to medium size networks but who don't need the advanced features necessary for corporate deployments

Managed

- Allows administrators to monitor traffic across the network, introduce redundancy and control access
- Found in networks with numerous users and applications, where performance and reliability must be maximized and security enforced
- Ideal for large sites where server farms are deployed, with hundreds of users sharing multiple printers and applications and routinely using wireless access and video-conferencing, such as in corporate headquarters
- Includes D-Link's industry leading selection of xStack switches

Unified Wireless

- Managed switches which offer flexible deployment, one single device can manage both wired and wireless access traffic – unified switch = wireless controller + LAN switch
- Feature-rich centralized management for wireless Access Points (AP) and clients, including security policy and RF parameters
- Enables seamless wireless roaming without the need for cursor re-authentication: necessary in particular for Voice-over-WLAN (VoWLAN) applications
- Compared to previous generation wireless solutions (mobile controller), unified switching platforms offer a strong depth of features including incomplete wired switching functions and enough physical connections to be located at the 'edge' of the network

xStack

- High port-density Layer 3 stackable switches
- Combine the ultimate performance with fault tolerance, security, management functions with flexibility and ease-of-use
- Equipped with 2 stacking ports providing 20Gbps full duplex bandwidth
- Provides the 10G uplinks for transmission at 10 times the speed of a Gigabit port
- Flexible and Scalable - Whether you need to bring Gigabit or just conventional 10/100Mbps speed to your organization's desktops, D-Link xStack has the right solution with right port types, port densities and uplinks to match your requirements

Gigabit Ethernet Layer 3 Chassis Switches

DES-7200 Series



XSTACK



DES-7200 series chassis-based switch is an intelligent and high performance multi-layer LAN device designed for enterprise, campus, and metropolitan area networks (MAN). The switch is ideal for deployment in environments where uninterrupted running of network applications and high level of performance, security and control are required. It provides the flexibility of deploying Gigabit and/or 10-Gigabit packet switching and routing.

- Internet Group Management Protocol (IGMP) Snooping
- Rapid Ether Ring Protection (RERP)
- Double VLAN (Q-in-Q)
- Selective Q-in-Q
- Private VLAN
- Virtual Router Redundancy Protocol (VRRP)
- IPv6 Ready Phase 2
- Open Shortest Path First (OSPF)
- Border Gateway Protocol (BGP)
- Protocol Independent Protocol-Dense Mode (PIM-DM)
- Protocol Independent Protocol-Sparse Mode (PIM-SM)
- Quality of Service (QoS)
- Multi Protocol Label Switching (MPLS)
- Virtual Routing & Forwarding (VRF)
- IP Flow Information Export (IPFIX)
- Global MAC-IP Binding
- CPU Protection Policy (CPP)
- 802.1X Port-based Access Control
- 802.1X MAC-based Access Control
- Simple Network Management Protocol (SNMP)

DES-7206-BASE

- I/O Module Slot x 4
- CPU Module Slot x 2
- Built in Fan Tray
- Built in Dust Filter
- AC/DC Power Supply Option
- Redundant Power Supply

DES-7210-BASE

- I/O Module Slot x 8
- CPU Module Slot x 2
- Built in Fan Tray
- Built in Dust Filter
- AC/DC Power Supply Option
- Redundant Power Supply

Optional Accessories

I/O Modules

7200-24	12-Port 10/100/1000BASE-T + 12-Port Combo 1000BASE-T or SFP
7200-24G	12-Port SFP + 12-Port Combo 10/100/1000BASE-T or SFP
7200-24P	12-Port 10/100/1000BASE-T PoE + 12-Port Combo 1000BASE-T PoE or SFP
7200-48	44-Port 10/100/1000BASE-T + 4-Port Combo 1000BASE-T or SFP
7200-48P	44-Port 10/100/1000BASE-T PoE + 4-Port Combo 1000BASE-T PoE or SFP
7200-2XG	2-Port 10-Gigabit XFP
7200-4XG	4-Port 10-Gigabit XFP

Enhanced I/O Modules

7200-24G2XGE	12-Port SFP + 12-Port Combo 1000BASE-T or SFP + 2-Port 10-Gigabit XFP
7200-24GE	24-Port SFP
7200-48E	44-Port 10/100/1000BASE-T + 4-Port Combo 1000BASE-T or SFP

Extension Memory

7200-512RAM	512MB Additional RAM Module (for 7200-CM3/7200-CM4)
-------------	---

CPU Modules

7200-CM1	CPU Module with 96G Switching Capacity (for DES-7206-BASE)
7200-CM3	CPU Module with 96G Switch Capacity & Supports Advanced Service Engine (for DES-7206-BASE)
7200-CM2	CPU Module with 192G Switching Capacity (for DES-7210-BASE)
7200-CM4	CPU Module with 192G Switching Capacity & Supports Advanced Service Engine (for DES-7210-BASE)

Advanced Service Engines

7200-ASE2	ASE II for IPFIX Support
7200-ASE3	ASE III for MPLS Support

Redundant Power Supplies

7200-1200AC	1200W AC Redundant Power Supply
7200-1200DC	1200W DC Redundant Power Supply
7200-2000AC	2000W AC Redundant Power Supply

Fans

7206-FAN	Fan Tray (for DES-7206-BASE)
7210-FAN	Fan Tray (for DES-7210-BASE)

10-Gigabit Ethernet XFP Transceivers

DEM-421XT	10GBASE-SR, MMF, 300m
DEM-422XT	10GBASE-LR, SMF, 10km
DEM-423XT	10GBASE-ER, SMF, 40km

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
------------	-----------------------

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DES-7200 Series

Model	DES-7206-BASE		DES-7210-BASE	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3ab; IEEE 802.3z; IEEE 802.3ae; IEEE 802.3af			
General Features	Max. Switching Capacity	192Gbps (with 2 Control Modules)		384Gbps (With 2 Control Modules)
	Passive Backplane Capacity	0.8TBytes		1.6TBytes
	Maximum Forwarding Rate	142Mpps (with 2 Control Modules)		286Mpps (with 2 Control Modules)
	Packet Buffer Memory	2MBytes		
	SDRAM for CPU	256MBytes (With 7200-CM1/7200-CM2) / 512MBytes (With 7200-CM3/7200-CM4) - Expandable to 1GBytes		
	Flash Memory	32MBytes (With 7200-CM1/7200-CM2) / 512MBytes (With 7200-CM3/7200-CM4)		
	Console Port	RJ-45 Ethernet-based; Out-of-Band Configuration		
	Extension Flash Storage Media	Type-A Female USB Port		
Base Unit	Expansion Module Slot	Total 6 Slots: 2 for Control Modules + 4 for Port Modules		Total 10 Slots: 2 for Control Modules + 8 for Port Modules
	Max. 10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	192		384
	Max. 10BASE-T/100BASE-TX/1000BASE-T PoE Port (RJ-45)	192		384
	Max. SFP Port	96		192
	Max. 10GE XFP Slot	16		32
	Fan Tray	Yes (Built-in); 7206-FAN for DES-7206-BASE		Yes (Built-in); 7210-FAN for DES-7210-BASE
	Dust Filter	Yes (Built-in)		
	Power Supply	No (Need to Select the Suitable Power Supply Module)		
Control Module	2			
CPU & Management Module	7200-CM1	CPU Module with 96G Switching Capacity CPU		7200-CM2
	7200-CM3	Module with 96G Switching Capacity & Support Advanced Service Engine (ASE)		7200-CM4
Port Module	Standard Module	7200-24	12-Port 10/100/1000BASE-T; 12-Port Combo 10/100/1000BASE-T or SFP	
		7200-24G	12-Port SFP; 12-Port Combo 10/100/1000BASE-T or SFP	
		7200-24P	12-Port 10/100/1000BASE-T PoE; 12-Port Combo 10/100/1000BASE-T PoE or SFP	
		7200-48	44-Port 10/100/1000BASE-T; 4-Port Combo 10/100/1000BASE-T or SFP	
	Enhanced I/O Module	7200-48P	44-Port 10/100/1000BASE-T PoE; 4-Port Combo 10/100/1000BASE-T PoE or SFP	
		7200-2XG	2-Port 10-Gigabit XFP	
		7200-4XG	4-Port 10-Gigabit XFP	
		7200-24G2XGE	12-Port SFP; 12-Port Combo 10/100/1000BASE-T or SFP; 2-Port XFP	
Advanced Service Engine (ASE) Module (Require 7200-CM3 or 7200-CM4)	7200-ASE2	ASE for IPFIX; Support 128K IPFIX Entries; 6Gbps Throughput		
	7200-ASE3	ASE for MPLS; Support 192K Shared Table for Routing and L3 Forwarding Entries; 10Gbps Throughput		
Power Supply Module	7200-1200AC	Power Output: 1,200W; AC Input: 90~264VAC, 40~60Hz		
	7200-1200DC	Power Output: 1,200W; DC Input: -36~-72VDC		
	7200-2000AC	Power Output: 1,200W@90~176VAC, 2,000W@176~264VAC; AC Input: 90Vac~264VAC, 40~60Hz		
RAM Module	7200-512RAM	512MB Extension RAM Module for 7200-CM3/7200-CM4; Support Better Performance when the Network Requires More Than 128K Routes or MPLS Applications		
Fan Module	7206-FAN	Fan Tray for DES-7206-BASE, 6 DC Fans	7210-FAN	Fan Tray for DES-7210-BASE, 6 DC Fans
L2 Features	MAC Address: 16K Per Standard I/O Card, 32K Per Enhanced I/O Card; Jumbo Frame: Max. 9,216Bytes;			
	Address Resolution Protocol (ARP): Static ARP, Configurable ARP Aging Time; IGMP Snooping: 1K Groups, IGMP Proxy; Port Mirroring: One-to-One, Multi-to-One, Tx/Rx/Both Port Mirroring; Spanning Tree (STP): 802.1D STP, 802.1w Rapid STP, 802.1s Multiple STP; Rapid Ether Ring Protection (RERP): Max. 16 Domains, Recovering L2 Traffic in 500ms; 802.3ad Link Aggregation: 128 Trunk Groups, 8 Ports Per Group; Head of Line Blocking Prevention			
Virtual LAN (VLAN)	802.1Q Tagged VLAN, 802.1v Protocol VLAN, VLAN Group: 4K; Port-based VLAN; Super VLAN; Private VLAN; Double VLAN: Port-based Q-in-Q, Selective Q-in-Q			
L3 Features	Max. 2K IP Interface; Secondary IP; Virtual Router Redundancy Protocol (VRRP); IPv6 Tunneling: Manual Tunnel, ISATAP, 6to4; IPv6 Ready Phase 2			
L3 Routing	Routing Entries: 12K, 192K (With 7200-ASE3); Static Routes: Max. 1K; Policy Based Route; Routing Information Protocol (RIP) v1/v2; RIPng (IPv6)*; Multi Path Route: ECMP/WCMP; BGP+ v4 (IPv6); Open Shortest Path First (OSPF) v2/v3 (IPv6); Stub/NSSA Area; Border Gateway Protocol (BGP) v4			
L3 Multicasting	Protocol Independent Protocol-Dense Mode (PIM-DM); PIM-DMv6*; Protocol Independent Protocol-Sparse Mode (PIM-SM); PIM-SMv6*; Protocol Independent Protocol-Source Specific Mode (PIM-SSM); PIM-SSMv6*; PIM Snooping			
Quality of Service	Internet Group Management Protocol (IGMP) v1/v2/v3			
	802.1p Class of Service (CoS); 8 Queues; Queue Handling: Strict, Weighted Round Robin (WRR), Strict + WRR; CoS based on: VLAN ID, 802.1p Priority, MAC Address			
Multi Protocol Label Switching (MPLS) & Virtual Private LAN Service (VPLS)	Virtual Routing & Forwarding (VRF) (Require Enhanced I/O module or 7200-ASE3); VPLS* (Require 7200-ASE4); MPLS Label Management (Require 7200-ASE3); Label Distribution Protocol (LDP) (Require 7200-ASE3); MPLS L3 VPN (Require 7200-ASE3); Virtual Private Wire Service (VPWS)* (Require 7200-ASE3)			
IP Flow Information Export (IPFIX)	Require 7200-ASE2			
Security	CPU Protection Policy (CPP); Secure Shell (SSH) v1.5/v2; Port Security: Max. 16 Max Addresses Per Port; Global MAC-IP Binding; Defeat IP Scan; IP-MAC-Port Binding			
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, MAC-based Access Control, Dynamic VLAN Assignment; Accounting: Period Accounting, Multiple Accounting; Remote Authentication Dial In User Service (RADIUS) Command Line Interface (CLI); Telnet Server; TFTP; DHCP Server; DHCP Relay; DHCP Relay Option 82; XModem;			
Management	Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Trap; System Log;			
	Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; System Status LED; System Alert; DNS Client; Debug; Network Time Protocol (NTP) / Simple Network Time Protocol (SNTP); File System: Flash Storage Media, Multiple Firmware, Multiple Configuration			
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1901, 1907); SNMP (RFC1157, 2571-2576); RIPv2 (RFC1724) RMON (RFC1271, 2819); PIM-SSM (RFC3569); IP FDB (RFC2096); IGMPv3 (RFC2933); D-Link Private MIB			
Standard Compliance	PIM-SM (RFC2362); VRRP (RFC2338, 2787); DVMRP (RFC1075); DiffServ (RFC2474-2475); 802.1p (RFC2674); IGMPv3 (RFC2933); RADIUS (RFC2138-2139, 2865-2866); Super VLAN (RFC3069); OSPF (RFC1370, 1587, 1765, 1850, 2328, 2370); DHCP (RFC1542, 2131, 3046); (RFC791); BGP (RFC1771, 1997, 2439, 2796, 2842, 2918); SNMP (RFC3411-3417); UDP (RFC768); IP (RFC791); TCP (RFC793); Telnet (RFC854); NTP (RFC1305); TFTP (RFC1350); SNMP (RFC1769)			
Physical & Environment	Dimension (W x D x H)	436.8 x 508 x 647.4 mm		436.8 x 448 x 956 mm
	Operation Temperature	0 to 40 °C		
	Storage Temperature	-40 to 70 °C		
Certification	Humidity	90% Non-Condensing		
	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A		
	Safety Compliance	cUL; CB		

Gigabit Ethernet xStack Layer 3 Core Switches

DGS-3600 Series



XSTACK



DGS-3600 series consists of Layer 3 Gigabit switches that deliver performance, flexibility, security, multi-layer QoS and access, with redundant power option for SMB and enterprises. It is easy to deploy, simple to manage, and it can be virtually stacked with any switches supporting D-Link Single IP Management (SIM). It also supports 10-Gigabit physical stacking.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- L2 Protocol Tunneling
- 802.1v Protocol VLAN
- Double VLAN (Q-in-Q)
- Selective Q-in-Q
- Virtual Router Redundancy Protocol (VRRP)
- Ethernet-Ring Protection Switching (E-RPS)*
- IPv6 Tunnel*
- Gratuitous ARP
- Routing Information Protocol (RIP)
- Routing Information Protocol Next Generation (RIPng)*
- Open Shortest Path First (OSPF)
- Border Gateway Protocol (BGP)*
- Protocol Independent Protocol-Dense Mode (PIM-DM)
- Protocol Independent Protocol-Sparse Mode (PIM-SM)
- Distance Vector Multicast Routing Protocol (DVMRP)
- Quality of Service (QoS)
- D-Link Unidirectional Link Detection (DULD)*
- Access Control List (ACL)
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine
- IP-MAC-Port Binding
- 802.1X Access Control
- Web-based Access Control (WAC)
- MAC-based Access Control (MAC)
- Microsoft® Network Access Protection (NAP)
- Three-Level User Account
- sFlow
- Link Layer Discover Protocol (LLDP)
- LLDP-Media Endpoint Discovery (LLDP-MED)

DGS-3612G

- SFP Slot x 8
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply

DGS-3627

- 10/100/1000BASE-T x 20
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slot x 3
- Redundant Power Supply
- Physical Stack

DGS-3627G

- SFP Slot x 20
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slot x 3
- Redundant Power Supply
- Physical Stack

DGS-3650

- 10/100/1000BASE-T x 44
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slot x 2
- Redundant Power Supply
- Physical Stack

Optional Accessories

Modules

DEM-410X	1-Port 10G XFP Module (for DGS-3627, DGS-3627G & DGS-3650)
DEM-410CX	1-Port 10G CX4 Module (for DGS-3627, DGS-3627G & DGS-3650)

10-Gigabit Ethernet XFP Transceivers

DEM-421XT	10GBASE-SR, MMF, 300m (for DGS-3627, DGS-3627G & DGS-3650)
DEM-422XT	10GBASE-LR, SMF, 10km (for DGS-3627, DGS-3627G & DGS-3650)
DEM-423XT	10GBASE-ER, SMF, 40km (for DGS-3627, DGS-3627G & DGS-3650)

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km (for DGS-3612G)
DEM-211	100BASE-FX, MMF, 2km (for DGS-3612G)

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km (for DGS-3612G)
------------	---------------------------------------

Redundant Power Supplies

DPS-500	140-Watt AC Redundant Power Supply (for DGS-3612G, DGS-3627, DGS-3627G & DGS-3650)
DPS-500DC	140-Watt AC Redundant Power Supply (for DGS-3627, DGS-3627G & DGS-3650)

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DGS-3600 Series

Model	DGS-3612G	DGS-3627	DGS-3627G	DGS-3650	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3ae				
Port Interface	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	-	20	-	44
	SFP Port	8	-	20	-
	Combo 1000BASE-T/SFP	-	4		-
	10 GE Expansion Slot	-	3	3	2
	XFP Expansion Module CX4 Expansion Module	-	DEM-410X DEM-410CX		-
Stackability	Virtual Stack	D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices			
	Physical Stack	-	Via Optional CX4/XFP Module; Bi-Directional Redundant Stacking Topology; Duplex Chain / Ring Topology; Bandwidth up to 40Gbps (Full Duplex); Up to 12 Units Per Stack; Backup Master; Trunking or Mirroring across Stack		
General Features	Switching Capacity	24Gbps	108Gbps	136Gbps	
	Max. Forwarding Rate	17.86Mpps	80.36Mpps	101.19Mpps	
	Forwarding Mode	Store and Forward			
	Packet Buffer Memory	2MBytes			
	SDRAM for CPU	256MBytes			
	Flash Memory	PROM 512KBytes x 1; Runtime 16MBytes x 1			
	Mean Time Before Failure	342,645 hours	287,631 hours	289,946 hours	246,838 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration				
L2 Features	MAC Address Table: 16K; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; IGMP Snooping v1/v2/v3: 1K Groups, IGMP Snooping Fast Leave, Host-based IGMP Fast Leave*; MLD Snooping v1: 1K Groups, MLD Snooping Fast Leave; Jumbo Frame: Max. 9,216Bytes; Spanning Tree (STP): 802.1D STP, 802.1w Rapid STP, 802.1s Multiple STP, Per Port/Device BPDU Filtering, Root Restriction*; Loopback Detection; 802.3ad Link Aggregation: Max. 32 Groups Per Device, 8 Gigabit Ports or 2 10GE Ports Per Group; Port Mirroring: One-to-One, Many-to-One, Flow-based Mirroring, RSPAN; L2 Protocol Tunneling				
Virtual LAN (VLAN)	VLAN Group: Max. 4K Static VLAN Groups, Max. 255 Dynamic VLAN Groups; 802.1Q Tagged VLAN; 802.1v Protocol VLAN; GARP VLAN Registration Protocol (GVRP); Double VLAN (Q-in-Q); Port-based VLAN (Q-in-Q); Selective Q-in-Q; MAC-based VLAN*; Super VLAN*				
L3 Features	256 Interfaces; Virtual Router Redundancy Protocol (VRRP); Ethernet-Ring Protection Switching (E-RPS)*; IPv6 Tunneling*: Static, ISATAP, GRE, 6to4; IPv6 Ready Phase 1/2; Proxy ARP; Gratuitous ARP				
L3 Routing	12K Hardware Routing Entries Shared by IPv4/IPv6: Max. 12K IPv4 Routes, Max. 6K IPv6 Routes; 8K Hardware L3 Forwarding Entries Shared by IPv4/IPv6: Max. 8K IPv4 Entries, Max. 4K IPv6 Entries; Static Route Entries: 256 for IPv4, 128 for IPv6, ECMP/WCMP; Policy-based Route; Routing Information Protocol (RIP) v1/v2; RIPv6 (IPv6)*; Border Gateway Protocol (BGP) v4* Open Shortest Path First (OSPF) v2/v3 (IPv6): OSPF Passive Interface, Stub/NSSA Area, OSPF Equal Cost Route				
Multicasting	1K Hardware Multicast Groups; Internet Group Management Protocol (IGMP) v1/v2/v3 Protocol Independent Protocol-Dense Mode (PIM-DM); Protocol Independent Protocol-Sparse Mode (PIM-SM); PIM Sparse-Dense Mode; Distance Vector Multicast Routing Protocol (DVMRP) v3				
Quality of Service (QoS)	802.1p Class of Service (CoS); 8 Queues; Queue Handling: Strict, Weighted Round Robin (WRR), Strict + WRR; CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, IPv4/IPv6 Address, DSCP, Protocol Type, IPv6 Traffic Class, IPv6 Flow Label, TCP/UDP Port, User-Defined Packet Content Actions for Flows: Remark 802.1p Priority Tag, Remark TOS/DSCP Tag, Bandwidth Control, Flow Statistics, Committed Information Rate (CIR): Min. Granularity 1kbps; Time-based QoS Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps), Flow-based (Ingress, Min. Granularity)				
Access Control List (ACL)	Max. 1,792 Access Rules; ACL Statistics; Time-based ACL; ACL based on: 802.1p Priority, VLAN ID, MAC Address, Ether Type, IPv4/IPv6 Address, DSCP, Protocol Type, TCP/UDP Port Number, IPv6 Traffic Class, IPv6 Flow Label, User-Defined Packet Content				
Security	Secure Shell (SSH) v1/v2; Secure Sockets Layer (SSL) v1/v2/v3; Port Security: Max. 16 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; Traffic Segmentation; D-Link Safeguard Engine; CPU Interface Filtering; IP-MAC-Port Binding; ARP Packet Inspection, IP Packet Inspection, DHCP Snooping, DHCPv6 & NDP Snooping*, Max. 500 Address Binding Entries Per Device; DHCP Server Screening; ARP Spoofing Prevention*; BPDU Attack Protection*				
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Web-based Access Control (WAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; MAC-based Access Control (MAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Microsoft Network Access Protection (NAP): 802.1X NAP, DHCP NAP; Guest VLAN; RADIUS & TACACS+ Authentication for Switch Access; Three-Level User Account				
Management	Web-based GUI; Command Line Interface (CLI); Telnet Server; Telnet Client*; TFTP Client; ZModem; System Log; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Trap; Link Layer Discovery Protocol (LLDP); Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; DHCP Auto-Configuration; DHCP Relay; DHCP Relay Option 60/61*/82; DHCP Server; Flash File System; Multiple Images; Multiple Configurations; CPU Monitoring; Simple Network Time Protocol (SNTP); Internet Control Message Protocol (ICMP) v6; IPv6 Neighbor Discovery (ND); DHCPv6 Client*; DHCPv6 Relay*; DHCPv6 Server*; Cable Diagnostics*; sFlow; BootP/DHCP Client; Debug Command; D-Link Unidirectional Link Detection (DULD)*				
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); SNMP (RFC2571-2576); RMON (RFC1271, 2819); RMONv2 (RFC2021); Ether-Like (RFC2665); MAU (RFC2668); 802.1p (RFC2674); IF (RFC2233, 2863); RADIUS Authentication Client (RFC2618); RIPv2 (RFC1724); OSPFv2 (RFC1850); VRRP (RFC2787); IP Forwarding Table CIDR (RFC2096); IPv4 Multicast Routing (RFC2932); PIM for IPv4 (RFC2934); RADIUS Accounting Client (RFC2620); IGMP (RFC2933); Ping*; Traceroute*; D-Link Private MIB				
Standard Compliance	UDP (RFC768); TFTP (RFC783); IP (RFC791); ICMP (RFC792); TCP (RFC793); ARP (RFC826); Telnet (RFC854); BootP (RFC951, 1542); HTTP (RFC2068); VRRP (RFC2338); IPv6 Tunnel (RFC2529, 3053, 3056); RADIUS (RFC2138); RADIUS Accounting (RFC2139); TACACS (RFC1492); sFlow (RFC3176); DiffServ Expedited Forwarding (RFC2598)				
Physical & Environment	Dimension (W x D x H)	19" 1U Rack-Mount; 441 x 389 x 44mm			
	Weight (W/O Modules)	5.0kg	5.5kg	5.5kg	5.7kg
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply			
	Max. Power Consumption	43.7W	94.3W	75.6W	137.5W
	Redundant Power Supply	DPS-500	DPS-500 / DPS-500DC		
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-40 to 70 °C			
Operation Humidity	10% to 90% RH				
Storage Humidity	5% to 90% RH				
Acoustic	< 51.1 dB	< 51.6 dB	< 51.3 dB	< 48.1 dB	
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; C-Tick Class A; VCCI Class A			
	Safety Compliance	cUL; CB			
	Metro Ethernet Forum	MEF 9, 14			

* Available in Future Firmware Upgrade

Fast Ethernet xStack Layer 3 Core Switches

DES-3800 Series



The xStack DES-3800 series consists of Layer 3 10/100Mbps switches that deliver performance, flexible expansion, robust security, multi-layer QoS, Power over Ethernet and redundant power option.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- Loopback Detection (LBD)
- 802.1v Protocol VLAN
- Double VLAN (Q-in-Q)
- Open Shortest Path First (OSPF)
- Virtual Router Redundancy Protocol (VRRP)
- Protocol Independent Multicast-Dense Mode (PIM-DM)
- Protocol Independent Multicast-Sparse Mode (PIM-SM)
- Distance Vector Multicast Routing Protocol (DVMRP)
- Quality of Service (QoS)
- Access Control List (ACL)
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine™
- D-Link ZoneDefense™
- IP-MAC-Port Binding
- 802.1X Port/Host-based Access Control
- Web-based Access Control
- MAC-based Access Control
- Microsoft® Network Access Protection (NAP)
- Guest VLAN

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX,SMF/MMF,10km/2km
DEM-311GT	1000BASE-SX,MMF,550m
DEM-312GT2	1000BASE-SX,MMF,2km
DEM-314GT	1000BASE-LH,SMF,50km
DEM-315GT	1000BASE-ZX,SMF,80km

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Redundant Power Supplies

DPS-200	60-Watt AC Redundant Power Supply (for DES-3828 & DES-3852)
DPS-600	500-Watt AC Redundant Power Supply (for DES-3828P)

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DES-3828

- 10/100BASE-TX x 24
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- AC Power Supply
- Redundant Power Supply

DES-3828DC

- 10/100BASE-TX x 24
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- DC Power Supply

DES-3828P

- 10/100BASE-TX x 24 (PoE)
- 10/100/1000BASE-T x 2
- 1000BASE-T/SFP Combo Slot x 2
- AC Power Supply
- Redundant Power Supply

DES-3852

- 10/100BASE-TX x 48
- 10/100/1000BASE-T x 2
- 1000BASE-T/SFP Combo Slot x 2
- AC Power Supply
- Redundant Power Supply

DES-3800 Series

Model	DES-3828	DES-3828DC	DES-3828P	DES-3852	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DES-3828P)				
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	24	24 (PoE)	48	
	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	2			
	Combo 1000BASE-T/SFP Port	2			
Stackability	Virtual Stack D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices				
General Features	Switching Capacity	12.8Gbps		15.7Gbps	
	Max. Forwarding Rate	9.5Mpps		11.7Mpps	
	Forwarding Mode	Store and Forward			
	Packet Buffer Memory	32MBytes			
	SDRAM for CPU	128MBytes			
	Flash Memory	PROM 512KBytes x 1; Runtime 16MBytes x 1			
	Mean Time Before Failure (MTBF)	123,027 hours	133,105 hours	168,110 hours	102,737 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration				
L2 Features	MAC Address Table: 16K; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; IGMP Snooping v1/v2/v3: 256 Groups, Static Multicast Addresses: 64, Host-based IGMP Snooping Fast Leave; Spanning Tree (STP): 802.1D STP, 802.1w Rapid STP, 802.1s Multiple STP; Per Port / Device BPDU Filtering; 802.3ad Link Aggregation: Max. 32 Groups Per Device, Max. 8 Ports Per Group; MLD Snooping v1/v2; Port Mirroring: One-to-One, Many-to-One, Flow-based; Jumbo Frame: Up to 9KBytes; Loopback Detection				
Virtual LAN	VLAN Group: Max. 4K Static VLAN Group, Max. 4K Dynamic VLAN Group; 802.1Q Tagged VLAN; GARP VLAN Registration Protocol (GVRP); Double VLAN (Q-in-Q); 802.1v Protocol VLAN				
L3 Features	128 Static Routing Entries; 2K Hardware Routing Entries; 4K Hardware L3 Forwarding Entries; 64 IP Interfaces; Open Shortest Path First (OSPF) v2: OSPF Passive Interface, OSPF Equal Cost Route; Routing Information Protocol (RIP) v1/v2; Virtual Router Redundancy Protocol (VRRP); ARP Proxy				
Multicast	Internet Group Management Protocol (IGMP) v1/v2/v3; Distance Vector Multicast Routing Protocol (DVMRP) v3; Protocol Independent Multicast-Dense Mode (PIM-DM); Protocol Independent Multicast-Sparse Mode (PIM-SM)				
Quality of Service (QoS)	Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps), Flow-based (Ingress, Min. Granularity 64kbps); 802.1p Class of Service; 8 Queues; Queue Handling: Strict, Weighted Round Robin (WRR), Strict + WRR; CoS based on: Switch Port, MAC Address, TOS, DSCP, IP Address, TCP/UDP Port				
Access Control List (ACL)	Max. 800 Access Rules; CPU Interface Filtering; ACL based on: Port, MAC Address, 802.1p Priority, VLAN ID, DSCP, IPv4/IPv6 Address, Protocol Type, TCP/UDP Port Number, User Defined Packet Content, IPv6 Traffic Class, IPv6 Flow Label				
Security	Secure Shell (SSH) v1.5/v2; Secure Sockets Layer (SSL) v2/v3; Port Security: Max. 16 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; Traffic Segmentation; D-Link Safeguard Engine; D-Link ZoneDefense; DHCP Snooping; IP-MAC-Port Binding: 500 Address Binding Entries Per Device, ARP Packet Inspection; IP Packet Inspection				
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Web-based Access Control (WAC): Port-based Access Control, Dynamic VLAN Assignment; MAC-based Access Control (MAC): Port-based Access Control, Dynamic VLAN Assignment; Microsoft Network Access Protection (NAP); Guest VLAN; RADIUS Accounting; RADIUS and TACACS+ Authentication for Switch Access; Three-Level User Account				
Management	Web-based GUI; Command Line Interface (CLI); Telnet Server/Client; TFTP Client; BootP/DHCP Client; DHCP Auto-Configuration; DHCP Server; System Log; Simple Network Time Protocol (SNTP); CPU Monitoring; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Trap; DHCP Relay Option 82; Dual Image; Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; Dual Configuration				
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); RMON (RFC1757, 2819); Ether-Like (RFC1643, 2358, 2665); 802.1p (RFC2674); Bridge (RFC4363); IF (RFC2233, 2863); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); RIPv2 (RFC1724); OSPFv2 (RFC1850); IP Forwarding Table (RFC2096); VRRP (RFC2787); IPv4 Multicast Routing (RFC2932); PIM for IPv4 (RFC2934); D-Link Private MIB				
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount 441 x 310 x 44mm		19-inch, 1U Rack-Mount 441 x 369 x 44mm	
	Weight	4.24kg		6.02kg	
	Power Input	AC Input: 100-240VAC, 50/60Hz; Internal Universal Power Supply	DC 60W, 48VDC Internal Universal Power Supply	AC Input: 90-264VAC, 50/60Hz; Internal Universal Power Supply	AC Input: 100-240VAC, 50/60Hz; Internal Universal Power Supply
	Max. Power Consumption	36.2W	32.7W	507.2W	47W
	Power over Ethernet	-		Power Budget: 370W; Per Port: 1-16.8W (Default: 15.4W) Time-based PoE	-
	Redundant Power Supply	DPS-200	-	DPS-600	DPS-200
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-40 to 70 °C			
	Humidity	5% to 95% Non-Condensing			
	Acoustic	< 51 dB	< 52 dB	< 51 dB	< 53 dB
Certification	EMI-EMC Compliance	FCC Class A; CE; C-Tick			
	Safety Compliance	CSA International; CB			

Gigabit Ethernet xStack Layer 2 Edge Switches

DGS-3400 Series



XSTACK



The xStack DGS-3400 Series consists of Layer 2 Gigabit switches that deliver performance, flexibility, security, multi-layer QoS and redundant power supply option for SMB and enterprises.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- Loopback Detection (LBD)
- 802.1v Protocol VLAN
- Double VLAN (Q-in-Q)
- Selective Q-in-Q
- Routing Information Protocol (RIP)
- RIP Next Generation (RIPng)
- IGMP Snooping Multicast (ISM) VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine™
- CPU Interface Filtering
- IP-MAC-Port Binding
- IPv6 Tunnel
- D-Link Unidirectional Link Detection (DULD)
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- Web-based Access Control (WAC)
- MAC-based Access Control (MAC)
- Compound Authentication
- Microsoft® Network Access Protection (NAP)
- Three-Level User Account
- sFlow
- Link Layer Discovery Protocol (LLDP)
- LLDP-Media Endpoint Discovery (LLDP-MED)

DGS-3426P

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slots x 2
- Redundant Power Supply
- Physical Stack

DGS-3427

- 10/100/1000BASE-T x 20
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slots x 3
- Redundant Power Supply
- Physical Stack

DGS-3450

- 10/100/1000BASE-T x 44
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slots x 2
- Redundant Power Supply
- Physical Stack

Optional Accessories

Modules

DEM-410X	1-Port 10G XFP Module
DEM-410CX	1-Port 10G CX4 Module

10-Gigabit Ethernet XFP Transceivers

DEM-421XT	10GBASE-SR, MMF, 300m
DEM-422XT	10GBASE-LR, SMF, 10km
DEM-423XT	10GBASE-ER, SMF, 40km

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Redundant Power Supplies

DPS-500	140-Watt AC Redundant Power Supply (for DGS-3427 & DGS-3450)
DPS-500DC	140-Watt DC Redundant Power Supply (for DGS-3427 & DGS-3450)
DPS-600	500-Watt AC Redundant Power Supply (for DGS-3426P)

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DGS-3400 Series

Model	DGS-3426P	DGS-3427	DGS-3450	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3ae; IEEE 802.3af (DGS-3426P)			
Port Interface	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	24 (PoE)	24	48
	Combo 1000BASE-T/SFP		4	
	10 Gigabit Uplink	2	3	2
Stackability	XFP Expansion Module		DEM-410X	
	CX4 Expansion Module		DEM-410CX	
	Virtual Stack	D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices		
General Features	Physical Stack	Via Optional CX4 or XFP Module; Bi-Directional Redundant Stacking Topology; Linear/Ring Topology; Up to 40Gbps (Full Duplex); Up to 12 Units Per Stack; Backup Master; Trunking or Mirroring across Stack		
	Switching Capacity	88Gbps	108Gbps	136Gbps
General Features	Max. Forwarding Rate	65.47Mpps	80.36Mpps	101.19Mpps
	Forwarding Mode		Store and Forward	
	Packet Buffer Memory		750KBytes	
	SDRAM for CPU		256MBytes	
	Flash Memory	PROM 512KBytes x 1; Runtime 16MBytes x 1		
L2 Features	Mean Time Before Failure (MTBF)	170,148 hours	341,075 hours	301,868 hours
	Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration		
Virtual LAN (VLAN)	MAC Address Table: 8K; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; IGMP Snooping v1/v2/v3: 1K Groups, Host-based IGMP Snooping Fast Leave; Limited IP Multicast (IGMP Filtering); MLD Snooping v1/v2: 511 Groups, Host-based MLD Snooping Fast Leave; Multiple VLAN Replication; Spanning Tree Protocol (STP): 802.1D-2004 Edition STP, 802.1w Rapid STP, 802.1s Multiple STP, BPDU Filtering, STP Root Restriction; Jumbo Frame: Max. 9,216Bytes; Loopback Detection; 802.3ad Link Aggregation: Max. 32 Groups Per Device, 8 Ports Per Group, Cross Stack/Module Trunk; Port Mirroring: One-to-One, Many-to-One, Flow-based Mirroring, RSPAN; L2 Protocol Tunneling			
L3 Routing	802.1Q Tagged VLAN; VLAN Group: Max. 4094 VLAN; GARP VLAN Registration Protocol (GVRP); Double VLAN (Q-in-Q): Port-based Q-in-Q, Selective Q-in-Q; VLAN Translation; ISM VLAN; 802.1v Protocol VLAN; MAC-based VLAN; Voice VLAN*; Private VLAN*			
Quality of Service (QoS)	64 IP Interfaces; 126 Static Routes Shared by IPv4/IPv6; Gratuitous ARP; 2K Hardware Routing Entries Shared by IPv4/IPv6: Max. 2K IPv4 Routes, Max. 1K IPv6 Routes; Routing Information Protocol (RIP) v1/v2*: RIPng; IPv6 Tunneling*: Static, ISATAP, GRE, 6to4			
Access Control List (ACL)	802.1p QoS; 8 Queues; Queue Handling: Strict, Weighted Round Robin (WRR), Strict + WRR; Time-based QoS CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, IPv4/IPv6 Address, DSCP, TCP/UDP Port Number, Protocol Type, IPv6 Traffic Class, IPv6 Flow Label, User-Defined Packet Content			
Security	QoS Flow Actions: Remarks 802.1p Priority Tag, Remark TOS/DSCP Tag, Bandwidth Control, Flow Statistics, Committed Information Rate (CIR); Three Color Marker: trTCM, srTCM; Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 1kbps), Flow-based (Ingress, Min. Granularity 64kbps) Max. 768 Access Rules; Time-based ACL; ACL Statistics;			
Authentication, Authorization & Accounting (AAA)	ACL based on: 802.1p Priority, VLAN ID, MAC Address, Ether Type, IPv4/IPv6 Address, DSCP, Protocol Type, TCP/UDP Port Number, IPv6 Traffic Class, IPv6 Flow Label, User-Defined Packet Content			
Management	Secure Shell (SSH) v1/v2; Secure Sockets Layer (SSL) v1/v2/v3; Port Security: Max. 16 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; Traffic Segmentation; D-Link Safeguard Engine; CPU Interface Filtering; IP-MAC-Port Binding: ARP Packet Inspection, IP Packet Inspection, DHCP Snooping, DHCPv6 & NDP Snooping*, Max. 500 Address Binding Entries Per Device; DHCP Server Screening; ARP Spoofing Prevention*; BPDU Attack Protection*			
Operations, Administration & Management (OAM)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Web-based Access Control (WAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; MAC-based Access Control (MAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Compound Authentication; Guest VLAN; Microsoft Network Access Protection (NAP): 802.1X NAP, DHCP NAP; RADIUS Accounting; RADIUS and TACACS+ Authentication for Switch Access; Three-Level User Account			
Management Information Base (MIB)	Web-based GUI (IPv4/IPv6); Command Line Interface (CLI); Telnet (IPv4/IPv6); TFTP Client (IPv4/IPv6); Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Trap; System Log; Link Layer Discovery Protocol (LLDP); Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; sFlow; BootP/DHCP Client; DHCP Auto-Configuration; DHCP Relay; DHCP Relay Option 60/61/82; DHCP Server; Flash File System; CPU Monitoring; Multiple Images/Configurations; Simple Network Time Protocol (SNTP); Password Encryption; LLDP-MED*; Internet Control Message Protocol (ICMP) v6; IPv6 Neighbor Discovery (ND); DHCPv6 Client*; DHCPv6 Relay*			
Standard Compliance	Cable Diagnostics			
Physical & Environment	Concise MIB (RFC1212); MIB-II (RFC1213); MIB Traps (RFC1516); Bridge (RFC1493, 4188); SNMPv2 (RFC1907); RMON (RFC1757, 2819); RMONv2 (RFC2021); IP Forwarding Table (RFC2096); Ether-Like (RFC1398, 1643, 2358, 2665); 802.1p (RFC2674, 4363); Interfaces Group (RFC2233, 2863); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); Entity (RFC2737); Ping & Traceroute (RFC2925); D-Link Private MIB			
	UDP (RFC768); IP (RFC791); ICMPv4 (RFC792); TCP (RFC793); ARP (RFC826); Telnet (RFC854); ICMPv6 (RFC2463, 4443); CIDR (RFC1338, 1519); HTTP (RFC2068, 2616); IPv6 (RFC2460); SNMPv1/v2c/v3 (RFC1157, 1901, 1908, 2273, 2570-2575); DiffServ Expedited Forwarding (RFC2598); IPv6 Neighbor Discovery (ND) (RFC4861); IPv6 Stateless Address Auto-configuration (RFC4862); Path MTU Discover (RFC1981)*			
Certification	Dimension (W x D x H)	19-inch; 1U Rack-Mount; 440 x 389 x 44mm		
	Weight	5.82kg	5.51kg	5.74kg
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply		
	Max. Power Consumption	525.0W	71.6W	131.3W
	Power over Ethernet	Power Budget: 370W; Per Port: 15.4W Time-based PoE		
	Redundant Power Supply	DPS-600	DPS-500 / DPS-500DC	
	Operation Temperature	0 to 40 °C		
	Storage Temperature	-40 to 70 °C		
	Operation Humidity	10% to 90% RH		
	Storage Humidity	5% to 90% RH		
Acoustic	< 52.4 dB	< 52.3 dB		
Fan	2 DC Fans (40 x 40mm)			
EMI-EMC Compliance	FCC Class A; CE Class A; C-Tick Class A			
Safety Compliance	CSA International; CB			

* Available in Future Firmware Upgrade

Gigabit Ethernet xStack Layer 2 Secure Switches

DGS-3200 Series



XSTACK



DGS-3200 series consists of Security Gigabit switches that deliver high performance, flexible expansion and robust security. It executes firm network security and provides ACL functionalities to secure the internal IT network against external viruses.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- 802.1v Protocol VLAN
- IGMP Snooping Multicast (ISM) VLAN
- VLAN Trunking
- Private VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine™
- IP-MAC-Port Binding
- Microsoft® Network Access Protection (NAP)
- ARP Spoofing Prevention
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- Web-based Access Control (WAC)
- MAC-based Access Control (MAC)
- Compound Authentication
- Guest VLAN
- Simple Network Management Protocol (SNMP)

DGS-3200-10

- 10/100/1000BASE-T x 8
- Combo 1000BASE-T/SFP x 2
- Fanless
- 11-inch, 1U Desktop

DGS-3200-24

- 10/100/1000BASE-T x 20
- Combo 1000BASE-T/SFP x 4
- Smart Fan x 2
- Redundant Power Supply
- 19-inch, 1U Rack-Mount

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
------------	-----------------------

Redundant Power Supplies

DPS-200	60-Watt AC Redundant Power Supply (for DGS-3200-24)
---------	---

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DGS-3200 Series

Model	DGS-3200-10	DGS-3200-24	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab		
Port Interface	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)	8	20
	Combo 1000BASE-T/SFP	2	4
Stackability	D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices		
General Features	Switching Capacity	20Gbps	48Gbps
	Max. Forwarding Rate	14.88Mpps	35.7Mpps
	Forwarding Mode	Store and Forward	
	Packet Buffer Memory	128KBytes	768KBytes
	SDRAM for CPU	128MBytes	
	Flash Memory	16MBytes	
	Mean Time Before Failure	726,077 hours	502,576 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration (for DGS-3200-10) Combo Female RS-232 DB-9 / RJ-45 Console Port for Out-of-Band Configuration (for DGS-3200-24)		
L2 Features	MAC Address Table: 8K (DGS-3200-10) 16K (DGS-3200-24); Jumbo Frame: Max. 10,240Bytes; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; IGMP Authentication; IGMP Snooping v1/v2/v3: 256 Groups, Host-based IGMP Snooping Fast Leave, Data Driven Multicast; MLD Snooping v1/v2: 256 Groups; Port Mirroring: One-to-One, Many-to-One, Flow-based Mirroring Spanning Tree Protocol (STP): 802.1D-2004 Edition STP, 802.1w Rapid STP, 802.1s Multiple STP, BPDU Filtering, Root Restriction; Loopback Detection; 802.3ad Link Aggregation: Max. 8 Ports Per Group, Max. 5 Groups Per Device (DGS-3200-10), Max. 12 Groups Per Device (DGS-3200-24)		
Virtual LAN (VLAN)	802.1Q Tagged VLAN; VLAN Group: Max. 4094 VLAN; 802.1v Protocol VLAN; ISM VLAN; GARP VLAN Registration Protocol (GVRP): Max. 255 Dynamic VLANs; VLAN Trunking; Private VLAN		
Quality of Service (QoS)	802.1p Quality of Service; 8 Queues Per Port; Queue Handling: Strict, Weighted Round Robin (WRR); CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, IPv4/IPv6 Address, DSCP, TCP/UDP Port No., Protocol Type, IPv6 Traffic Class, IPv6 Flow Label, User-Defined Packet Content Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps, Flow-based (Ingress, Min. Granularity 64kbps); MAC-based VLAN; Private VLAN		
Access Control List (ACL)	Max. 200 Access Rules; Time-based ACL; CPU Interface Filtering; ACL Statistics; ACL based on: 802.1p Priority, VLAN ID, MAC Address, IPv4/IPv6 Address, DSCP, Protocol Type, TCP/UDP Port Number, IPv6 Traffic Class, IPv6 Flow Label, User-Defined Packet Content		
Security	Secure Shell (SSH) v2; Secure Sockets Layer (SSL) v1/v2/v3; Broadcast/Multicast/Unicast Storm Control; Traffic Segmentation; D-Link Safeguard Engine; IP-MAC-Port Binding: ARP Packet Inspection, IP Packet Inspection, DHCP Snooping, 512 Address Binding Entries Per Device; Port Security: Max. 64 MAC Address Per Port; Microsoft Network Access Protection (NAP): 802.1X NAP (IPv4/IPv6), DHCP NAP (IPv4); DHCP Server Screening; DHCP Client Filtering; ARP Spoofing Prevention		
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Web-based Access Control (WAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; MAC-based Access Control (MAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Compound Authentication; Guest VLAN; RADIUS and TACACS+ Authentication for Management Access; RADIUS Accounting		
Management	Web-based GUI (IPv4/IPv6); Command Line Interface (CLI); Telnet (IPv4/IPv6); XModem; ZModem; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Trap; Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; BootP/DHCP Client; TFTP Client (IPv4/IPv6); DHCP Auto-Configuration; DHCP Relay; DHCP Relay Option 82; Simple Network Time Protocol (SNTP); Internet Control Message Protocol (ICMP) v6; IPv6 Neighbor Discovery; System Log; CPU Monitoring; Dual Image; Dual Configuration		
Operations, Administration & Management (OAM)	Cable Diagnostics		
D-Link Green	Power Savings Mode: Link Down Status, Cable Length Detection; Compliant with RoHS 6		
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC4188); SNMPv2 (RFC1907); RMONv2 (RFC2021); 802.1p (RFC2674); Ether-Like (RFC1643, 2358, 2665); IF (RFC2233, 2863); Ping & Traceroute (RFC2925); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); D-Link Private MIB		
Standard Compliance	UDP (RFC768); TFTP (RFC783); IP (RFC791); ICMP (RFC792); TCP (RFC793); ARP (RFC826); Telnet (RFC854); BootP (RFC951, 1542); HTTP (RFC2068); RADIUS (RFC2138); ICMPv6 (RFC4443); RADIUS Accounting (RFC2139, 2866); TACACS (RFC1492); SNMPv1 (RFC1157); SNMPv2c (RFC1901, 1908); SNMPv3 (RFC2570, 2575); 31-Bit Prefixed (RFC3021); IPv6 (RFC2460); IPv6 Neighbor Discovery (RFC4861); Stateless Address Auto-configuration (RFC4862); IPv6 Path MTU Discovery (RFC1981); Deprecation of Type 0 Routing Headers in IPv6 (RFC5095)		
Physical & Environment	Dimension (W x D x H)	11-inch, 1U Height; 280 x 180 x 43mm	19-inch, 1U Rack-Mount; 440 x 210 x 44mm
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply	
	Max. Power Consumption	20.9W	41.9W
	Redundant Power Supply	-	DPS-200
	Operation Temperature	0 to 40 °C	0 to 50 °C
	Storage Temperature	-40 to 70 °C	
	Humidity	5% to 95% Non-Condensing	
Fan	Fanless	2 Smart Fan (Default Low Speed)	
SD Card Reader	-	Yes	
Certification	EMI-EMC Compliance		FCC; CE; C-Tick; VCCI Class A
Safety Compliance			UL; CB Report

Fast Ethernet xStack Layer 2 Edge Switches

DES-3528/52 Series



XSTACK



The xStack DES-3528/52 series consists of L2 10/100Mbps switches that deliver performance, flexible expansion, robust security, multi-layer QoS and redundant power supply option.

- D-Link Single IP Management (Virtual Stack)
- Loopback Detection (LBD)
- Internet Group Management Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- Policy-based Routing
- 802.1v Protocol VLAN
- Double VLAN (Q-in-Q)
- Selective Q-in-Q
- IGMP Snooping Multicast (ISM) VLAN
- Asymmetric VLAN
- Voice VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- Traffic Segmentation
- Broadcast/Multicast/Unicast Storm Control
- ARP Spoofing Prevention
- BPDU Attack Protection
- 802.1X Port/Host-based Access Control
- Web-based Access Control (WAC)
- MAC-based Access Control (MAC)
- Multiple Authentication
- Guest VLAN
- Microsoft® Network Access Protection (NAP)
- Three-Level User Accounts

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
------------	-----------------------

Redundant Power Supplies

DPS-200	60-Watt AC Redundant Power Supply (for DES-3528 & DES-3552)
DPS-600	500-Watt AC Redundant Power Supply (for DES-3528P)

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DES-3528



- 10/100BASE-TX x 24
- Combo 1000BASE-T/SFP x 2
- 1000BASE-T/Stacking Port x 2
- AC Power Supply
- Redundant Power Supply
- Physical Stack

DES-3528P

- 10/100BASE-TX x 24 (PoE)
- Combo 1000BASE-T/SFP x 2
- 1000BASE-T/Stacking Port x 2
- AC Power Supply
- Redundant Power Supply
- Physical Stack

DES-3552

- 10/100BASE-TX x 48
- Combo 1000BASE-T/SFP x 2
- 1000BASE-T/Stacking Port x 2
- AC Power Supply
- Redundant Power Supply
- Physical Stack

DES-3528/52 Series

Model	DES-3528	DES-3528P	DES-3552
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DES-3528P)		
Port Interface	10BASE-T/100BASE-TX Port (RJ-45) 10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45) Combo 1000BASE-T/ SFP	24 2 2	48
Stackability	D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices Via GE Port 27 & 28 (for DES-3528/28P); Via GE Port 51 & 52 (for DES-3552); Bi-Directional Redundant Stacking Topology; Linear/Ring Topology; Bandwidth up to 2Gbps Bi-Directional Per Port, Up to 4Gbps Per Device; Up to 8 Units Per Stack; Backup Master; Inter Trunking or Mirroring		
General Features	Switching Capacity	12.8Gbps	17.6Gbps
	Max. Forwarding Rate	9.5Mpps	13.1Mpps
	Forwarding Mode	Store and Forward	
	Packet Buffer Memory	1MBytes	
	SDRAM for CPU	128MBytes	
	Flash Memory	16MBytes	
Mean Time Before Failure	203,785 hours	345,226 hours	380,412 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration		
L2 Features	MAC Address Table: 16K; Flow Control: IEEE 802.3x Flow Control, HOL Blocking Prevention; Jumbo Frame: Max. 9,216 Bytes; Spanning Tree Protocol (STP): 802.1D STP, 802.1w Rapid STP, 802.1s Multiple STP, BPDU Filtering; Loopback Detection; 802.3ad Link Aggregation: Max. 8 Groups Per Device, Max. 8 Ports Per Group; Port Mirroring: One-to-One, Many-to-One, Flow-based Mirroring, RSPAN		
L2 Multicasting	IGMP Snooping v1/v2/v3: 256 Groups, Host-based IGMP Snooping Fast Leave, Report Suppression; Limited IP Multicasting (IGMP Filtering): Max. 24 IGMP Filtering Profiles, 128 Ranges Per Profile; MLD Snooping v1/v2: 256 Groups; MLD Snooping Fast Leave		
L3 Features	ARP Proxy; Policy-based Routing		
Virtual LAN	VLAN Groups: Max. 4K VLAN; GARP VLAN Registration Protocol (GVRP): Max. 256 Dynamic VLAN; 802.1Q Tagged VLAN; 802.1v Protocol VLAN; Double VLAN (Q-in-Q); Port-based Q-in-Q, Selective Q-in-Q; VLAN Translation; Port-based VLAN; MAC-based VLAN; ISM VLAN; Asymmetric VLAN; VLAN Trunking; Voice VLAN; Subnet-based VLAN		
Quality of Service (QoS)	802.1p Quality of Service; 8 Queues Per Port; Queue Handling: Strict Priority, Weighted Round Robin (WRR), Strict + WRR; CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, DSCP, Protocol Type, IPv6 Traffic Class, IPv6 Flow Label; TCP/UDP Port, User-Defined Packet Content; Time-based QoS; Actions for Flow: Remark 802.1p Priority Tag, Remark TOS/DSCP Tag, Bandwidth Control, Flow Statistics, Committed Information Rate (CIR): Min. Granularity 64kbps; Stabilized Random Early Detection (SRED) Congestion Control; Bandwidth Control: Port-based (Ingress, Min. Granularity 64kbps), Flow-based (Ingress, Min. Granularity 64kbps), Per Egress Queue Bandwidth Control, Per Egress Queue Bandwidth Guarantee		
Access Control List (ACL)	Max. 1,792 Access Rules; ACL Statistics; Time-based ACL; VLAN-based ACL; CPU Interface Filtering; ACL based on: 802.1p Priority, VLAN ID, MAC Address, Ether Type, IPv4/IPv6 Address, DSCP, Protocol Type, TCP/UDP Port Number, IPv6 Traffic Class, IPv6 Flow Label, User-Defined Packet Content		
Security	Secure Shell (SSH) v2; Secure Sockets Layer (SSL) v1/v2/v3; Port Security: Max. 64 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; D-Link Safeguard Engine; NetBIOS/NetBEUI Filtering; IP-MAC-Port Binding (IMPB): ARP Packet Inspection, IP Packet Inspection, DHCP Snooping, 500 Address Binding Entries Per Device; Traffic Segmentation; DHCP Server Screening; DHCP Client Filtering; ARP Spoofing Prevention; BPDU Attack Protection		
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment, Authentication Database Failover; Web-based Access Control (WAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment, Authentication Database Failover; MAC-based Access Control (MAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment, Authentication Database Failover; Multiple Authentication; Japanese Web-based Access Control (JWAC); Microsoft Network Access Protection (NAP): 802.1X NAP, DHCP NAP; Guest VLAN; RADIUS & TACACS+ Authentication for Switch Access; RADIUS Accounting; Three-Level User Accounts		
Management	Web-based GUI; Command Line Interface (CLI); Telnet Server; Telnet Client; TFTP Client; ZModem; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Traps; Link Layer Discovery Protocol (LLDP); Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; CPU Monitoring; PPPoE Circuit-ID Tag Insertion; Dual Image; Dual Configuration; DHCP Auto-Configuration; sFlow; BootP/DHCP Client; DHCP Server; DHCP Relay; DHCP Relay Option 60/61/82; System Log; Network Time Protocol (NTP) / Simple NTP (SNTP); Password Recovery; Password Encryption; DHS Relay		
Operations, Admin & Management (OAM)	Cable Diagnostics; 802.3ah Ethernet Link OAM; 802.1ag Connectivity Fault Management (CFM); Loopback Diagnostics		
D-Link Green	Compliant with RoHS 6; Time-based PoE		
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1409); SNMPv2 (RFC1907); RMON (RFC1757, 2819); RMONv2 (RFC2021); Ether-Like (RFC1643, 2358, 2665); 802.1p (RFC2674); IF (RFC2233, 2863); Ping & Traceroute (RFC2925); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); D-Link Private MIB		
Standard Compliance	UDP (RFC768); TFTP (RFC783); IP (RFC791); ICMP (RFC792); TCP (RFC793); ARP (RFC826); Telnet (RFC854); BootP (RFC951, 1542); HTTP (RFC2068); RADIUS (RFC2138); RADIUS Accounting (RFC2139, 2866); DiffServ (RFC2474); DSCP AF (RFC2597); DSCP EF (RFC2598); TACACS (RFC1492); SNMPv1 (RFC1157); SNMPv2c (RFC1901, 1908); SNMPv3 (RFC2570, 2575); Syslog (RFC3164, 3295); DHCP Relay Option (RFC3046)		
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount 441 x 210 x 44mm	19-inch, 1U Rack-Mount 441 x 310 x 44mm
	Weight	2.51kg	5.42kg
	Power Input	AC Input: 100-240VAC, 50/60Hz; Universal Power Supply	
	Max. Power Consumption	20.5W	505.1W
	Power over Ethernet	-	Power Budget: 370W; Port 1-8: 30W Port 9-24: 15.4W Time-based PoE
	Redundant Power Supply	DPS-200	DPS-600
	Operation Temperature	0 to 50 °C	
	Storage Temperature	-40 to 70 °C	
	Operation Humidity	5% to 95% Non-Condensing	
	Acoustic	0 dB	48.2 dB at Max Speed
Fan	Fanless	4 DC Fans	2 DC Fans
Real Time Clock (RTC)	Maintain the Timing Setting when the Device Power is Off		
EMI-EMC Compliance	FCC Class A; CE Class A; C-Tick; VCCI		
Safety Compliance	CB; UL/cUL		
Metro Ethernet Forum	MEF 9, 14		

Fast Ethernet Metro Ethernet Edge Switches

DES-3200 Series



XSTACK



The DES-3200 series Layer 2 xStack Managed Switch is designed for the Metro ETTX and FTTX market. This series provides 8/16/24 100Mbps Fast Ethernet connections plus 2/4 combo Gigabit/SFP ports. DES-3200-28F provides Fast Ethernet fiber connections which is an advantage in Metro Ethernet applications.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- Ethernet Ring Protection Switching (ERPS)*
- Gratuitous Address Resolution Protocol (ARP)
- 802.3ah Ethernet Link OAM*
- 802.1v Protocol VLAN
- VLAN Trunking
- Asymmetric VLAN
- Double VLAN (Q-in-Q)
- Selective Q-in-Q
- IGMP Snooping Multicast (ISM) VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- CPU Interface Filtering
- 802.1ag Connectivity Fault Management (CFM)*
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine™
- IP-MAC-Port Binding (IMPB)
- ARP Spoofing Prevention*
- BPDU Attack Protection*
- DHCP Server Screening*
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- Per Queue Bandwidth Control*

DES-3200-10

- 10/100BASE-TX x 8
- Combo 1000BASE-T/SFP x 2
- Fanless
- 9-inch, 1U Desktop

DES-3200-18

- 10/100BASE-TX x 16
- Combo 1000BASE-T/SFP x 2
- Fanless
- 9-inch, 1U Desktop

DES-3200-28

- 10/100BASE-TX x 24
- Combo 1000BASE-T/SFP x 4
- Fanless
- 19-inch, 1U Rack-Mount

DES-3200-28F

- 100BASE-X SFP x 24
- Combo 1000BASE-T/SFP x 4
- DC Fan x 1
- 19-Inch, 1U Rack-Mount

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
------------	-----------------------

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DES-3200 Series

Model	DES-3200-10	DES-3200-18	DES-3200-28	DES-3200-28F	
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab				
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	8	16	24	
	100BASE-X SFP Port	-	-	24	
	Combo 1000BASE-T/SFP Port	2		4	
Stackability	Virtual Stack D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices				
General Features	Switching Capacity	5.6Gbps	7.2Gbps	12.8Gbps	
	Maximum Forwarding Rate	4.2Mpps	5.4Mpps	9.5Mpps	
	Forwarding Mode	Store and Forward			
	Packet Buffer Memory	384KBytes			
	DDR1 SDRAM for CPU	128MBytes			
	Flash Memory	16MBytes			
	Mean Time Before Failure (MTBF)	873,750 hours	743,115 hours	639,525 hours	447,268 hours
	Console Port Female RS-232 DB-9 Console Port for Out-of-Band Configuration				
L2 Features	MAC Address Table: 8K; Jumbo Frame: Max. 2048Bytes; Spanning Tree Protocol: 802.1D-2004 Edition STP, 802.1w Rapid STP, 802.1s Multiple STP, BPDU Filtering, Root Restriction; L2 Protocol Tunneling; Loopback Detection (LBD); 802.3ad Link Aggregation: Max. 5 Groups (DES-3200-10), Max. 9 Groups (DES-3200-18), Max. 14 Groups (DES-3200-28/28F), Max. 8 Ports Per Group; Port Mirroring: 1 Mirroring Group, One-to-One, Many-to-One, Flow-based (ACL) Mirroring; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; Ethernet-Ring Protection Switching (E-RPS)*				
L2 Multicast	IGMP Snooping v1/v2, v3 Awareness: 1K Groups, Port-based IGMP Snooping Fast Leave; Limited IP Multicasting: Max. 24 IGMP Filtering Profiles, 128 Groups Per Profile MLD Snooping v1/v2, v2 Awareness: 1K Groups; IGMP Authentication				
L3 Features	Gratuitous ARP				
Virtual VLAN (VLAN)	802.1Q Tagged VLAN; 802.1v Protocol VLAN; VLAN Group: Max. 4K VLAN; Port-based VLAN; MAC-based VLAN; GARP VLAN Registration Protocol (GVRP): Max. 255 Dynamic VLAN; VLAN Trunking; Asymmetric VLAN; ISM VLAN; VLAN Translation Double VLAN (Q-in-Q): Port-based Q-in-Q, Selective Q-in-Q				
Quality of Service (QoS)	802.1p, 4 Queues Per Port; Queue Handling: Strict Priority, Weighted Round Robin (WRR); CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, Ether Type, IP Address, TOS, DSCP, Protocol Type, TCP/UDP Port, User-Defined Packet Content Actions for Flows: Remark 802.1p Priority Tag; Time-based QoS; Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 62.5kbps), Flow-based (Ingress, Min. Granularity 62.5kbps)				
Access Control List (ACL)	Max. 512 Access Rules; Time-based ACL; ACL Statistics; CPU Interface Filtering; ACL based on: 802.1p Priority, VLAN ID, MAC Address, Ether Type, IP Address, DSCP, Protocol Type, TCP/UDP Port Number, User-Defined Packet Content, Switch Port				
Security	Secure Shell (SSH) v2; Secure Sockets Layer (SSL) v1/v2/v3; Broadcast/Multicast/Unicast Storm Control; Traffic Segmentation; D-Link Safeguard Engine; IP-MAC-Port Binding (IMPB); IP Packet Inspection, ARP Packet Inspection, DHCP Snooping, 500 Address Binding Entries Per Device; Port Security: Max. 64 MAC Addresses Per Port; DoS Attack Prevention; ARP Spoofing Prevention*; BPDU Attack Protection*				
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control; Two-Level User Account; Guest VLAN; RADIUS & TACACS+ Authentication for Switch Access; RADIUS Accounting				
Management	Web-based GUI (IPv4/IPv6); Command Line Interface (CLI); Telnet Server/Client (IPv4/IPv6); TFTP Client (IPv4/IPv6); XModem; ZModem; System Log; Dual Image; CPU Monitoring; Simple Network Management Protocol (SNMP) v1/v2c/v3: SNMP over IPv6; SNMP Traps; Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; BootP/DHCP Client; DHCP Auto-Configuration; DHCP Relay; DHCP Relay Option 82; Simple Network Time Protocol (SNTP); Link Layer Discovery Protocol (LLDP); Password Encryption; Simple Mail Transfer Protocol (SMTP); Debug Command; Network Load Balancing (NLB)*; IPv6 Management				
Operations, Administration & Management (OAM)	Loopback Diagnostics*; Cable Diagnostics*; 802.3ah Link OAM; 802.1ag Connectivity Fault Management (CFM)*				
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1409); SNMPv2 (RFC1907); RMON (RFC1757, 2819); RMONv2 (RFC2021); Ether-Like (RFC1643, 2358, 2665); 802.1p (RFC2674); IF (RFC2233, 2866); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); Ping & Traceroute (RFC2925); D-Link Private MIB				
Physical & Environment	Dimension (W x D x H)	9-inch, 1U Desktop; 228.5 x 180 x 44mm		19-inch, 1U Rack-Mount; 441 x 207 x 44mm	
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply			
	Power Consumption	12.7W	13.2W	18.4W	46.7W
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-40 to 70 °C			
Operation Humidity	5% to 95% Non-Condensing				
Fan	Fanless		1 DC Fan		
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A; IC			
	Safety Compliance	UL/cUL; CB			

Gigabit Ethernet Entry-Level Managed Switches

DGS-3100 Series



DGS-3100 series consists of managed Layer 2 Gigabit stackable switches designed to provide feature-rich, low-cost switching in the entry-level network management category.

- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- Loopback Detection (LBD)
- GARP VLAN Registration Protocol (GVRP)
- Quality of Service (QoS)
- Access Control List (ACL)
- ARP Spoofing Prevention
- Broadcast/Multicast/Unicast Storm Control
- D-Link Safeguard Engine™
- Microsoft® Network Access Protection (NAP)
- Guest VLAN
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- MAC-based Access Control (MAC)
- Link Layer Discovery Protocol (LLDP)

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
------------	-----------------------

Redundant Power Supplies

DPS-200	60-Watt AC Redundant Power Supply (for DGS-3100-24 & DGS-3100-24TG)
DPS-500	140-Watt AC Redundant Power Supply (for DGS-3100-48)
DPS-600	500-Watt AC Redundant Power Supply (for DGS-3100-24P & DGS-3100-48P)

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DGS-3100-24

- 10/100/1000BASE-T x 20
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply
- Physical Stack

DGS-3100-24P

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply
- Physical Stack

DGS-3100-24TG

- 10/100/1000BASE-T x 8
- SFP Slots x 16
- Redundant Power Supply
- Physical Stack

DGS-3100-48

- 10/100/1000BASE-T x 44
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply
- Physical Stack

DGS-3100-48P

- 10/100/1000BASE-T x 44 (PoE)
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply
- Physical Stack

DGS-3100 Series

Model	DGS-3100-24	DGS-3100-24P	DGS-3100-24TG	DGS-3100-48	DGS-3100-48P	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DGS-3100-24P & DGS-3100-48P)					
Port Interface	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)	20	20 (PoE)	8	44	44 (PoE)
	SFP Port	-	-	16	-	-
	Combo 1000BASE-T/SFP Port	4	-	-	-	4
Stackability	Physical Stack Via HDMI Stacking Ports; Up to 20Gbps with Bi-Directional Redundant Stacking Topology; Up to 10Gbps with Linear Topology; Up to 6 Units Per Stack; Backup Master; Inter Trunking or Mirroring; HDMI Cable Length: 1 meter					
General Features	Switching Capacity	68Gbps		116Gbps		
	Maximum Forwarding Rate	50.60Mpps		86.31Mpps		
	Forwarding Mode	Store and Forward				
	Packet Buffer Memory	768KBytes		1.5MBytes		
	SDRAM for CPU	64MBytes				
	Flash Memory	16MBytes				
	Mean Time Before Failure (MTBF)	212,377 hours	117,136 hours	195,655 hours	103,924 hours	96,648 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration					
L2 Features	MAC Address Table: 8K; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; Jumbo Frame: Max. 10,240Bytes; IGMP Snooping v1/v2: 256 Group, IGMP Snooping Fast Leave; MLD Snooping v1/v2: 128 Groups; Port Mirroring: One-to-One, Many-to-One; Spanning Tree Protocol (STP): 802.1D STP, 802.1w Rapid STP, 802.1s Multiple STP, Per Port / Per Device BPDU Filtering; Loopback Detection; 802.3ad Link Aggregation: Max. 32 Groups Per Device, 8 Ports Per Group					
Virtual VLAN (VLAN)	VLAN Group: Max. 256 Static VLAN Groups; 802.1Q Tagged VLAN; GARP VLAN Registration Protocol (GVRP)					
Quality of Service	802.1p Class of Service: 4 Queues; Queue Handling: Strict, Weighted Round Robin (WRR), Strict + WRR; CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, Ether Type, IPv4 Address, DSCP, TCP/UDP Port Bandwidth Control: Port-based (Ingress, Min. Granularity 3500kbps; Egress, Min. Granularity 64kbps), Flow-based (Ingress, Min. Granularity 64kbps)					
Access Control List (ACL)	Max. 15 Profiles; Max. 240 Rules Shared by All Profiles; Time-based ACL; ACL based on: 802.1p Priority, VLAN ID, Ether Type, MAC Address, IPv4 Address, DSCP, Protocol Type, TCP/UDP Port Number					
Security	Secure Shell (SSH) v2; Secure Sockets Layer (SSL) v3; ARP Spoofing Prevention; Port Security: Max. 16 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; D-Link Safeguard Engine					
Authentication, Authorization & Accounting (AAA)	Microsoft Network Access Protection (NAP): DHCP NAP; Guest VLAN; 802.1X: Port-based Access Control, Host-based Access Control; MAC-based Access Control (MAC); RADIUS and TACACS+ Authentication for Management Access					
Management	Web-based GUI; Command Line Interface (CLI); Telnet Server/Client; TFTP Client; Link Layer Discovery Protocol (LLDP); DHCP Relay Option 82; System Log; BootP/DHCP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Trap; DHCP Auto-Configuration; Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; Dual Image; Dual Configuration; CPU Monitoring; Simple Network Time Protocol (SNTP)					
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1901, 1908, 3418); RMON (RFC1757, 2819); 802.1p (RFC2674); Ether-Like (RFC1643); IF (RFC2863); RADIUS Authentication Client (RFC2618); Ping & Traceroute (RFC2925); D-Link Private MIB					
Standard Compliance	UDP (RFC768); TFTP (RFC783); IP (RFC791); ICMP (RFC792); TCP (RFC793); ARP (RFC826); Telnet (RFC854); BootP (RFC951, 1542, 2131); HTTP (RFC2068); RADIUS (RFC2138, 2139); TACACS (RFC1492); RADIUS Accounting (RFC2620); SNMPv1 (RFC1157); SNMPv2c (RFC1901, 1908); SNMPv3 (RFC2570, 2575), DiffServ Expedited Forwarding (RFC2598)					
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount 440x210x44mm	19-inch, 1U Rack-Mount 440x310x44mm	19-inch, 1U Rack-Mount 440x210x44mm	19-inch, 1U Rack-Mount 440x310x44mm	19-inch, 1U Rack-Mount 440x430x44mm
	Weight	3.04kg	5.58kg	2.95kg	5.50kg	7.43kg
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply				
	Maximum Power Consumption	41.8W	482.0W	37.1W	90.5W	539.0W
	Standby Power Consumption	19.58W	49.3W	22.4W	48.2W	70.3W
	Power over Ethernet	-	Power Budget: 370W; Per Port: 15.4W	-	-	Power Budget: 370W; Per Port: 15.4W
	Redundant Power Supply	DPS-200	DPS-600	DPS-200	DPS-500	DPS-600
	Operation Temperature	0 to 45 °C	0 to 40 °C	0 to 45 °C	0 to 45 °C	0 to 40 °C
	Storage Temperature	-10 to 70 °C				
	Operation Humidity	10% to 90% RH				
Storage Humidity	5% to 90% RH					
Acoustic	45.9 dB	48 dB	44.1 dB	47.4 dB	50.4dB	
Certification	EMI-EMC Compliance	FCC Class A; ICES-003 Class A; CE; C-Tick; VCCI Class A				
	Safety Compliance	cUL; CB				

Fast Ethernet Entry-Level Managed Switches

DES-3028/52 Series



DES-3028 / DES-3052 series provides flexible choices of 24 or 48 Fast Ethernet ports, with or without Power over Ethernet. Each switch is equipped with four Gigabit Ethernet ports including two combo SFP which are capable of both Gigabit and Fast Ethernet (100BASE-FX) fiber connections for user-specific applications.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- Asymmetric VLAN
- IGMP Snooping Multicast (ISM) VLAN
- Double VLAN (Q-in-Q)
- Quality of Service (QoS)
- Access Control List (ACL)
- CPU Interface Filtering
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine™
- IP-MAC-Port Binding (IMPB)
- Microsoft® Network Access Protection
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- Guest VLAN
- Simple Network Management Protocol (SNMP)
- Cable Diagnostics

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
------------	-----------------------

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DES-3028

- 10/100BASE-TX x 24
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fanless

DES-3028P

- 10/100BASE-TX x 24 (PoE)
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- DC Fan x 2

DES-3052

- 10/100BASE-TX x 48
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fanless

DES-3052P

- 10/100BASE-TX x 48 (PoE)
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- DC Fan x 3

DES-3028/52 Series

Model	DES-3028	DES-3028P	DES-3052	DES-3052P	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DES-3028P & DES-3052P)				
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	24	24 (PoE)	48	
	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	2			
	Combo 1000BASE-T/SFP	2			
Stackability	Virtual Stack D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices				
General Features	Switching Capacity	12.8Gbps		17.6Gbps	
	Maximum Forwarding Rate	9.5Mpps		13.1Mpps	
	Forwarding Mode	Store and Forward			
	Packet Buffer Memory	512KBytes			
	SDRAM for CPU	64MBytes			
	Flash Memory	8MBytes			
	Mean Time Before Failure (MTBF)	248,271 hours	196,033 hours	292,133 hours	169,182 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration				
L2 Features	MAC Address Table: 8K; Jumbo Frames: Max. 2,048Bytes; IGMP Snooping v1/v2: 256 Groups, Port-based IGMP Snooping Fast Leave; IGMP Authentication; Limited IP Multicast: Max. 24 IGMP Filtering Profiles, 128 Ranges Per Profile; MLD Snooping v1/v2: 256 Group, MLD Snooping Fast Leave Spanning Tree Protocol (STP): 802.1D-2004 Edition STP, 802.1w Rapid STP, 802.1s Multiple STP, BPDU Filtering, Root Restriction; Loopback Detection (LBD); 802.3ad Link Aggregation: Max. 6 Groups Per Device, Max. 8 Ports Per Group; Port Mirroring: One-to-One, Many-to-One, Flow-based Mirroring; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention				
Virtual LAN (VLAN)	802.1Q Tagged VLAN, VLAN Group: Max. 4K VLAN; Port-based VLAN; Asymmetric VLAN; ISM VLAN; GARP VLAN Registration Protocol (GVRP): Max. 255 Dynamic VLAN; Double VLAN (Q-in-Q): Port-based Q-in-Q				
Quality of Service (QoS)	802.1p Quality of Service; 4 Queues Per Port; Queue Handling: Strict, Weighted Round Robin; CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, IP Address, DSCP, Protocol Type, TCP/UDP Port, User-Defined Packet Content Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps), Flow-based (Ingress, Min. Granularity 64kbps); Time-based QoS				
Access Control List (ACL)	Max. 256 Access Rules; Time-based ACL; CPU Interface Filtering; Traffic Segmentation; ACL based on: 802.1p Priority, VLAN ID, MAC Address, Ether Type, IP Address, DSCP, Protocol Type, TCP/UDP Port Number, User-Defined Packet Content				
Security	Secure Shell (SSH) v2; Secure Sockets Layer (SSL) v1/v2/v3; Port Security: Max. 16 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; IP-MAC-Port Binding (IMPB): ARP Packet Inspection, IP Packet Inspection, DHCP Snooping, 500 Address Binding Entries Per Device; Microsoft Network Access Protection (NAP): 802.1X NAP, DHCP NAP; D-Link Safeguard Engine				
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Guest VLAN, RADIUS Accounting; RADIUS & TACACS+ Authentication for Switch Access				
Management	Web-based GUI; Command Line Interface (CLI); Telnet Server/Client; TFTP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Traps; XModem; ZModem; Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; BootP/DHCP Client; DHCP Auto-Configuration; DHCP Relay; DHCP Relay Option 82; Dual Image; CPU Monitoring; Simple Network Time Protocol (SNTP); System Log; Link Layer Discovery Protocol (LLDP); Debug Command; Cable Diagnostics				
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); RMON (RFC1757, 2819); RMONv2 (RFC2021); Ether-Like (RFC1643, 2358, 2665); 802.1p (RFC2674); IF (RFC2233, 2863); Ping & Traceroute (RFC2925); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); D-Link Private MIB				
Standard Compliance	RADIUS Accounting (RFC2866); RADIUS Authentication For Management Access (RFC2138, 2139); TACACS+ Authentication for Management Access (RFC1492); HTTP (RFC2068); UDP (RFC768); TFTP (RFC783); IP (RFC791); ICMP (RFC792); TCP (RFC793); ARP (RFC826); Telnet (RFC854); SNMP (RFC1157, 1901, 1908, 2570, 2575); RMONv1 (RFC2819); BootP/DHCP (RFC951, 1542); DHCP Relay (RFC3046); System Log (RFC3164, 3195)				
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount; 441 x 207 x 44mm		19-inch, 1U Rack-Mount; 441 x 309 x 44mm	
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply			
	Power Consumption	18.8W	217W	25.5W	395W
	Power over Ethernet	-	Power Budget: 185W; Per Port up to 15.4W	-	Power Budget: 370W; Per Port up to 15.4W
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-10 to 70 °C			
	Humidity	5% to 95% Non-Condensing			
Fan	Fanless	2 DC Fans	Fanless	3 DC Fans	
Certification	EMI-EMC Compliance	FCC Class A; CE; C-Tick; VCCI Class A			
	Safety Compliance	cUL; LVD			

Fast Ethernet Entry-Level Managed Switches

DES-3000 Series



DES-3000 Series consists of high-performance managed Layer 2 switches. Ideal as a solution for small and medium-size business (SMB) and enterprise markets. Designed as an entry-level management solution for SMB, these switches come included with various enriched advanced features. The DES-3000 Series is a cost-effective solution suitable for business applications that require superior performance with options for expansion. The switches in addition offer fiber uplinks for long distance connections to different group users, such as classrooms, departments spread across campus, or buildings.

- D-Link Single IP Management (Virtual Stack)
- Loopback Detection (LBD)
- Internet Group Management Protocol (IGMP) Snooping
- 802.1Q Virtual LAN (VLAN)
- Quality of Service (QoS)
- Traffic Segmentation
- CPU interface Filtering
- IP-MAC-Port Binding (IMPB)
- Broadcast/Multicast/Unicast Storm Control
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- Microsoft® Network Access Protection
- Simple Network Management Protocol (SNMP)
- Cable Diagnostics

Optional Accessories

Modules (for DES-3026)

DEM-201F	1-Port 100BASE-FX Multi-Mode Fiber Module
DEM-201FL	1-Port 100BASE-FX Single-Mode Fiber Module
DEM-301G	1-Port SFP Module
DEM-301T	1-Port 1000BASE-T Module

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DES-3010F

- 10/100BASE-TX x 8
- 10/100/1000BASE-T x 1
- 100BASE-FX x 1 (Multi-Mode Fiber)
- Fanless
- 11-inch, 1U Desktop

DES-3010G

- 10/100BASE-TX x 8
- 10/100/1000BASE-T x 1
- SFP x 1
- Fanless
- 11-inch, 1U Desktop

DES-3026

- 10/100BASE-TX x 24
- Expansion Slots x 2
- Fanless
- 19-inch, 1U Rack-Mount

DES-3000 Series

Model	DES-3010F	DES-3010G	DES-3026	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab			
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	8	8	24
	100BASE-FX (MMF)	1	-	Via DEM-201F Module
	100BASE-FX (SMF)	-	-	Via DEM-201FL Module
	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	1	1	Via DEM-301T Module
	SFP Port	-	1	Via DEM-301G Module
Expansion Slot	-			
Stackability	Virtual Stack D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices			
General Features	Switching Capacity	3.8Gbps	5.6Gbps	8.8Gbps
	Maximum Forwarding Rate	2.8Mpps	4.2Mpps	6.6Mpps
	Forwarding Mode	Store and Forward		
	Packet Buffer Memory	256KBytes		
	SDRAM for CPU	32MBytes		
	Flash Memory	4MBytes		
	Mean Time Before Failure (MTBF)	239,160 hours	247,500 hours	123,925 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration			
L2 Features	MAC Address Table: 8K; Loopback Detection; IGMP Snooping v1/v2: 256 Groups, Port-based IGMP Snooping Fast Leave; Spanning Tree Protocol (STP): 802.1D STP, 802.1w Rapid STP, BPDU Filtering; 802.3ad Link Aggregation: Max. 3 Groups Per Device, Max. 4 Ports Per Group, (2 Groups for Fast Ethernet Ports, 1 Group for Gigabit Ethernet Ports) Port Mirroring: One-to-One, Many-to-One			
Virtual LAN (VLAN)	802.1Q Tagged VLAN; VLAN Group: Max. 255 VLAN; Static VLAN			
Quality of Service (QoS)	802.1p Quality of Service; 4 Queues; CoS based on: MAC Destination Address, Switch Port, TOS, DSCP Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps)			
Security	Port Security: Max. 10 MAC Addresses Per Port; Traffic Segmentation; CPU Interface Filtering; IP-MAC-Port Binding (IMPB): ARP Inspection, 500 Address Binding Entries Per Device; Broadcast/Multicast/Unicast Storm Control; Secure Shell (SSH) v2			
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Guest VLAN; Microsoft Network Access Protection (NAP): DHCP NAP			
Management	D-Link Single IP Management (SIM); Web-based GUI; Command Line Interface (CLI); Telnet Server; TFTP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Traps; DHCP Relay; DHCP Relay Option 60/61; DHCP Auto-Configuration; BootP/DHCP Client			
Operations, Administration & Management (OAM)	Cable Diagnostics			
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); RMON (1757); Ether-Like (RFC1643, 2358); 802.1p (RFC2674); IF (RFC1213, 2233); RADIUS Extension Standard (RFC2869); D-Link Private MIB			
Physical & Environment	Dimension (W x D x H)	11-inch, 1U Desktop; 280 x 180 x 44mm		19-inch, 1U Rack-Mount; 441 x 207 x 44mm
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply		
	Power Consumption	15W	14.8W	17W
	Operation Temperature	0 to 40 °C		
	Storage Temperature	-40 to 70 °C		
Certification	Humidity	5% to 95% Non-Condensing		
	EMI-EMC Compliance	FCC Class A; CE; C-Tick VCCI		
	Safety Compliance	CSA International		

Gigabit Ethernet Web Smart Switches

DGS-1210 Series



D-Link DGS-1210 Series is the latest generation of Web Smart Switches that feature D-Link Green technology. This series integrates advanced management and security functions that provide performance and scalability. DGS-1210 Series is designed for SMBs/enterprises seeking to upgrade from unmanaged switches to Web Smart switches, which gives customers easy access and simplifies operation at an affordable price.

- Internet Group Management Protocol (IGMP) Snooping
- Loopback Detection (LBD)
- Cable Diagnostics
- 802.1Q Virtual LAN (VLAN)
- Management VLAN
- Asymmetric VLAN
- Auto Voice VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- 802.1X Access Control
- Port Security
- Broadcast/Multicast/Unicast Storm Control
- D-Link Safeguard Engine™
- DHCP Server Screening*
- ARP Spoofing Prevention*
- Web-based GUI
- Simple Network Management Protocol (SNMP)

Optional Accessories

Gigabit Ethernet WDM SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
------------	-----------------------

DGS-1210-10P

- 10/100/1000BASE-T x 8 (PoE)
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 13-inch, 1U Desktop
- Power Savings

DGS-1210-16

- 10/100/1000BASE-T x 12
- Combo 1000BASE-T/SFP x 4
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1210-24

- 10/100/1000BASE-T x 20
- Combo 1000BASE-T/SFP x 4
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1210-48

- 10/100/1000BASE-T x 44
- Combo 1000BASE-T/SFP x 4
- DC Fan x 2
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1210 Series

Model	DGS-1210-10P	DGS-1210-16	DGS-1210-24	DGS-1210-48	
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DGS-1210-10P); Pre-Standard IEEE 802.3at (DGS-1210-10P)				
Port Interface	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)	8 (PoE)	12	20	
	Combo 1000BASE-T/SFP Port	2	4	4	
	Switching Capacity	20Gbps	32Gbps	48Gbps	
	Maximum Forwarding Rate	14.88Mpps	23.8Mpps	35.7Mpps	
	Forwarding Mode	Store and Forward			
General Features	Packet Buffer Memory	512KBytes		1MBytes	
	DDR2 for CPU	64MBytes			
	Flash Memory	16MBytes			
	Mean Time Before Failure (MTBF)	202,249 hours	799,491 hours	410,948 hours	
			322,402 hours		
L2 Features	MAC Address: 8K Entries Per Device, Static MAC Address: 256 Entries; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; IGMP Snooping v1/v2: 256 Groups, Static Multicast Address: 64, IGMP Per VLAN; Spanning Tree Protocol (STP): 802.1D STP, 802.1w Rapid STP; Loopback Detection; 802.3ad Link Aggregation: Max. 5 Groups Per Device, 8 Ports Per Group (DGS-1210-10P); Max. 8 Groups Per Device, 8 Ports Per Group (DGS-1210-16/24/48); Port Mirroring: One-to-One, Many-to-One, Mirroring for Tx/Rx/Both; Cable Diagnostics; Configurable Auto MDI/MDIX; Multicast Filtering*				
Virtual LAN (VLAN)	802.1Q Tagged VLAN; VLAN Group: Max. 256 Static VLAN Groups, Max. 4094 VIDs; Management VLAN; Asymmetric VLAN; Auto Voice VLAN: Max. 10 User Defined OUI, Max. 8 Default OUI				
Quality of Service (QoS)	802.1p Quality of Service; 4 Queues Per Port; Queue Handling: Strict, Weighted Round Robin (WRR); CoS based on: 802.1p Priority Queues, DSCP; Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps)				
Access Control List (ACL)	Max. 50 Profiles; Max. 240 Rules Shared by Profiles; ACL Actions: Permit, Deny; ACL based on: MAC Address, IPv4 Address (ICMP/IGMP/TCP/UDP), VLAN ID, 802.1p Priority, DSCP				
Security	802.1X; Port Security: Max. 64 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; Static MAC; D-Link Safeguard Engine; DHCP Server Screening*; ARP Spoofing Prevention*: Max. 64 Entries; Secure Sockets Layer* (SSL) v1/v2/v3 (IPv4)				
Management	Web-based GUI; Compact CLI through Telnet; Telnet Server; TFTP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3*; SNMP Trap; Trap for SmartConsole Utility; System Log: Max. 500 Log Entries, IPv4 Log Server; BootP/DHCP Client; Simple Network Time Protocol (SNTP)				
Power Savings	By Link Status and Cable Length Detection				
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); Trap Convention (RFC1215); Interface Group (RFC2233); D-Link Private MIB				
Standard Compliance	UDP (RFC768); IP (RFC791); ICMP (RFC792); TCP (RFC793); ARP (RFC826); Telnet Server (RFC854, 855, 858); Telnet Binary Transmission (RFC856); Congestion Control in TCP/IP Network (RFC896); Reverse Address Resolution Protocol (RFC903); BootP Client (RFC951); MIB (RFC1155); SNMPv1 (RFC1157); Path MTU Discovery (RFC1191); Concise MIB Definition (RFC1212); MIB-II, IF (RFC1213); Traps for Use with SNMP (RFC1215); Standard MIB (RFC1239); TFTP (RFC1350); Bridge MIB (RFC1493); CIDR (RFC1519); HTTP/1.0 (RFC1945); DHCP (RFC2131); DHCP Options and BootP Vendor Extensions (RFC2132); RADIUS Authentication (RFC2138); Interface MIB (RFC2233); 802.1p (RFC2647); Structure of Management Information Version 2 (SMIPv2) (RFC2578); SNMP (RFC3416, 3417)				
Physical & Environment	Dimension (W x D x H)	13-inch, 1U Desktop 330 x 180 x 44mm	19-inch, 1U Rack-Mount; 440 x 210 x 44mm	19-inch, 1U Rack-Mount; 440 x 250 x 44mm	
	Weight	1.84kg	2.87kg	2.97kg	
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply			
	Max. Power Consumption	PoE On: 109.3W PoE Off: 14.45W	17.4W	24.1W	59.1W
	Standby Power Consumption	7W/110V 7.8W/240V	4.9W/110V; 5W/240V	6W/110V; 6.2W/240W	19.2W/110V; 20.1W/240V
	Power over Ethernet	All Ports are Selective at 15.4W / 30W Power Budget: 78W Time-based PoE			
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-10 to 70 °C			
	Operation Humidity	10% to 95% RH			
	Storage Humidity	5% to 95% RH			
	Acoustic	0dB		46.2 dB	
	Fan	Fanless		Smart Fan x 2	
	Reset Button	One Reset Button			
Certification	EMI-EMC Compliance Safety Compliance				
	FCC Class A; CE Class A; IC Report Class A; C-Tick Class A; VCCI Class A cUL; LVD				

Gigabit Ethernet Web Smart Switches

DGS-1200 Series



D-Link Web Smart switches come with plug-and-play simplicity, designed to provide performance and reliability for small and medium-size business (SMB) network.

Switch management and configuration is through SmartConsole utility or web-based GUI. SmartConsole is an easy way to access the switch from a local computer.

- Internet Group Management Protocol (IGMP) Snooping
- Static Port Trunk
- 802.1Q Tagged Virtual LAN (VLAN)
- Management VLAN
- Asymmetric VLAN
- Quality of Service (QoS)
- 802.1X Port-based Access Control
- Broadcast Storm Control
- Cable Diagnostics
- D-Link Safeguard Engine™
- Web-based GUI
- Simple Network Management Protocol (SNMP)

Optional Accessories

Gigabit Ethernet WDM SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

DGS-1216T

- 10/100/1000BASE-T x 14
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1224T

- 10/100/1000BASE-T x 22
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1224TP

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- DC Fan x 2
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1248T

- 10/100/1000BASE-T x 44
- Combo 1000BASE-T/SFP x 4
- DC Fan x 3
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1200 Series

Model	DGS-1216T	DGS-1224T	DGS-1224TP	DGS-1248T	
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DGS-1224TP)				
Port Interface	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)	14	22	20 (PoE)	
	Combo 1000BASE-T/SFP Port	2		4	
General Features	Switching Capacity	32Gbps	48Gbps	96Gbps	
	Maximum Forwarding Rate	23.8Mpps	35.7Mpps	71.4Mpps	
	Forwarding Mode	Store and Forward			
	Packet Buffer Memory	384KBytes	512KBytes	384KBytes	1,024KBytes
	SDRAM for CPU	8MBytes		16MBytes	8MBytes
	Flash Memory	2MBytes PROM		4MBytes PROM	2MBytes PROM
Mean Time Before Failure (MTBF)	228,450 hours	215,976 hours	173,467 hours	186,656 hours	
L2 Features	MAC Address: 8K Entries Per Device, Static MAC Address: 256 Entries; IGMP Snooping v1/v2: 64 Multicast Groups; Spanning Tree Protocol: 802.1D STP; Jumbo Frame: Max. 10,240Bytes (for DGS-1216T/24T/24TP), Max. 9,220Bytes (for DGS-1248T); Static Port Trunk: Max. 6 Groups Per Device, 8 Ports Per Group				
Green Ethernet	Power Savings Mode				
Virtual LAN (VLAN)	802.1Q Tagged VLAN; Max. 256 Static VLAN Groups; Management VLAN; Asymmetric VLAN				
Quality of Service (QoS)	802.1p Priority Queues; Max. 4 Queues Per Port; DSCP-based QoS; Queue Handling: Strict, Weighted Round Robin (WRR)				
Security	802.1X Port-based Access Control; Broadcast Storm Control; Trusted Host; D-Link Safeguard Engine: Protect CPU from Broadcast/Multicast/Unicast Flooding; Cable Diagnostics				
Power Savings	By Link Status				
Management	Web-based GUI; Simple Network Management Protocol (SNMP) v1; DHCP Client; Trap Setting for Destination IP, System Events, Fiver Port Events, Twisted-Pair Port Events; Port Access Control; SmartConsole Utility; Firmware Upgrade using SmartConsole Utility; Web-based: Configuration Backup/Restoration; Web-based: Firmware Backup/Upload; System Reboot using Web-based Interface				
Management Information Base (MIB)	MIB-II (RFC1213); D-Link Private MIB				
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount; 440 x 210 x 44mm		19-inch, 1U Rack-Mount; 440 x 309 x 44mm	
	Weight	2.72kg	2.80kg	3.6kg	4.46kg
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply			
	Power Consumption	23W	31.2W	250.3W	76.2W
	Power over Ethernet	-		Power Budget: 180W	-
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-10 to 70 °C			
	Operation Humidity	10% to 90% RH			
	Storage Humidity	5% to 90% RH			
	Acoustic	0 dB	0 dB	47 dB	51.6 dB
	Fan	Fanless	Fanless	2 DC Fans	3 DC Fans
Reset Button	One Reset Button				
Certification	EMI-EMC Compliance Safety Compliance				
	FCC Class A; CE Class A; VCCI Class A cUL; LVD				

Fast Ethernet Web Smart Switches

DES-1210 Series



D-Link DES-1210 Series is the latest generation of Web Smart switches, which integrates advanced management and security functions that provide performance and scalability. While easy to use, the DES-1210 Series provides a complete and affordable solution for small and medium businesses.

- Internet Group Management Protocol (IGMP) Snooping
- Multicast Filtering*
- 802.1Q Tagged Virtual LAN (VLAN)
- Management VLAN
- Asymmetric VLAN
- Auto Voice VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- 802.1X Access Control
- Broadcast/Multicast/Unicast Storm Control
- D-Link Safeguard Engine™
- DHCP Server Screening*
- ARP Spoofing Prevention*
- Web-based GUI
- Simple Network Management Protocol (SNMP)

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
------------	-----------------------

DES-1210-28

- 10/100BASE-TX x 24
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount

DES-1210-52

- 10/100BASE-TX x 48
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount

DES-1210 Series

Model	DES-1210-28	DES-1210-52
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab	
Port Interface	24	48
10BASE-T/100BASE-TX Port (RJ-45)		
10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	2	
Combo 1000BASE-T/SFP	2	
Switching Capacity	12.8Gbps	17.6Gbps
Maximum Forwarding Rate	9.5Mpps	13.1Mpps
Forwarding Mode	Store and Forward	
Packet Buffer Memory	512KBytes	1MBytes
DDR2 for CPU	64MBytes	
Flash Memory	16MBytes	
Mean Time Before Failure (MTBF)	419,467 hours	289,012 hours
L2 Features	MAC Address Table: 8K, Static MAC: 256; Enable/Disable Auto-Learning of MAC Addresses; Flow Control: 802.3 Flow Control, Head-of-Line (HoL) Blocking Prevention; IGMP Snooping v1/v2: 256 Groups, At least 64 Multicast addresses; IGMP Per VLAN, Cable Diagnostics; Configurable Auto MDI/MDIX; Multicast Filtering*; Spanning Tree Protocol (STP): 802.1D STP, 802.1w Rapid STP; Loopback Detection; 802.3ad Link Aggregation: Max. 8 Groups Per Device, 8 Ports Per Group; Port Mirroring: One-to-One, Many-to-One, Mirroring for Tx/Rx/Both	
Virtual VLAN (VLAN)	802.1Q Tagged VLAN; VLAN Group: Max. 256 Static VLAN, Max. 4,094 VID; Management VLAN; Asymmetric VLAN; Auto Voice VLAN: Max. 10 User Defined OUI, Max. 8 Default OUI	
Quality of Service (QoS)	802.1p Quality of Service; 4 Queues Per Port; Queue Handling: Strict, Weighted Round Robin (WRR); CoS based on: 802.1p Priority Queues, DSCP; Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps)	
Access Control List (ACL)	Max. 50 Profiles; Max. 240 Rules Shared by Profiles; ACL Actions: Permit, Deny; ACL based on: MAC Address, IPv4 Address (ICMP/IGMP/TCP/UDP), VLAN ID, 802.1p Priority, DSCP	
Security	802.1X; Port Security: Max. 64 MAC Addresses Per Port; Static MAC Broadcast/Multicast/Unicast Storm Control; IP-MAC-Port Binding; DHCP Snooping*; D-Link Safeguard Engine; DHCP Server Screening*; ARP Spoofing Prevention*: Max. 64 Entries; Secure Sockets Layer (SSL) v1/v2/v3 (IPv4)	
Management	Web-based GUI; Compact CLI through Telnet; Telnet Server; TFTP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3*; SNMP Trap; Trap for SmartConsole Utility; System Log: Max. 500 Log Entries, IPv4 Log Server; BootP/DHCP Client; Simple Network Time Protocol (SNTP)	
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); MIB Traps Convention; Interface Group MIB; D-Link Private MIB	
Dimension (W x D x H)	19-inch, 1U Rack-Mount; 440 x 210 x 44 mm	19-inch, 1U Rack-Mount; 440 x 250 x 44 mm
Weight	2.6kg	3.3kg
Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply	
Max. Power Consumption	17.6W	28.9W
Standby Power Consumption	7.6W/110V; 7.9W/240W	13.2W/110V; 13.3W/240V
Operation Temperature	0 to 40 °C	
Storage Temperature	-10 to 70 °C	
Operation Humidity	10% to 95% RH	
Storage Humidity	5% to 95% RH	
Acoustic	0 dB	
Fan	Fanless	
Reset Button	One Reset Button	
EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A; C-Tick	
Safety Compliance	cUL; LVD	

Fast Ethernet Web Smart Switches

DES-1200 Series



D-Link Web Smart switches come with plug-and-play simplicity, designed to provide performance and reliability for small and medium-size business (SMB) network.

Switch management and configuration is through SmartConsole utility or web-based GUI. SmartConsole is an easy way to access the switch from a local computer.

- Internet Group Management Protocol (IGMP) Snooping
- Static Port Trunk
- 802.1Q Tagged Virtual LAN (VLAN)
- Management VLAN
- Asymmetric VLAN
- Quality of Service (QoS)
- 802.1X Port-based Access Control
- Broadcast Storm Control
- Cable Diagnostics
- D-Link Safeguard Engine™
- Web-based GUI
- Simple Network Management Protocol (SNMP)

Optional Accessories

Gigabit Ethernet WDM SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
------------	-----------------------

DES-1228

- 10/100BASE-TX x 24
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount

DES-1228P

- 10/100BASE-TX x 24 (PoE)
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fan x 4
- Reset Button x 1
- 19-inch, 1U Rack-Mount

DES-1252

- 10/100BASE-TX x 48
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount

DES-1200 Series

Model	DES-1228	DES-1228P	DES-1252	
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DES-1228P)			
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	24	24 (PoE)	48
	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	2	2	2
	Combo 1000BASE-T/SFP	2	2	2
General Features	Switching Capacity	12.8Gbps		17.6Gbps
	Maximum Forwarding Rate	9.52Mpps		13.1Mpps
	Forwarding Mode	Store and Forward		
	Packet Buffer Memory	128KBytes		
	SDRAM for CPU	8MBytes		
	Flash Memory	2MBytes PROM		
	Mean Time Before Failure (MTBF)	326,647 hours	149,676 hours	298,917 hours
L2 Features	MAC Address Table: 8K; Static MAC: 256; Enable/Disable Auto-Learning of MAC Addresses; IGMP Snooping v1/v2: 64 Multicast Groups; Spanning Tree Protocol: 802.1D STP; Power Savings; Static Port Trunk: Max. 6 Groups Per Device, 8 Ports Per Group			
Virtual VLAN (VLAN)	802.1Q Tagged VLAN; Max. 256 Static VLAN Groups; Management VLAN; Asymmetric VLAN			
Quality of Service (QoS)	802.1p Priority Queue; Max. 4 Queues Per Port; DSCP-based QoS; Queue Handling: Strict, Weighted Round Robin (WRR)			
Security	802.1X Port-based Access Control; Broadcast Storm Control; Trusted Host; Cable Diagnostics; D-Link Safeguard Engine: Protect CPU from Broadcast/Multicast/Unicast Flooding			
Management	Web-based GUI; Simple Network Management Protocol (SNMP) v1; DHCP Client; Trap Settings for Destination IP, System Events, Fiber Port Events, Twisted-Pair Port Events; Port Access Control; Web-based Configuration Backup/Restoration; Web-based Firmware Backup/Upload; Firmware Upgrade using SmartConsole Utility; System Reboot using Web-based Interface; SmartConsole Utility			
Management Information Base (MIB)	MIB-II (RFC1213); D-Link Private MIB			
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount; 440 x 140 x 44mm	19-inch, 1U Rack-Mount; 440 x 209 x 44mm	19-inch, 1U Rack-Mount; 440 x 310 x 44mm
	Weight	2.08kg	3.20kg	3.72kg
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply		
	Power Consumption	18.35W	222W	26.2W
	Power over Ethernet	-	Power Budget: 170W Per Port: 15.4W	-
	Operation Temperature	0 to 40 °C		
	Storage Temperature	-10 to 70 °C		
	Operation Humidity	10% to 90% RH		
	Storage Humidity	5% to 90% RH		
	Fan	Fanless	Four Fans	Fanless
	Reset Button	One Reset Button		
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A; C-Tick		
	Safety Compliance	cUL		

Gigabit Ethernet Unmanaged Switches

DGS-1000 Series



DGS-1000 Series consists of unmanaged Gigabit switches designed for cost effective small office home office (SOHO) and workgroup connection. They support full duplex operation, provide IEEE 802.3x flow control for reliable data transfer, and auto MDI/MDIX to eliminate the need for cross-over cables to simplify installation. They make use of D-Link Green technology to reduce power consumption and provide a longer product life without sacrificing operational performance or functionality. Recyclable packaging and minimized use of harmful substances (RoHS compliant) make this switch series truly environmentally friendly.

- Power Savings by Link Status
- Power Savings by Cable Length Detection
- Jumbo Frame
- IEEE 802.3x Flow Control
- Auto MDI/MDIX
- Quality of Service (QoS)
- Cable Diagnostics



DGS-1016D

- 10/100/1000BASE-T x 16
- Internal Power Supply
- 11-inch, 1U Desktop & Rack-Mount
- Fanless
- Power Savings



DGS-1024D

- 10/100/1000BASE-T x 24
- Internal Power Supply
- 11-inch, 1U Desktop & Rack-Mount
- Fanless
- Power Savings

DGS-1000 Series

Model	DGS-1016D	DGS-1024D
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3ab	
Port Interface	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)	16
General Features	Switching Capacity	32Gbps
	Forwarding Mode	Store-and-Forward
	Packet Buffer Memory	512KBytes
	MAC Address	8K
	Jumbo Frame	9,600Bytes
	Mean Time Before Failure (MTBF)	859,898 hours
L2 Features	IEEE 802.3x Flow Control; Auto MDI/MDIX	
Quality of Service (QoS)	802.1p, Number of Queues: 4, Strict Mode	
Cable Diagnostics	Yes	
Power Savings	By Link Status	Yes
	By Cable Length Detection	Yes
Physical & Environment	Dimension (W x D x H)	11-inch 1U Desktop & Rack-Mount 280 x 180 x 44mm
	Power Input	100-240VAC, 50/60Hz, Internal Universal Power Supply
	Operation Temperature	0 to 40 °C
	Storage Temperature	-10 to 70 °C
	Operation Humidity	10% to 90% RH
	Storage Humidity	5% to 90% RH
Certification	Fan	Fanless
	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A; C-Tick Class A; ICES-003 Class A
	Safety Compliance	UL/cUL; CB
	RoHS Compliance	Yes

Fast Ethernet Unmanaged Switches

DES-1000 Series

DES-1000 series consists of unmanaged Ethernet switches designed for cost effective small office home office (SOHO) and workgroup connection. They use the copper twisted-pair wires as the network cable, and support full/half duplex operation for 10/100Mbps speeds. These switches provide IEEE 802.3x flow control for reliable data transfer, and auto MDI/MDI-X to eliminate the need for cross over cables to simplify installation.

- Fanless
- IEEE 802.3x Flow Control
- Auto MDI/MDIX
- Plug-and-Play Installation Filtering
- Quality of Service (QoS)
(DES-1016D & DES-1024D)



DES-1016D

- 10/100BASE-TX x 16
- Internal Power Supply
- 11-inch, 1U Desktop & Rack-Mount
- Fanless



DES-1016R+

- 10/100BASE-TX x 16
- Expansion Slot x 1
- Internal Power Supply
- 19-inch, 1U Rack-Mount
- Fanless



DES-1024D

- 10/100BASE-TX x 24
- Internal Power Supply
- 11-inch, 1U Desktop & Rack-Mount
- Fanless

Optional Module

DES-102F 2-Port 100BASE-FX, MMF, SC, 2km



DES-1024R+

- 10/100BASE-TX x 24
- Expansion Slot x 1
- Internal Power Supply
- 19-inch, 1U Rack-Mount
- Fanless



DES-1026G

- 10/100BASE-TX x 24
- 10/100/1000BASE-T x 2
- Internal Power Supply
- 19-inch, 1U Rack-Mount
- Fanless

Optional Module

DES-102F 2-Port 100BASE-FX, MMF, SC, 2km

DES-1000 Series

Model	DES-1016D	DES-1024D	DES-1016R+
LAN Interface	IEEE 802.3; IEEE 802.3u		
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	16	24
	100BASE-FX Port (SC) Multi-Mode Fiber Module Slot	-	16
General Features	Switching Capacity	3.2Gbps	4.8Gbps
	Forwarding Mode	Store-and-Forward	
	Packet Buffer Memory	160KBytes	
	MAC Address	8K	
	Mean Time Before Failure (MTBF)	47,220 hours	32,274 hours
L2 Features	IEEE 802.3x Flow Control; Auto MDI/MDIX		
Quality of Service (QoS)	802.1p; Number of Queues: 2; Strict Mode		
Physical & Environment	Dimension (W x D x H)	11-inch Desktop & Rack-Mount; 280 x 180 x 44mm	
	Power Input	100-240VAC, 50/60Hz, Internal Universal Power Supply	
	Power over Ethernet	-	
	Operation Temperature	0 to 40 °C	
	Storage Temperature	-10 to 70 °C	
	Operation Humidity	10% to 90% RH	
	Storage Humidity	5% to 90% RH	
	Fan	Fanless	
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A; ICES-003 Class A	
	Safety Compliance	cUL	
	RoHS Compliance	Yes	

Model	DES-1024R+	DES-1026G	
LAN Interface	IEEE 802.3u; IEEE 802.3		
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	24	
	100BASE-FX Port (SC)	2 (Via DES-102F Module)	
	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	-	
	Module Slot	1	
General Features	Switching Capacity	4.8Gbps	
	Forwarding Mode	Store-and-Forward	
	Packet Buffer Memory	256KBytes	320KBytes
	MAC Address	4K	8K
	Mean Time Before Failure (MTBF)	133,605 hours	409,781 hours
L2 Features	IEEE 802.3x Flow Control; Auto MDI/MDIX		
Physical & Environment	Dimension (W x D x H)	19-inch-Rack-Mount 441 x 207 x 44mm	19-inch Rack-Mount; 440x140x44mm
	Power Input	100-240VAC, 50/60Hz, Internal Universal Power Supply	
	Operation Temperature	0 to 40 °C	
	Storage Temperature	-10 to 70 °C	
	Operation Humidity	10% to 90% RH	
	Storage Humidity	5% to 90% RH	
Certification	Fan	Fanless	
	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A; ICES-003 Class A	
	Safety Compliance	CSA International	cUL
	RoHS Compliance	Yes	

Network Management D-View 6.0

DV-600S & DV-600P



D-View 6.0 provides user-friendly interface with easy access to all the features and tools from a single location. D-View is easy to learn and can help ease the administrator's task of manually creating network topology because it provides robust features for quick generation of such topology within the software. The administrator can also import or export the topology as and when required.



Model	D-View 6.0 Standard (DV-600S)	D-View 6.0 Professional (DV-600P)
Hardware Requirement	CPU: 1.4GHz & above; DRAM: 1G & above; Hard Disk: 200MB; Ethernet Interface: 10/100/1000Mbps	
Software Requirement	Internet Explorer 6 SP1 & above; Microsoft XML Parser; SDK	
Operating System Requirement	Microsoft Windows 2000 Server SP4 Microsoft Windows 2000 Advanced Server SP4 Microsoft Windows 2003 SP2 Microsoft XP Home / Professional SP2	Microsoft Windows 2000 Server SP4 Microsoft Windows 2000 Advanced Server SP4 Microsoft Windows 2003 SP2
Database Management System Requirement	-	Microsoft SQL Server 2000 SP3 Microsoft SQL Server 2005
Architecture	Standalone Architecture	Client-Server Architecture
Login	Single User Login	Multiple User Login
No. of Supported Nodes	<=1,000	>=1,000

Features	
Network Management	<ul style="list-style-type: none"> Automatically discover new devices in the network Periodically poll network devices to monitor their status Provide an intuitive view of managed devices in a topology Support multiple, concurrent administrators Integrate with all SNMP-enabled devices Manage wireless switches, access points and NetDefend products such as IPS and UTM firewalls
Fault / Event Management	<ul style="list-style-type: none"> Notify administrator when new trap events occur through email, audio or visual alerts Support customized notifications based on severity of event
Device Management	<ul style="list-style-type: none"> Central management center for D-Link's end-to-end security solutions Provide backup and restoration of configuration files Manage third-party devices using the MIB complier and MIB browser
Performance Management	<ul style="list-style-type: none"> Retrieve and monitor packet information for specific ports such as error rate, packet size and port flow statistics based on RMON protocol or RFC 1213 standard
MIB Utilities	<ul style="list-style-type: none"> Powerful, easy-to-use MIB complier and browser Support free and lost views for viewing devices in a domain
D-View Plug-ins	<ul style="list-style-type: none"> E2ES Console Plug-in NetDefend Plug-in Wireless Plug-in



Performance Report



Topology Map

D-View Plug-ins

Model	Description	Products	Configuration & Management	Monitoring	Reporting
E2ES Plug-in	D-Link innovates comprehensive security solutions aimed to provide end-to-end threat containment and security protection solutions. D-View 6.0 E2ES Console Plug-in inherits the powerful management ability of D-View 6.0 platform and provides a central management center to manage D-Link's end-to-end security solution. Customers can take the advantages to ease the effort of daily maintenance by D-View 6.0 platform and easily to apply the security rules, policies and specific security functions, such as IP-MAC-Port Binding (IMPB), ZoneDefense, etc.	xStack Switches DGS-3600, DGS-3400, DGS-3200, DES-3800, DES-3528/52 Series Managed Switches DGS-3100, DES-3028/52 Series	Integrated console for switches including <ul style="list-style-type: none"> • IP-MAC-Port Binding (IMPB) • Access Control List (ACL) • 802.1X Authentication • MAC-based Access Control (MAC) • Web-based Access Control (WAC) • Loopback Detection (LBD) • ZoneDefense • Port Security • Microsoft Network Access Protection (NAP) 	<ul style="list-style-type: none"> • Built-in RADIUS Service • Microsoft Network Access Protection (NAP) 	<ul style="list-style-type: none"> • System resource statistics • Reporting for passed authentication. • Reporting for failed authentication. • Reporting for logged-in users • Reporting for database backup and restore
NetDefend Plug-in	D-View 6.0 NetDefend Plug-in inherits the powerful management ability of D-Link 6.0 and provides a central management platform to manage D-Link's gateway security products. Customers can take the advantages to ease the effort of daily maintenance by D-View 6.0 platform and easily to monitor, apply the security rules, policies and specific security functions, such as VPN, UTM services, etc	NetDefend IPS Firewalls DFL-210, DFL-800, DFL-1600, DFL-2500 NetDefend UTM Firewalls DFL-260, DFL-860, DFL-1660, DFL-2560, DFL-2560G	<ul style="list-style-type: none"> • Batch configuration for multiple NetDefend appliances • Built-in HTTP/HTTPS/SSH Client for Advanced Configuration 	Realtime system resource status including <ul style="list-style-type: none"> • CPU memory and Rule Number Utilization • Connection and Traffic Management Status • DHCP Leasing Status • IPS/AV/WCF License Status 	System resource statistics including <ul style="list-style-type: none"> • CPU Load • Connection Status • Physical / Virtual / Tunnel Interface Status • IR Rule Usage • DHCP Server and Leasing Status • User Authentication • Traffic Management
Wireless Plug-in	D-Link's D-View Wireless Plug-in is a platform for managing enterprise wireless and wired LAN network. In addition to D-View's LAN management functionality, Wireless Plug-in provides a unified console for managing the broad portfolio of D-Link's enterprise wireless LAN products, including Unified Switches, Unified Access Points and Standalone Access Points. With D-View Wireless Plug-in, IT managers can control, configure and monitor all D-Link Switches and Wireless Access Points from a single location, significantly reducing operation overhead and total cost of ownership (TCO).	Unified Switches DWS-3000, DWS-4000 Series Unified Access Points DWL-3500AP, DWL-8500AP, DWL-8600AP Standalone Access Points DAP-2590, DWL-3200AP, DWL-8200AP	<ul style="list-style-type: none"> • Multiple Unified Switch Management. • Unified Access Point Management • Batch configuration for access points of same model • Different wireless profiles are available to set AP configuration 	<ul style="list-style-type: none"> • Rogue AP Detection • Client Statistics • AP Statistics • Global Statistics 	Display a variety of AP reports for easier management and troubleshooting including <ul style="list-style-type: none"> • Client Association • Security • AP Utilization • AP Channel Usage

Expansion Modules

D-Link expansion modules are designed for flexible deployment of additional connections on D-Link switches.

Model	Standard	No. of Ports	Connector	Optional Accessories
DES-102F	IEEE 802.3u 100BASE-FX Multi-Mode Fiber	2	SC	-
DEM-201F	IEEE 802.3u 100BASE-FX Multi-Mode Fiber	1	SC	-
DEM-201FL	IEEE 802.3u 100BASE-FX Single-Mode Fiber	1	SC	-
DEM-301G	IEEE 802.3u SFP	1	SFP	SFP Transceivers DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT, DEM-330T/R, DEM-331T/R
DEM-301T	IEEE 802.3ab 100BASE-T	1	RJ-45	-
DEM-410CX	IEEE 802.3ak 10-Gigabit Ethernet	1	CX4	3-Meter CX4 Stacking Cable DEM-CB300CX
DEM-410X	IEEE 802.3ae 10-Gigabit Ethernet	1	XFP	XFP Transceivers DEM-421XT, DEM-422XT, DEM-423XT

Switch vs Expansion Module Compatible Matrix

Switch Model	DES-102F	DEM-201F	DEM-201FL	DEM-301G	DEM-301T	DEM-410CX	DEM-410X
DES-1000 Series							
DES-1016R+	Yes	-	-	-	-	-	-
DES-1024R+	Yes	-	-	-	-	-	-
DES-3000 Series							
DES-3026	-	Yes	Yes	Yes	Yes	-	-
DGS-3400 Series							
DGS-3426P	-	-	-	-	-	Yes	Yes
DGS-3427	-	-	-	-	-	Yes	Yes
DGS-3450	-	-	-	-	-	Yes	Yes
DGS-3600 Series							
DGS-3627	-	-	-	-	-	Yes	Yes
DGS-3627G	-	-	-	-	-	Yes	Yes
DGS-3650	-	-	-	-	-	Yes	Yes
DWS-4000 Series							
DWS-4026	-	-	-	-	-	Yes	Yes

SFP/XFP Transceivers

D-Link Small Form-Factor Pluggable (SFP) and 10-Gigabit Small Form-Factor Pluggable (XFP) Transceivers can achieve long distance data transmission and high speed communication with single-mode fiber, multi-mode fiber and copper cables. These modules can be installed into switches and media converters.

10-Gigabit Ethernet XFP Transceivers

Model	Type	Standard	Connector	Wavelength	Cable Type	Transmission Distance
DEM-421XT	XFP (10GE)	IEEE 802.3ae 10GBASE-SR	Duplex LC	850nm	Multi-Mode Fiber 50/125µm, 62.5/125µm	300m
DEM-422XT	XFP (10GE)	IEEE 802.3ae 10GBASE-LR	Duplex LC	1310nm	Single-Mode Fiber 9/125µm	10km
DEM-423XT	XFP (10GE)	IEEE 802.3ae 10GBASE-ER	Duplex LC	1550nm	Single-Mode Fiber 9/125µm	40km

Gigabit Ethernet WDM Bi-Directional SFP Transceivers

Model	Type	Standard	Connector	Wavelength	Cable Type	Transmission Distance
DEM-330T ¹	WDM Bi-Directional SFP (1Gbps)	IEEE 802.3z 1000BASE-BX	Simplex LC	TX: 1550nm RX: 1310nm	Single-Mode 9/125µm	10km
DEM-330R ¹	WDM Bi-Directional SFP (1Gbps)	IEEE 802.3z 1000BASE-BX	Simplex LC	TX: 1310nm RX: 1550nm	Single-Mode 9/125µm	10km
DEM-331T ²	WDM Bi-Directional SFP (1Gbps)	IEEE 802.3z 1000BASE-BX	Simplex LC	TX: 1550nm RX: 1310nm	Single-Mode 9/125µm	40km
DEM-331R ²	WDM Bi-Directional SFP (1Gbps)	IEEE 802.3z 1000BASE-BX	Simplex LC	TX: 1310nm RX: 1550nm	Single-Mode 9/125µm	40km

¹ DEM-330T & DEM-330R are used as a pair

² DEM-331T & DEM-331R are used as a pair

Gigabit Ethernet SFP Transceivers

Model	Type	Standard	Connector	Wavelength	Cable Type	Transmission Distance
DEM-310GT	SFP (1Gbps)	IEEE 802.3z 1000BASE-LX	Duplex LC	1310nm	Single-Mode 9/125 µm Multi-Mode Fiber 50/125µm, 62.5/125µm	SMF: 10km (9/125µm) MMF: 2km (50/125µm)/ 500m (62.5/125µm)
DEM-311GT	SFP (1Gbps)	IEEE 802.3z 1000BASE-SX	Duplex LC	850nm	Multi-Mode Fiber 50/125µm, 62.5/125µm	550m
DEM-312GT2	SFP (1Gbps)	IEEE 802.3z 1000BASE-SX	Duplex LC	1310nm	Multi-Mode Fiber 50/125µm, 62.5/125µm	1 km (50/125µm)/ 2km (62.5/125µm)
DEM-314GT	SFP (1Gbps)	IEEE 802.3z 1000BASE-LH	Duplex LC	1550nm	Single-Mode 9/125µm	50km
DEM-315GT	SFP (1Gbps)	IEEE 802.3z 1000BASE-ZX	Duplex LC	1550nm	Single-Mode 9/125µm	80km

Fast Ethernet SFP Transceivers

Model	Type	Standard	Connector	Wavelength	Cable Type	Transmission Distance
DEM-210	SFP (100Mbps)	IEEE 802.3u 100BASE-FX	Duplex LC	1310nm	Single-Mode 9/125 µm	15km
DEM-211	SFP (100Mbps)	IEEE 802.3u 100BASE-FX	Duplex LC	1310nm	Multi-Mode Fiber 50/125µm, 62.5/125µm	2km

Switch vs SFP/XFP Transceiver Compatible Matrix

	10GE XFP			GE WDM Bi-Di SFP					GE SFP					FE SFP	
	DEM-421XT	DEM-422XT	DEM-423XT	DEM-330R	DEM-330T	DEM-331R	DEM-331T	DEM-310GT	DEM-311GT	DEM-312GT2	DEM-314GT	DEM-315GT	DEM-210	DEM-211	
Switches															
DES-1200 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DES-1210 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DES-3000 Series (DES-3010G)	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	
DES-3028/52 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DES-3200 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DES-3528/52 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DES-3800 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	
DES-7200 Series via Modules	Yes ⁴	Yes ⁴	Yes ⁴	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	
DGS-1200 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	
DGS-1210 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DGS-3100 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DGS-3200 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DGS-3400 Series	Yes ⁶	Yes ⁶	Yes ⁶	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	
DGS-3600 Series (DGS-3612G)	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DGS-3600 Series (DGS-3627/27G/50)	Yes ⁶	Yes ⁶	Yes ⁶	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	
Business Wireless															
DWS-3000 Series (DWS-3024/24L)	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	
DWS-4000 Series	Yes ⁶	Yes ⁶	Yes ⁶	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	
Security															
UTM Firewall (DFL-2560G)	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	
Storage															
SAN Array (DSN-3400-10)	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	

⁴ Requires 7200-2XG, 7200-4XG or 7200-24G2XGE Modules

⁵ Requires 7200-24, 7200-24G, 7200-24P, 7200-48, 7200-48P, 7200-24G2XGE, 7200-24GE, 7200-48E Modules

⁶ Requires DEM-410X Module

Redundant Power Supplies

D-Link redundant power supplies (RPS) are designed to conform to wattage requirements of D-Link switches. These external RPS are enclosed in solid metal cases with sockets to AC or DC power sources on one end and the connectors to the switch's internal power supply on the other end.

Redundant Power Supplies

Model	Output Power	Input Power	Input Frequency	Form Factor	Over Current Protection
DPS-200	60-Watt	90 to 264VAC AC Power Source	47 to 63Hz	Solid Metal Case	Yes
DPS-500	140-Watt	90 to 264VAC AC Power Source	47 to 63Hz	Solid Metal Case	Yes
DPS-500DC	140-Watt	-36 to -72VDC DC Power Source	47 to 63Hz	Solid Metal Case	Yes
DPS-600	500-Watt	90 to 264VAC AC Power Source	47 to 63Hz	Solid Metal Case 19-inch Rack-Mount, 1U Height	Yes

Redundant Power Supply Chassis

Model	No. of RPS Slots	Form Factor	Supported RPS
DPS-800	2	19-inch Rack-Mount, 1U Height	DPS-200; DPS-500; DPS-500DC
DPS-900	8	19-inch Rack-Mount, 5U Height	DPS-200; DPS-500

Redundant Power Supply Accessories

Model	Description	Supported RPS
DPS-CB400	4-Meter Extension Power Cable	DPS-200; DPS-500; DPS-500DC

Switch vs Redundant Power Supply Compatible Matrix

Switch Model	DPS-200 (60W)	DPS-500 (140W)	DPS-500DC (140W)	DPS-600 (500W)
DES-3528/52 Series				
DES-3528	Yes	-	-	-
DES-3528P	-	-	-	Yes
DES-3552	Yes	-	-	-
DES-3800 Series				
DES-3828	Yes	-	-	-
DES-3828P	-	-	-	Yes
DES-3852	Yes	-	-	-
DGS-3100 Series				
DGS-3100-24	Yes	-	-	-
DGS-3100-24P	-	-	-	Yes
DGS-3100-24TG	Yes	-	-	-
DGS-3100-48	-	Yes	-	-
DGS-3100-48P	-	-	-	Yes
DGS-3200 Series				
DGS-3200-24	Yes	-	-	-
DGS-3400 Series				
DGS-3426P	-	-	-	Yes
DGS-3427	-	Yes	Yes	-
DGS-3450	-	Yes	Yes	-
DGS-3600 Series				
DGS-3612G	-	Yes	-	-
DGS-3627	-	Yes	Yes	-
DGS-3627G	-	Yes	Yes	-
DGS-3650	-	Yes	Yes	-
DWS Series				
DWS-3024	-	-	-	Yes
DWS-3024L	-	-	-	Yes
DWS-4026	-	-	-	Yes

Power Supply Chassis vs RPS Compatible Matrix

Chassis Model	DPS-200 (60W)	DPS-500 (140W)	DPS-500DC (140W)	DPS-600 (500W)
DPS-800 (2-Slot)	Yes	Yes	Yes	-
DPS-900 (8-Slot)	Yes	Yes	-	-
DPS-CB400 (4-Meter Extension Power Cable)	Yes	Yes	Yes	-

Media Converters

D-Link media converter convert UTP cable to fiber optic cable in designated FTTH or optional fiber network. It is able to easily receive transmission over long distance with minimal noise influence.

Fast Ethernet Media Converters

Model	Standard	Fiber Connector	Fiber Cable*	Coverage Distance	Data Rate	Other Features
DMC-300SC	10/100BASE-TX <=> 100BASE-FX	SC	2-Core MMF	2km	100Mbps	Auto MDI/MDI-X
DMC-515SC	10/100BASE-TX <=>100BASE-FX	SC	2-Core SMF	15km	100Mbps	Auto MDI/MDI-X
DMC-530SC	10/100BASE-TX <=>100BASE-FX	SC	2-Core SMF	30km	100Mbps	Auto MDI/MDI-X
DMC-615SC	100BASE-FX <=> 100BASE-FX	SC	2-Core MMF 2-Core SMF	15km	100Mbps	-

Fast Ethernet Media Converters

Model	Standard	Fiber Connector	Fiber Cable*	Coverage Distance	Data Rate	Other Features
DMC-700SC	1000BASE-T <=> 1000BASE-SX	SC	2-Core MMF	550m	1Gbps	Auto MDI/MDI-X Link Pass Through
DMC-810SC	1000BASE-T <=> 1000BASE-LX	SC	2-Core SMF	10km	1Gbps	Auto MDI/MDI-X Link Pass Through

* MMF: Multi-Mode Fiber; SMF: Single-Mode Fiber

** Supported SFP Transceivers: DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT
Supported WDM Bi-Directional SFP Transceivers: DEM-330T, DEM-330R, DEM-331T, DEM-331R

Media Converter Chassis & Accessories

Model	Description
DMC-1000	16-Slot Media Converter Chassis with Internal Power Supply
DMC-1001	Redundant Power Supply for DMC-1000
DMC-1002	SNMP Management Module for DMC-1000

Web Smart Switch Selection Matrix

Models	DGS-1210 Series	DGS-1200 Series	DES-1210 Series	DES-1200 Series
General				
Maximum Switching Capacity	10-Port: 20Gbps 16-Port: 32Gbps 24-Port: 48Gbps 48-Port: 96Gbps	16-Port: 32Gbps 24-Port: 48Gbps 48-Port: 96Gbps	28-Port: 12.8Gbps 52-Port: 17.6Gbps	28-Port: 12.8Gbps 52-Port: 17.6Gbps
Form Factor	10-Port: 13-inch 1U Rack-Mount 16/24/48-Port: 19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount
Fixed 10/100BASE-TX Port	No	No	28-Port: 24 52-Port: 48	28-Port: 24 52-Port: 48
Fixed 10/100/1000BASE-T Port	10-Port: 8 16-Port: 14 24-Port: 22 48-Port: 44	16-Port: 14 24-Port: 22 24-Port TP: 20 48-Port: 44	All Models: 2	All Models: 2
Fixed Combo 1000BASE-T or SFP Port	10-Port: 2 16/24/48-Port: 4	16/24-Port: 2 24-Port TP: 4 48-Port: 4	All Models: 2	All Models: 2
Layer 2 Features				
Flow Control IEEE 802.3x	Yes	Yes	Yes	No
Jumbo Frame (Size)	Yes (10,000Bytes)	Yes (10,240Bytes)	No	No
Internet Group Management Protocol (IGMP) Snooping	Yes (v1,v2)	Yes (v1,v2)	Yes (v1,v2)	Yes (v1,v2)
803.1D Spanning Tree Protocol (STP)	Yes	Yes	Yes	Yes
802.1w Rapid Spanning Tree Protocol (RSTP)	Yes	No	Yes	No
Loopback Detection (LBD)	No	No	Yes	No
802.3ad Link Aggregation	Yes	Yes (Port Trunking)	Yes	Yes (Port Trunking)
Port Mirroring	Yes	Yes	Yes	Yes
Cable Diagnostics	Yes	Yes	Yes	Yes
Power Savings (Link Status / Cable Length Detection)	Yes	Yes (Link Status only)	Yes	Yes (Link Status only)
Virtual LAN (VLAN)				
VLAN Groups	256	256	256	256
Port-based VLAN	Yes	Yes	Yes	Yes
802.1Q VLAN Tagging	Yes	Yes	Yes	Yes
Asymmetric VLAN	Yes	Yes	Yes	Yes
Voice VLAN	Yes	No	Yes	No
Quality of Service (QoS)				
802.1p Support	Yes	Yes	Yes	Yes
Port-based QoS	Yes	Yes	Yes	Yes
DSCP QoS	Yes	Yes	Yes	Yes
Strict Priority	Yes	Yes	Yes	Yes
Weighted Round Robin (WRR)	Yes	Yes	Yes	Yes
Bandwidth Control (min. granularity)	Yes (64kbps)	No	Yes (64kbps)	No
Access Control List (ACL)				
Access Control List	Yes	No	Yes	No
ACL Max Profiles / Rules	50 / 240	No	50 / 240	No
Security				
Secure Sockets Layer (SSL)	Yes* (v1/v2/v3)	No	Yes* (v1/v2/v3)	No
Port Security (Entries)	Yes (64)	No	Yes (64)	No
802.1X Port-based Access Control	Yes	Yes	Yes	Yes
Storm Control (min. granularity)	Yes (64kbps)	Yes (Broadcast Storm Control only) (8kbps*2 ⁿ , n=0~9)	Yes (64kbps)	Yes (Broadcast Storm Control only) (8kbps*2 ⁿ , n=0~9)
D-Link Safeguard Engine	Yes	Yes	Yes	Yes
ARP Spoofing Prevention	Yes*	No	Yes*	No
DHCP Server Screening	Yes*	No	Yes*	No
Management VLAN	Yes	Yes	Yes	Yes
Management				
Web Based Management	Yes	Yes	Yes	Yes
Command Line Interface	Yes (via Telnet)	No	Yes (via Telnet)	No
Telnet Server	Yes	No	Yes	No
TFTP client	Yes	No	Yes	No
Simple Network Management Protocol (SNMP)	Yes (v1/v2c) Yes* (v3)	Yes (v1)	Yes (v1/v2c) Yes* (v3)	Yes (v1)
Configurable Auto MDI/MDIX	Yes	No	Yes	No
System Log	Yes	Yes	Yes	Yes
BootP/DHCP Client	Yes	No	Yes	No
Simple Network Time Protocol (SNTP)	Yes	No	Yes	No
Trusted Host	Yes	Yes	Yes	Yes
DHCP Auto-configuration	Yes*	No	Yes*	No
Power over Ethernet (PoE)				
802.3af PoE	Yes	Yes (DGS-1224TP)	Yes	Yes (DES-1228P)
Pre-Standard of 802.3af PoE	Yes (DGS-1210-10P)	No	Yes (DES-1210-28P)	No

* Function will be ready in future firmware

Chassis Switch Selection Matrix

Models	DES-7200 Series
General	
Maximum Switching Capacity	6-Slot: 192Gbps; 10-Slot: 384Gbps
Passive Backplane Capacity	6-Slot: 800Gbps; 10-Slot: 1600Gbps
Form Factor	6-Slot: 19-inch 15U Rack-Mount 10-Slot: 19-inch 22U Rack-Mount
CPU Engine Slots	6/10-Slot: 2
I/O Module Slots	6-Slot: 4, 10-Slot: 8 (Vertical)
Power Module Slots	2
Max. 10/100BASE-TX Port	0
Max. 10/100BASE-FX Fiber Port	0
Max. 10/100/1000BASE-T Port	6-Slot: 192; 10-Slot: 384 (With 7200-48 or 7200-48P)
Max. SFP Port	6-Slot: 96; 10-Slot: 192 (With 7200-24G or 7200-24G2XGE)
Max. 10-Gigabit XFP Port	6-Slot: 16; 10-Slot: 32 (With 7200-4XG)
Power over Ethernet (PoE)	24-Port: 7200-24P; 48-Port: 7200-48P
Layer 2 Features	
Jumbo Frame (Size)	Yes (9,216Bytes)
802.1D/802.1w/802.1s Spanning Tree Protocol (STP)	Yes
Ethernet Ring Protection Switching (E-RPS)	Yes (RERP)
Loopback Detection (LBD)	No
802.3ad Link Aggregation	Yes
Port Mirroring	Yes
Layer 2 Multicast	
Internet Group Management Protocol (IGMP) Snooping	Yes (v1/v2/v3)
Multicast Listener Discover (MLD) Snooping	No
Virtual LAN (VLAN)	
802.1Q VLAN Tagging	Yes
802.1v Protocol VLAN Classification	Yes
Double VLAN (Q-in-Q)	Yes
IGMP Snooping Multicast (ISM) VLAN	Yes (IVGL/SVGL)
Voice VLAN	No
GARP VLAN Registration Protocol (GVRP)	Yes
Layer 3 Features	
Virtual Router Redundancy Protocol (VRRP)	Yes
IPv6 Tunneling	Yes
Layer 3 Routing	
Static Route	Yes
Policy-based Route	Yes
Routing Information Protocol (RIP)	Yes (v1/v2)
Routing Information Protocol Next Generation (RIPng)	Yes
Open Shortest Path First (OSPF)	Yes (v1/v2/v3)
Border Gateway Protocol (BGP)	Yes
Layer 3 Multicasting	
Protocol Information Multicast - Dense Mode (PIM-DM)	Yes
Protocol Information Multicast - Sparse Mode (PIM-SM)	Yes
PIM Sparse-Dense Mode	No
Distance-Vector Multicast Routing Protocol (DVMRP) v3	No
Internet Group Management Protocol (IGMP)	Yes (v1/v2/v3)
Multi-Protocol Label Switching (MPLS)	
VPN Routing and Forwarding (VRF)	Yes* (Enhanced I/O module or 7200-ASE3)
MPLS L3 VPN (MPLS / BGP VPN)	Yes* (With 7200-ASE3)
MPLS L2 VPN (VPWS / VPLS)	Yes* (With 7200-ASE3)
Quality of Service (QoS)	
Strict Priority	Yes
Weighted Round Robin (WRR)	Yes
Strict + WRR	Yes
Bandwidth Control (min. granularity)	Yes (64kbps)
Time-Based QoS	Yes
Access Control List (ACL)	
Access Control List	Yes (Ingress / VLAN-Based) (Egress ACL with Enhanced I/O Module)
Time-based ACL	Yes
Security	
Secure Shell (SSH)	Yes (v1.5/v2)
Secure Sockets Layer (SSL)	No
Port Security (Entries Per Port)	Yes (16)
Traffic Segmentation	Yes (Private VLAN)
IP-MAC-Port Binding (IMPB)	Yes (ARP Inspection, IP Source Guard, DHCP Snooping)
D-Link Safeguard Engine	Yes (CPP)
Authentication, Authorization & Accounting (AAA)	
802.1X Access Control	Yes
Web-based Access Control (WAC)	No
MAC-based Access Control (MAC)	No
Microsoft Network Access Protection (NAP)	Yes*
Guest VLAN	Yes
Dynamic VLAN Assignment	Yes
RADIUS & TACACS+ Authentication for Management Access	Yes
Management	
Web GUI, CLI & SNMP	Yes*
Remote Monitoring (RMON)	Yes (v1)
sFlow	Yes*
Link Layer Discovery Protocol (LLDP)	Yes
Operations, Administration & Management (OAM)	
802.3ah Ethernet Link OAM	No
802.1ag Connectivity Fault Management (CFM)	No
Certification	
IPv6 Ready Logo	Yes (Phase II)

* Available in Future Firmware Upgrade

Managed Switch Selection Matrix

Models	Layer 3 xStack Switches		Layer 2 xStack Switches			Layer 2 Managed Switches			
	DGS-3600 Series	DES-3800 Series	DGS-3400 Series	DGS-3200 Series General	DES-3528/52 Series	DGS-3100 Series	DES-3200 Series	DES-3028/52 Series	DES-3000 Series
Maximum Switching Capacity	12-Port: 24Gbps 27-Port: 108Gbps 50-Port: 136Gbps	28-Port: 12.8Gbps 52-Port: 15.7Gbps	26-Port: 88Gbps 27-Port: 108Gbps 50-Port: 136Gbps	10-Port: 20Gbps 24-Port: 48Gbps	28-Port: 12.8Gbps 52-Port: 17.6Gbps	24-Port: 68Gbps 48-Port: 116Gbps	10-Port: 5.6Gbps 18-Port: 7.2Gbps 28-Port: 12.8Gbps 10/18-Port: 9-inch 1U Desktop 28-Port: 19-inch 1U Rack-Mount 10-Port: 8; 18-Port: 16; 28-Port: 24	28-Port: 12.8Gbps 52-Port: 17.6Gbps	10-Port F: 3.8Gbps 10-Port G: 5.6Gbps 26-Port: 8.8Gbps
Form Factor	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	10-Port: 11-inch 1U Desktop 24-Port: 19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	10-Port: 11-inch 1U Desktop 24-Port: 19-inch 1U Rack-Mount
Fixed 10/100BASE-TX Port	No	28-Port: 24; 52-Port: 48	No	No	28-Port: 24; 52-Port: 48	No	No	28-Port: 24; 52-Port: 48	10-Port: 8 26-Port: 24
Fixed 10/100/1000BASE-T Port	27-Port: 20; 50-Port: 44	All Models: 2	26/27-Port: 24; 50-Port: 48	10-Port: 8; 24-Port: 20	All Models: 2	24-Port: 20; 24-Port TG: 8; 48-Port: 44	No	All Models: 2	10-Port: 1 26-Port: 2 (DEM-301T) 10-Port G: 1 26-Port: 2 (DEM-301G)
Fixed Small Form-Factor Pluggable (SFP) Port	12-Port G: 8; 27-Port G: 20	No	No	No	No	24-Port TG: 16	28-Port F: 24	No	No
Fixed Combo 1000BASE-T or SFP Port	All Models: 4	All Models: 2	All Models: 4	10-Port: 2 24-Port: 4	All Models: 2	24/48-Port: 4 24-Port TG: 0	10/18-Port: 2 28-Port: 4	All Models: 2	No
Optional 10G XFP Uplink Capability	12-Port: No 27/50-Port: Yes (2)	No	26/50-Port: Yes (2) 27-Port: Yes (3)	No	No	No	No	No	No
Optional Module Slot	Yes (2)	Yes (2)	Yes (2)	No	No	No	No	No	26-Port: Yes (2)
Redundant Power Supply	12-Port: Yes (DPS-200) 27/50-Port: Yes (DPS-500)	28/52-Port: Yes (DPS-200) 28-Port DC: No 28-Port P: Yes (DPS-600)	Yes (DPS-500) 27/50-Port: 26-Port P: Yes (DPS-600)	10-Port: No 24-Port: Yes (DPS-200)	28/52-Port: Yes (DPS-200) 28-Port DC: No 28-Port P: Yes (DPS-600)	24-Port: Yes (DPS-200) 24/48-Port P: Yes (DPS-600) 48-Port: Yes (DPS-500)	No	No	No
Power over Ethernet (PoE)	No	Yes (DES-3828P)	Yes (DGS-3426P)	No	Yes (DES-3528P; DES-3552P)	Yes (DGS-3100-24P; DGS-3100-48P)	No	Yes (DES-3028P; DES-3052P)	No
Stackability									
Physical Stacking (device) / Max. Bandwidth	12-Port: No 27/50-Port: Yes (12) / 40Gbps	No	Yes (12) / 40Gbps	No	Yes (8) / 4Gbps	Yes (6) / 20Gbps	No	No	No
Virtual Stacking Single IP Management (device)	Yes (32)	Yes (32)	Yes (32)	Yes (32)	Yes (32)	Yes (32)	Yes (32)	Yes (32)	Yes (32)
Layer 2 Features									
Jumbo Frame (Size)	Yes (9,216Bytes)	Yes (9KBytes)	Yes (9,216Bytes)	Yes (10,240Bytes)	Yes (9,216Bytes)	Yes (10,240Bytes)	Yes (2,048Bytes)	Yes (2,048Bytes)	No
802.1D/802.1w/802.1s Spanning Tree Protocol (STP)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (802.1D/802.1w only)
Ethernet Ring Protection Switching (E-RPS)	Yes	No	Yes*	No	Yes*	No	Yes	Yes*	No
Loopback Detection (LBD)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
802.3ad Link Aggregation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Port Mirroring	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Layer 2 Multicast									
Internet Group Management Protocol (IGMP) Snooping	Yes (v1/v2/v3)	Yes (v1/v2/v3 awareness)	Yes (v1/v2/v3)	Yes (v1/v2/v3)	Yes (v1/v2/v3)	Yes (v1/v2)	Yes (v1/v2/v3 awareness)	Yes (v1/v2)	Yes (v1/v2/v3 awareness)
Multicast Listener Discover (MLD) Snooping	Yes (v1/v2)	Yes (v1/v2 awareness)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2 awareness)	Yes (v1/v2 awareness)	No
Virtual LAN (VLAN)									
802.1Q VLAN Tagging	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
802.1v Protocol VLAN Classification	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
Double VLAN (Q-in-Q)	Yes	Yes	Yes	No	Yes	No	Yes	No	No
Selective Q-in-Q	Yes	No	Yes	No	Yes	No	Yes	No	No
Voice VLAN	No	No	No	No	Yes*	No	No	No	No
IGMP Snooping Multicast (ISM) VLAN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No
Asymmetric VLAN	No	No	No	No	Yes	Yes	Yes	Yes	No
Layer 3 Features									
Virtual Router Redundancy Protocol (VRRP)	Yes	Yes	No	No	No	No	No	No	No
IPv6 Tunneling	Yes	No	Yes*	No	No	No	No	No	No
Layer 3 Routing									
Static Route	Yes	Yes	Yes	No	Yes*	No	No	No	No
Routing Information Protocol (RIP)	Yes (v1/v2)	Yes (v1/v2)	Yes* (v1/v2)	No	No	No	No	No	No
Routing Information Protocol Next Generation (RIPng)	Yes*	Yes*	Yes*	No	No	No	No	No	No
Open Shortest Path First (OSPF)	Yes (v2/v3*)	Yes (v2)	No	No	No	No	No	No	No
Border Gateway Protocol (BGP)	Yes	No	No	No	No	No	No	No	No
Layer 3 Multicasting									
Protocol Information Multicast - Dense Mode (PIM-DM)	Yes	Yes	No	No	No	No	No	No	No
Protocol Information Multicast - Sparse Mode (PIM-SM)	Yes	Yes	No	No	No	No	No	No	No
Distance-Vector Multicast Routing Protocol (DVMRP) v3	Yes	Yes	No	No	No	No	No	No	No
Internet Group Management Protocol (IGMP)	Yes (v1/v2/v3)	Yes	No	No	No	No	No	No	No
Quality of Service (QoS)									
Number of Queues Per Port	8	8	8	8	8	4	4	4	4
Strict Priority	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Highest queue)	Yes
Weighted Round Robin (WRR)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Strict + WRR	Yes	Yes	Yes	No	No	Yes	No	No	No
Random Early Detection (RED)	Yes (Weighted RED)	Yes (Weighted RED)	No	No	Yes (Stabilized RED)	No	No	No	No
Bandwidth Control (min. granularity)	Yes (64kbps)	Yes (64kbps)	Yes (64kbps)	Yes (64kbps)	Yes (64kbps)	Ingress: 3500Kbps Egress: 64Kbps	Yes (62.5kbps)	Yes (64kbps)	Yes (64kbps)
Three Color Marker	Yes	No	Yes	No	Yes	No	No	No	No
Access Control List (ACL)									
Access Control List	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Time-based ACL	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No
Security									
Secure Shell (SSH)	Yes	Yes (v1.5/v2)	Yes	Yes (v2)	Yes (v2)	Yes (v2)	Yes (v2)	Yes (v2)	Yes (v2)
Secure Sockets Layer (SSL)	Yes	Yes (v2/v3)	Yes	Yes (v1/v2/v3)	Yes (v1/v2/v3)	Yes	Yes (v1/v2/v3)	Yes (v1/v2/v3)	No
Port Security (Entries Per Port)	Yes (64)	Yes (16)	Yes (16)	Yes (64)	Yes (64)	Yes (16)	Yes (64)	Yes (16)	Yes (10)
Broadcast/Multicast/Unicast Storm Control (min. granularity)	Yes (1pps)	Yes (128kbps)	Yes (128kbps)	Yes (512kbps)	Yes (1pps)	Yes (3500kbps)	Yes (62.5kbps)	Yes (64kbps)	Yes (64kbps)
Traffic Segmentation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IP-MAC-Port Binding (IMPB)	Yes	Yes (v3.3)	Yes	Yes	Yes	No	Yes	Yes	Yes
D-Link Safeguard Engine	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
DHCP Server Screening	Yes	No	Yes	Yes	Yes	No	Yes	Yes*	No
ARP Spoofing Prevention	No	No	No	Yes	Yes*	Yes*	Yes	Yes*	No
BPDU Attack Protection	No	No	No	No	Yes	No	Yes	No	No
Authentication, Authorization & Accounting (AAA)									
802.1X Access Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Web-based Access Control (WAC)	Yes	Yes	Yes	Yes	Yes	No	No	No	No
MAC-based Access Control (MAC)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Compound Authentication	Yes	No	Yes	Yes	Yes*	No	No	No	No
Microsoft Network Access Protection (NAP)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Guest VLAN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dynamic VLAN Assignment	Yes	Yes	Yes	Yes	Yes	Yes*	Yes	Yes	Yes
RADIUS & TACACS+ Authentication for Management Access	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes*
Management									
Web GUI, CLI & SNMP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Remote Monitoring (RMON)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1)
sFlow	Yes	No	Yes	No	Yes	Yes	No	No	No
Link Layer Discovery Protocol (LLDP)	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes*
D-Link Unidirectional Link Detection (DULD)	Yes*	No	Yes*	No	Yes*	No	No	No	No
Operations, Administration & Management (OAM)									
802.3ah Ethernet Link OAM	No	No	No	Yes*	Yes	No	Yes	Yes*	No
802.1ag Connectivity Fault Management (CFM)	No	No	No	No	Yes	No	Yes	No	No
Certification									
IPv6 Ready Logo	Yes (Phase II)	No	Yes (Phase II)	Yes (Phase II)	No	No	Yes (Phase II)	No	No
Metro Ethernet Forum (MEF) Certification	Yes (MEF 9, 14)	No	No	No	Yes (MEF 9, 14)	No	Yes (MEF 21)	No	No

BUSINESS WIRELESS

Networking without cables through radio waves to communicate offers businesses the advantages of mobility and easy connectivity. Products under this category include Indoor and Outdoor Access Points, Unified Wired/Wireless Access System, Smart Wireless Switching, Wireless Single and Dual Band Antennas and Wireless Accessories.



Indoor Access Points

D-Link's Indoor Wireless Access Points are reliable, powerful, and suitable for business-class enterprise environment.

These access points provide various security options for network administrators to deploy a highly manageable and robust wireless network ideal for indoor hotspot deployment. D-Link Indoor access points offer a wide range of product options for different indoor environments and are compliant with various IEEE standards, including 802.11a, 802.11g and 802.11n.

DAP-2590

Wireless N Dual Band PoE Access Point



Main Features

- Operate at 2.4GHz or 5GHz frequency band
- 2 x 3 MIMO
- High Speed 300Mbps
- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Plenum-Rated Chassis

Physical Features

- 4dBi Dipole Antenna for 2.4GHz
- 6dBi Dipole Antenna for 5GHz
- Detachable Antenna with RP-SMA Interface

DAP-2690

Wireless N Quad Band PoE Access Point



Main Features

- Operate at 2.4GHz and 5GHz frequency band
- 2 x 2 MIMO
- High Speed 300Mbps
- Wireless Distribution System
- Internal RADIUS
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Plenum-Rated Chassis
- Advance Traffic Control

Physical Features

- 4dBi Dipole Antenna for 2.4GHz x2
- 6dBi Dipole Antenna for 5GHz x2
- Detachable Antenna with RP-SMA Interface
- RJ-45 Console Port

Indoor Access Points

Model		DAP-2590	DAP-2690
IEEE Wired Standard		802.3; 802.3u; 802.3ab; 802.3af	
Ethernet Interface		10/100/1000BASE-T (PoE)	
IEEE Wireless Standard		802.11a; 802.11b; 802.11g; 802.11n	
Data Transfer Rate	802.11a	54, 48, 36, 24, 18, 12, 9, 6 Mbps	
	802.11b	11, 5.5, 2, 1 Mbps	
	802.11g	54, 48, 36, 24, 18, 12, 9, 6 Mbps	
	802.11n	300, 270, 240, 180, 120, 90, 60, 30 Mbps	
Frequency Range	5GHz	US & Canada: 5.15GHz to 5.35GHz & 5.4725GHz to 5.85GHz Europe & Japan: 5.15GHz to 5.35GHz & 5.47GHz to 5.725GHz	
	2.4GHz	2.4GHz to 2.4835GHz	
RF Channel	5GHz	US & Canada: 12; Europe: 19; Japan: 8 (Non-Overlapping)	
	2.4GHz	United States: 11; Europe: 13; Japan: 13	
Radio and Modulation Type	802.11a	OFDM, BPSK, QPSK, 16QAM, 64QAM	
	802.11b	DSSS, DQPSK, DBPSK, CCK	
	802.11g	OFDM, BPSK, QPSK, 16QAM, 64QAM	
	802.11n	OFDM, BPSK, QPSK, 16QAM, 64QAM	
Transmitter Output Power (Typical)	802.11a	16dBm@6~24Mbps; 15dBm@36Mbps 15dBm@48Mbps; 12dBm@54Mbps	
	802.11b	18dBm@1/2/5.5/11Mbps	
	802.11g	17dBm@6~24Mbps; 17dBm@36Mbps; 16dBm@48Mbps; 13dBm@54Mbps	
	802.11n (2.4GHz)	HT20: 12 to 15dBm HT40: 12 to 13dBm	
	802.11n (5GHz)	HT20: 11 to 16dBm HT40: 11 to 16dBm	
Receiver Sensitivity	802.11a	-85dBm@6Mbps -85dBm@9Mbps -85dBm@12Mbps -85dBm@18Mbps -80dBm@24Mbps -78dBm@36Mbps -74dBm@48Mbps -73dBm@54Mbps	
	802.11b	-92dBm@1Mbps -91dBm@2Mbps -90dBm@5.5Mbps -88dBm@11Mbps	
	802.11g	-87dBm@6Mbps -87dBm@9Mbps -87dBm@12Mbps -87dBm@18Mbps -81dBm@24Mbps -79dBm@36Mbps -75dBm@48Mbps -74dBm@54Mbps	
		-89dBm@2Mbps -84dBm@11Mbps	
		-87dBm@6Mbps -87dBm@9Mbps -84dBm@12Mbps -82dBm@18Mbps -79dBm@24Mbps -75dBm@36Mbps -71dBm@48Mbps -70dBm@54Mbps	
802.11n (2.4GHz)	HT20: -85 to -70dBm HT40: -82 to -67dBm		
802.11n (5GHz)	HT20: -84 to -69dBm HT40: -81 to -66dBm		
Operation Modes		Access Point; WDS; WDS with AP; Wireless Client	
Antenna	Antenna Gain	5dBi@5GHz; 3dBi@2.4GHz	
	No. of Antennas	3	
Antenna Type		Detachable Dipole Antenna with Reverse SMA Connector	
Physical & Environment	Dimension (mm)	165.1x35.1x187.5 (W x H x D)	
	Weight	762 grams	
	Power Input	Via External Power Adapter	
	Operating/Storage Temperature	0 to 40°C / -20 to 65°C	
	Operating/Storage Humidity	10% to 90% Non-Condensing / 5% to 95% Non-Condensing	
Certification	EMI-EMC Compliance	FCC; CE; C-Tick; IC	
	Safety Compliance	UL	
	Wi-Fi*	Yes	

Indoor Access Points

DWL-2200AP

Wireless G PoE Access Point



Main Features

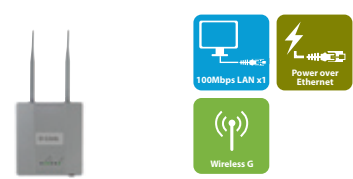
- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- MAC Filtering
- IEEE 802.1Q VLAN
- AP Grouping
- IEEE 802.11e (Wi-Fi Multimedia)

Physical Features

- 5dBi Dipole Antenna x 1
- Detachable Antenna with RP-SMA Interface

DWL-3200AP

Wireless G PoE Access Point



Main Features

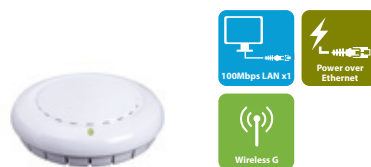
- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- IEEE 802.11e (Wi-Fi Multimedia)
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Plenum-Rated Chassis

Physical Features

- 5dBi Dipole Antenna x 2
- Detachable Antenna with RP-SMA Interface

DWL-3260AP

Wireless G PoE Access Point



Main Features

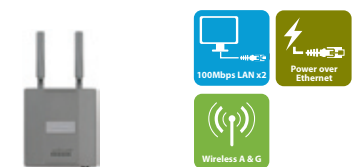
- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- IEEE 802.11e (Wi-Fi Multimedia)
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID

Physical Features

- 1dBi Internal Antenna
- Smoke Detector Design for Ceiling-Mount

DWL-8200AP

802.11a/g Dual Band Wireless Access Point



Main Features

- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Plenum-Rated Chassis

Physical Features

- 2.5dBi Dipole Antenna for 2.4GHz
- 5.5dBi Dipole Antenna for 5GHz
- Detachable Antenna with RP-SMA Interface

Indoor Access Points

Model	DWL-2200AP	DWL-3200AP	DWL-3260AP	DWL-8200AP
IEEE Wired Standard		802.3; 802.3u; 802.3af		802.3; 802.3u; 802.3af
Ethernet Interface		10/100BASE-TX (PoE)		10/100BASE-TX (PoE)
IEEE Wireless Standard		802.11b; 802.11g		802.11a; 802.11b; 802.11g
	802.11a	-		108, 54, 48, 36, 24, 18, 12, 9, 6 Mbps
	802.11b	11, 5.5, 2, 1 Mbps		
	802.11g	108, 54, 48, 36, 24, 18, 12, 9, 6 Mbps		
Frequency Range	5GHz	-		US & Canada: 5.15GHz to 5.35GHz & 5.4725GHz to 5.85GHz Europe & Japan: 5.15GHz to 5.35GHz & 5.47GHz to 5.725GHz
	2.4GHz	2.4GHz to 2.4835GHz		
RF Channel	5GHz	-		US & Canada: 12; Europe: 19; Japan: 8 (Non-Overlapping)
	2.4GHz	United States: 11; Europe: 13; Japan: 13		
Radio and Modulation Type	802.11a	-		OFDM, BPSK, QPSK, 16QAM, 64QAM
	802.11b	DSSS, DQPSK, DBPSK, CCK		
	802.11g	OFDM, BPSK, QPSK, 16QAM, 64QAM		
Transmitter Output Power (Typical)	802.11a	-	-	16dBm@6~18Mbps 14dBm@24/36Mbps 12dBm@48/54Mbps
	802.11b	18dBm@1/2/5.5/11Mbps	22dBm@1/2/5.5/11Mbps	18dBm@1/2/5.5/11Mbps
	802.11g	16 to 18dBm@6~36Mbps 14 to 16dBm@48Mbps 14 to 15dBm@54Mbps	21 to 22dBm@6~36Mbps 19 to 20dBm@48Mbps 19 to 20dBm@54/108Mbps	16 to 18dBm@6~36Mbps 14 to 16dBm@48Mbps 14 to 15dBm@54/108Mbps
Receiver Sensitivity	802.11a	-	-	-87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -68dBm at 108Mbps
	802.11b	-89dBm@2Mbps -83dBm@11Mbps	-89dBm@2Mbps -83dBm@11Mbps	-92dBm@1Mbps -89dBm@2Mbps -88dBm@5.5Mbps -83dBm@11Mbps
	802.11g	-87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -66dBm@54Mbps	-87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -66dBm@54Mbps	-87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -71dBm@54Mbps -68dBm@108Mbps
Operation Modes	Access Point; WDS; WDS with AP			Access Point; WDS; WDS with AP
Antenna	Antenna Gain	5dBi	5dBi	-
	No. of Antennas	1	2	1
	Antenna Type	Detachable Dipole Antenna with Reverse SMA Connector	Detachable Dipole Antenna with Reverse SMA Connector	Internal Dipole Antenna with Reverse SMA Connector for Optional External Antenna
Physical & Environment	Dimension (mm)	142x109x31 (L x W x H)	187.5x165.81x37.06 (L x W x H)	171.97x48.16 (Diameter x H)
	Weight	200 grams	603.28 grams	284 grams
	Power Input	Via External Power Adapter		
	Operating/Storage Temperature	0 to 40°C / -20 to 65°C		
	Operating/Storage Humidity	10% to 90% Non-Condensing / 5% to 95% Non-Condensing		
Certification	EMI-EMC Compliance	FCC; CE	FCC; CE; C-Tick	FCC; CE; C-Tick; IC
	Safety Compliance	UL		CSA
	Wi-Fi	Yes		

Outdoor Access Points

D-Link Outdoor Wireless Access Points are reliable, powerful, and suitable for business-class enterprise environment.

These access points provide various security options for network administrators to deploy a highly manageable and robust wireless network ideal for deployment of building to building network infrastructure.

DWL-2700AP

802.11g Wireless Access Point



Main Features

- Wi-Fi Protected Access (WPA2)
- IEEE 802.1X
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Water/Dust-Proof IP68 standard

Physical Features

- 5dBi Dipole Antenna x 2
- Detachable Antenna with RP-SMA Interface

Outdoor Access Points

Model		DWL-2700AP
IEEE Wired Standard		802.3; 802.3u; 802.3af
Ethernet Interface		10/100BASE-TX (PoE)
IEEE Wireless Standard		802.11b; 802.11g
Data Transfer Rate	802.11a	-
	802.11b	11, 5.5, 2, 1 Mbps
	802.11g	54, 48, 36, 24, 18, 12, 9, 6 Mbps
	802.11n	-
Frequency Range	5GHz	-
	2.4GHz	2.4GHz to 2.4835GHz
RF Channel	5GHz	-
	2.4GHz	United States: 11; Europe: 13; Japan: 13
Radio and Modulation Type	802.11a	-
	802.11b	DSSS, DQPSK, DBPSK, CCK
	802.11g	OFDM, BPSK, QPSK, 16QAM, 64QAM
	802.11n	-
Transmitter Output Power (Typical)	802.11a	-
	802.11b	23dBm@1~11Mbps
	802.11g	23dBm@6~54Mbps
Receiver Sensitivity	802.11a	-
	802.11b	-91dBm@1Mbps
		-90dBm@2Mbps
		-89dBm@5.5Mbps
		-84dBm@11Mbps
	802.11g	-85dBm@6Mbps
		-84dBm@9Mbps
-82dBm@12Mbps		
-80dBm@18Mbps		
-77dBm@24Mbps		
-73dBm@36Mbps		
-69dBm@48Mbps		
-68dBm@54Mbps		
802.11n (2.4GHz)	-	
802.11n (5GHz)	-	
Operation Modes		Access Point; WDS; WDS with AP
Antenna	Antenna Gain	5dbi
	No. of Antennas	2
	Antenna Type	Detachable Dipole Antennas with RN-P N Type Connectors
Physical & Environment	Dimension (mm)	277.7 x 155 x 45 (L x W x H)
	Weight	1.82 kg
	Outdoor Installation	IP68 Standard; Diecast Watertight Housing Built-in Heater with Sensor
	Power Input	Via External Power Adapter
	Operating/Storage Temperature	-40 to 60°C / -40 to 65°C
	Operating/Storage Humidity	10% to 90% Non-Condensing / 5% to 95% Non-Condensing
Certification	EMI-EMC Compliance	FCC; CE; C-Tick
	Safety Compliance	CSA
	Wi-Fi*	Yes

Unified Wired/Wireless Access System

DWS-3000 Series



D-Link Unified Wired/Wireless Switching Solution offers centralized management that greatly simplifies wireless deployment and significantly enhances access security, wireless throughput and network convergence.

Unified Switches

Wireless Management

- L2/L3 Fast Roaming
- Intra-Switch/Inter-Switch Roaming
- Centralized Security Policy/AP/Client Management & Monitoring
- Adaptable Wireless
- Automatic RF Channel Adjustment
- Automatic AP Transmit Output Power Adjustment
- AP Auto-Discovery & Firmware Dispatch
- AP Load Balancing
- AP Authentication
- Remote AP Reboot
- AP Self Healing
- Client Monitoring
- Wi-Fi Multimedia (WMM)
- SpectralLink Voice Priority (SVP)
- MAC Authentication
- WPA/WPA2 Personal/Enterprise
- Captive Portal
- Rogue AP Detection
- Station Isolation
- Visualization AP Management Tool

Wired Management

- Internet Group Management Protocol (IGMP) Snooping
- Link Layer Discovery Protocol (LLDP)
- Double VLAN (Q-in-Q)
- Subnet-based VLAN
- IPv4 Static Route
- Virtual Router Redundancy Protocol (VRRP)
- Quality of Service (QoS)
- Traffic Shaping
- Access Control List
- 802.1X Port-based Access Control
- Guest VLAN
- Broadcast Storm Control

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Unified Access Points

Managed Mode

- Centralized Management
- Centralized Firmware Dispatch
- Auto-Power Adjustment
- Dynamic Auto-Channel Selection
- L2 Fast Roaming
- L3 Fast Roaming
- Captive Portal

Standalone Mode

- Local Storage of Configuration

Managed & Standalone Mode

- WEP/WPA/WPA2 Security
- Rogue AP Detection
- Station Isolation
- MAC Address Filtering
- AP Load Balancing Setup
- Wi-Fi Multimedia (WMM)
- SpectralLink Voice Priority

Unified Switches

DWS-3024

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply
- Up to 48 APs per Switch
- Up to 192 APs per Peer Group

DWS-3024L

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply
- Up to 24 APs per Switch
- Up to 96 APs per Peer Group

Unified Access Points

DWL-3500AP

- 10/100BASE-TX x 1 (PoE)
- IEEE 802.11g Wireless LAN
- 5dBi Dipole Antenna x 2
- Detachable Antenna with RP-SMA Interface
- External Power Adapter

DWL-8500AP

- 10/100BASE-TX x 1 (PoE)
- IEEE 802.11a Wireless LAN
- IEEE 802.11g Wireless LAN
- 5dBi @5GHz & 2.5dBi @2.4GHz Dual Band Dipole Antenna x 2
- Detachable Antenna with RP-SMA Interface
- External Power Adapter

Unified Switches - DWS-3000 Series

Model	DWL-3024	DWL-3024L	
IEEE LAN Standard	802.3; 802.3u; 802.3z; 802.3ab; 802.3ae; 802.3af		
Port Interface	10/100/1000 BASE-T (RJ-45)	20 (PoE)	
	Combo 1000BASE-T/SFP	4	
General Features	Switching Capacity	48Gbps	
	Maximum Forwarding Rate	35.71Mpps	
	Forwarding Mode	Store and Forward	
	Packet Buffer Memory	750Kbytes	
	MTBF	174,272 hours	
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration		
WLAN Management Capability	DWL-3024L: Max. 24 APs, DWL-3024 (Directly/Indirectly Connected through LAN Switch) Max. 2048 Wireless Users (1024 Tunneled, 2048 Non-Tunneled)		
Roaming	Fast Roaming (Wireless Adapter needs to support too); Intra-Switch / Inter-Switch Roaming; Intra-Subnet / Inter-Subnet Roaming		
Access Control & Bandwidth Management	Max. 16 SSID Per AP (8 SSID Per RF Frequency Band); AP Load Balancing based on the No. of Users/Utilization Per AP		
Managed Access Point	DWL-3500AP; DWL-8500AP		
AP Management	AP Auto-Discovery; Remote AP Reboot; AP Monitoring: List Managed AP, Authentication Failed AP, Rogue AP; Auto AP RF Channel Adjustment; Client Monitoring: List Clients Associated with each Managed AP; Ad-Hoc Clients Monitoring;		
	AP Authentication with Local Database and External RADIUS Server; Centralized RF/Security Policy Management; Automatic AP Transmitted Output Power Adjustment		
WLAN Security	WPA Personal/Enterprise; WPA2 Personal/Enterprise; 64/128-bit WEP Data Encryption; MAC Authentication; Wireless Station & AP Monitoring on RF Channel, MAC Address, SSID, Time; Captive Portal; Station Isolation Rogue and Valid AP Classification based on MAC Address; Encryption Type: WEP, WPA, Dynamic WEP, TKIP, AES-CCMP, EAP-FAST, EAP-TLS, EAP-TTLS, EAP-MD5, PEAP-GTC, PEAP-MS-CHAPv2, PEAP-TLS		
L2 Features	MAC Address Table Size: 8K Entries; IGMP Snooping: 1K Multicast Groups; 802.1ab Link Layer Discovery Protocol (LLDP); 802.1D STP, 802.1w RSTP, 802.1s MSTP; 802.3ad Link Aggregation: Max. 32 Groups, Max. 8 Ports Per Group; Jumbo Frame: Max. 9Kbytes; Port Mirroring: One-to-One, Many-to-One		
Virtual LAN (VLAN)	802.1Q Tagged VLAN; VLAN Groups: Max. 3965; 802.1v Protocol VLAN; Subnet-based VLAN; MAC-based VLAN; Double VLAN; GARP VLAN Registration Protocol (GVRP)		
L3 Features	IPv4 Static Route; Routing Table Size: Max. 128 Static Routes; Floating Static Route; Proxy Address Resolution Protocol (ARP); Virtual Router Redundancy Protocol (VRRP);		
Quality of Service (QoS)	802.1p Priority Queues: Max. 8 Queues Per Port; Min. Bandwidth Guarantee Per Queue; Traffic Shaping; CoS based on: Switch Port, VLAN, DSCP, TCP/UDP Port, TOS, Dest/Source MAC Address, Dest/Source IP Address		
Access Control List (ACL)	ACL based on: Switch Port, MAC Address, 802.1p Queues, VLAN, Ether Type, DSCP, IP Address, Protocol Type, TCP/UDP Port		
LAN Security	RADIUS & TACACS+ Authentication for Management Access; Secure Shell (SSH) v1/v2; Secure Sockets Layer (SSL) v3; Transport Layer Security (TLS) v1; MAC Filtering; Denial of Service Protection; DHCP Filtering; Protected Port; 802.1X Port-based Access Control & Guest VLAN; Port Security: 20 MAC Per Port, Trap Violation Notification; Broadcast Storm Control in Granularity of 1% of Link Speed		
	Web-based GUI; Command Line Interface (CLI); System Log; Telnet Server: Max. 5 Sessions; Telnet Client; TFTP Client; Dual Images; Multiple Configuration Files; BootP/DHCP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3; Remote Monitoring (RMON): 4 Groups; DHCP Server; Simple Network Time Protocol (SNTP)		
Management Methods	Web-based GUI; Command Line Interface (CLI); System Log; Telnet Server: Max. 5 Sessions; Telnet Client; TFTP Client; Dual Images; Multiple Configuration Files; BootP/DHCP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3; Remote Monitoring (RMON): 4 Groups; DHCP Server; Simple Network Time Protocol (SNTP)		
	Dimension	19-inch; 1U Rack-Mount; 440 x 389 x 44mm (W x D x H)	
Physical & Environment	Weight	6kg	
	Power Input	Input: 100-240VAC, 50/60Hz; Internal Universal Power Supply	
	Max. Power Consumption	450W (All PoE Ports in Operation)	
	PoE	Power Budget: 370A; Per Port: 15.4W	
	RPS	DPS-600	
	Temperature	0 to 40 °C (Operation); -10 to 70 °C (Storage)	
	Humidity	10%~90% (Operation); 5%~90% (Storage); Non-Condensing	
Fan	4 40x40mm DC Fans		
Certification	EMI-EMC	FCC Class A; CE; VCCI; C-Tick; ICES-003; EN 60601 1-2	
	Safety	UL/cUL; CB	

Unified Access Points - DWL-3500AP & DWL-8500AP

Model	DWL-3500AP	DWL-8500AP	
IEEE Wired Standard	802.3; 802.3u; 802.3af		
IEEE Wireless Standard	802.11b; 802.11g	802.11a; 802.11b; 802.11g	
Data Transfer Rate	802.11a	-	54, 48, 36, 24, 18 12, 9, 6 Mbps
	802.11b	11, 5.5, 2, 1 Mbps	
802.11g	54, 48, 36, 24, 18, 12, 9, 6 Mbps		
Wireless Frequency Range	802.11a	-	5.15GHz to 5.35GHz & 5.47GHz to 5.825GHz
	802.11b/g	2.4GHz to 2.4835GHz	
RF Channels	802.11a Non-Overlapping	-	US & Canada: 12; Europe: 19; Japan: 8; China: 5
	802.11b/g	United States: 11; Europe: 13; Japan: 13	
Radio and Modulation Type	802.11a/b/g (DSSS)	DBPSK@1Mbps; DQPSK@2Mbps; CCK@5.5/11Mbps	
	802.11a/g (OFDM)	BPSK@6/9Mbps; QPSK@12/18Mbps; 16QAM@24/36Mbps; 64QAM@48/54/108Mbps	
Transmit Output Power (Typical)	802.11a	-	16dBm@6/9/12/18Mbps 14dBm@24/36Mbps 12dBm@48/54Mbps
	802.11b	18dBm@1/2/5.5/11Mbps	
802.11g	18dBm@6/9/12/18Mbps; 16dBm@24/36 Mbps; 14dBm@48/54Mbps		
EIRP	802.11a	-	16 dBm Using Default Antennas
	802.11g	23 dBm Using Default Antennas	
Receiver Sensitivity	802.11a	-	-87 dBm @ 6 Mbps -86 dBm @ 9 Mbps -85 dBm @ 12 Mbps -83 dBm @ 18 Mbps -80 dBm @ 24 Mbps -76 dBm @ 36 Mbps -71 dBm @ 48 Mbps -68dBm @ 108 Mbps
	802.11b	-92 dBm @ 1 Mbps; -89 dBm @ 2 Mbps; -88 dBm @ 5.5 Mbps; -83 dBm @ 11 Mbps	
	802.11g	-87 dBm @ 6 Mbps; -86 dBm @ 9 Mbps; -85 dBm @ 12 Mbps; -83 dBm @ 18 Mbps; -80 dBm @ 24 Mbps; -76 dBm @ 36 Mbps; -71 dBm @ 48 Mbps; -68 dBm @ 108 Mbps	
Antennas	Description	2 Detachable Dipole Antennas with Reverse SMA Connectors	2 Dual Band Detachable Dipole Antennas with Reverse SMA Connectors
	Antenna Gain	5dBi for 2.4GHz Band	5.5dBi for 5GHz Band 2.5dBi for 2.4GHz Band
Ethernet Interface	10/100BASE-TX Port with 802.3af Power over Ethernet (PoE)		
Security	64/128/152-bit Wired Equivalent Privacy (WEP); Wi-Fi Protected Access (WPA)/WPA2 Extensible Authentication Protocol (EAP); WPA/WPA2 Pre-Shared Key (PSK); Advanced Encryption Standard (AES); MAC Address Filtering; 802.11i-Ready; 802.1Q Service Set Identifier (SSID) Broadcast Enable/Disable; Eight SSID Per Frequency Band; Isolated Security for Each SSID; Station Isolation; IEEE 802.1X Supplicant		
	Management Methods & Protocols	Protocols Supported in DWS-3000 Series; HTTP/HTTPS; SSH; Syslog; Telnet	
Physical & Environment	Dimension (L x W x H)	277.7 x 155 x 45 mm	
	Weight	603.28 grams	800 grams
	Power Input	Via 48VDC, 0.4A External Power Adapter; Operating Voltage: 48VDC +/- 10% for PoE	
	Power Consumption	7W without PoE; 8.5W with PoE	8.5W without PoE; 9W with PoE
	Operation Temperature	0 to 40 °C	
	Storage Temperature	-20 to 65 °C	
	Operation Humidity	10% to 90% (Non-Condensing)	
Storage Humidity	5% to 95% (Non-Condensing)		
Certification	FCC Class B; CE; C-Tick; VCCI; TELEC; UL; Wi-Fi; ICES-003; EN60601-1-2		

Unified Wired/Wireless Access System

DWS-4000 Series



D-Link next generation L2+ Unified Wired/Wireless Switching Solution consists of Gigabit switch with an array of advanced features and 802.11u support. It is a full-featured and cost-effective mobility solution for mid to large enterprises and service providers. It enables network administrators to have control, security, redundancy and reliability needed to scale and manage the wireless networks easily and efficiently.

Unified Switch

Wireless Management

- L2/L3 Fast Roaming
- Intra-Switch/Inter-Switch Roaming
- Centralized Security Policy/AP/Client Management & Monitoring
- Adaptive Wireless
- Automatic RF Channel Adjustment
- Automatic AP Transmit Output Power Adjustment
- AP-AP Tunnel
- AP Load Balancing
- AP Auto-Discovery & Firmware Dispatch
- AP Authentication

- RF Self-Healing
- Auto-VoIP
- Wi-Fi Multimedia (WMM)
- SpectraLink Voice Priority (SVP)
- Remote AP Reboot
- Visualized AP Management Tool
- Wireless Intrusion Detection & Prevention System (WIDS/WIPS)
- Rogue AP/Client Detection & Mitigation
- WPA/WPA2 Personal/Enterprise
- Captive Portal
- Station Isolation

Wired Management

- Internet Group Management Protocol (IGMP) Snooping
- Link Layer Discovery Protocol (LLDP)
- LLDP-Media Endpoint Discovery (LLDP-MED)
- Double VLAN (Q-in-Q)
- Selective Q-in-Q
- Subnet-based VLAN
- IPv4 Static Route
- Routing Information Protocol (RIP)
- Virtual Router Redundancy Protocol (VRRP)
- Routing Information Protocol (RIP)
- Quality of Service (QoS)
- Traffic Shaping
- Bandwidth Control
- Access Control List
- 802.1X Port-based Access Control
- Guest VLAN
- Broadcast Storm Control

Unified Access Point

Managed Mode

- Centralized Management
- Centralized Firmware Dispatch
- Visualized AP Management Tool
- Auto-Power Adjustment
- Dynamic Auto-Channel Selection
- L2 Fast Roaming
- L3 Fast Roaming
- Captive Portal
- Rogue AP Mitigation
- Wireless Intrusion Detection & Prevention System (WIDS)

Standalone Mode

- Wireless Distribution System (WDS)
- AP Clustering
- Local Storage of Configuration

Managed & Standalone Mode

- WEP/WPA/WPA2 Security
- Rogue AP Detection
- Station Isolation
- MAC Address Filterin
- AP Load Balancing Setup
- Wi-Fi Multimedia
- SpectraLink Voice Priority (SVP)
- Unscheduled Automatic Power Save Delivery (U-APSD)

Unified Switch DWS-4026

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slot x 2
- Redundant Power Supply
- Up to 256 APs per Cluster/Peer Group

Unified Access Point DWL-8600AP

- 10/100/1000BASE-T x 1 (PoE)
- IEEE 802.11a Wireless LAN
- IEEE 802.11g Wireless LAN
- IEEE 803.11n Wireless LAN
- 6dBi @ 5GHz & 4dBi @ 2.4GHz Dual Band Dipole Antenna x 4
- Detachable Antenna with RP-SMA Interface
- External Power Adapter

Optional Accessories

Modules

DEM-410X	1-Port 10G XFP Module
DEM-410CX	1-Port 10G CX4 Module

10-Gigabit Ethernet XFP Transceivers

DEM-421XT	10GBASE-SR, MMF, 300m
DEM-422XT	10GBASE-LR, SMF, 10km
DEM-423XT	10GBASE-ER, SMF, 40km

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Unified Switch - DWS-4000 Series

Model	DWS-4026	
IEEE LAN Standard	802.3; 802.3u; 802.3z; 802.3ab; 802.3ae; 802.3af	
Port Interface	10/100/1000 BASE-T (RJ-45)	20 (PoE)
	Combo 1000BASE-T/SFP	4
	10 GE Slot	2
	XFP Module	DEM-410X
	CX4 Module	DEM-410CX
Physical Stack	Via CX4/XFP Module; Duplex Chain/Ring Topology; Bi-Directional Redundant Stacking Topology; Up to 40Gbps (Full Duplex); Up to 12 Units Per Stack	
General Features	Switch Capacity	88Gbps
	Forwarding Rate	65.47Mpps (Maximum)
	Forwarding Mode	Store and Forward
	Buffer Memory	750KBytes
	MTBF	185,540 hours
Console Port	Female RS-232 DB-9 Console for Out-of-Band Configuration	
WLAN Management Capability	Max. 64 APs Per Switch; Max. 256 APs Per Cluster; Max. 2048 Wireless Users (1024 Tunneled, 2048 Non-Tunneled)	
Roaming	Fast Roaming (Wireless Adapter needs to support too) Intra-Switch / Inter-Switch Roaming; Intra-Subnet / Inter-Subnet Roaming; AP-AP-Tunnel	
Access Control & Bandwidth Management	Max. 32 SSID Per AP (16 SSID Per RF Frequency Band); AP Load Balancing based on the No. of Users or Utilization Per AP	
Managed Access Point	DWL-8600AP	
AP Management	AP Auto-Discovery; Remote AP Reboot; AP Monitoring: List Managed AP, Authentication Failed AP, Rogue AP; Ad-Hoc Clients Monitoring; Client Monitoring: List Clients Associated with Each Managed AP; AP Authentication Supporting Local Database and External RADIUS Server; Centralized RF/Security Policy Management; Visualized AP Management Tool (Support up to 16 JPG Files); Unified AP Support (DWL-8600AP): Managed/Standalone Mode	
WLAN Security	Wireless Intrusion Detection & Prevention System (WIDS); Rogue AP Mitigation; 64/128-bit WEP Data Encryption; Rogue and Valid AP Classification based on MAC Address; WPA Personal/Enterprise; WPA2 Personal/Enterprise; Wireless Station and AP Monitoring on RF Channel, MAC Address, SSID, Time; Captive Portal; Station Isolation; Encryption Type Support: WEP, WPA, Dynamic WEP, TKIP, AES-CCMP, EAP-FAST, EAP-TLS, EAP-TTLS, EAP-MD5, PEAP-GTC, PEAP-MS-CHAPv2, PEAP-TLS; MAC Authentication	
L2 Features	MAC Address Table Size: 8K Entries; IGMP Snooping: 1K Multicast Groups; MLD Snooping; 802.1D STP, 802.1s Rapid STP, 802.1w Multiple STP; 802.3ad Link Aggregation: Max. 32 Groups, Max. 8 Ports Per Group; Jumbo Frame: Max. 9KBytes; 802.1ab Link Layer Discovery Protocol (LLDP); LLDP-MED; Port Mirroring: One-to-One, Many-to-One; Flow Control: 802.3x in Full Duplex, Back Pressure in Half Duplex, Head-of-Line Blocking Prevention	
Virtual LAN (VLAN)	802.1Q Tagged VLAN; 802.1v Protocol VLAN; VLAN Groups: Max. 3,965 Entries; Subnet-based VLAN; GARP VLAN Registration Protocol (GVRP); MAC-based VLAN; Double VLAN; Voice VLAN	
L3 Features	IPv4 Static Route; Routing Table Size: Max. 128 Static Routes; Floating Static Route; Proxy Address Resolution Protocol (ARP); Virtual Router Redundancy Protocol (VRRP); Routing Information Protocol (RIP) v1/v2	
Quality of Service (QoS)	802.1p Priority Queues (Max. 8 Queues Per Port); Auto-VoIP; Minimum Bandwidth Guarantee Per Queue; Traffic Shaping Per Port; Per-Flow Bandwidth Control; CoS based on: Switch Port, VLAN, DSCP, TCP/UDP Port, TOS, Dest/Source MAC Address, Dest/Source IP Address	
Access Control List (ACL)	ACL based on: Switch Port, MAC Address, 802.1p Queues, VLAN, Ether Type, DSCP, IP Address, Protocol Type, TCP/UDP Port	
LAN Security	RADIUS & TACACS+ Authentication for Management Access; Secure Shell (SSH) v1/v2; Secure Sockets Layer (SSL) v3; Transport Layer Security (TLS) v1; MAC Filtering; Denial of Service Protection; Dynamic ARP Inspection (DAI); Port Security: 20 MAC Per Port, Port Violation Notification; 802.1X Port-based Access Control and Guest VLAN; Broadcast Storm Control in Granularity of 1% of Link Speed; DHCP Snooping; Protected Port; DHCP Filtering	
Management Methods	Web-based GUI; Switch Clustering; RADIUS Accounting; Command Line Interface (CLI); Telnet Client; TFTP Client; Telnet Server: Max. 5 Sessions; sFlow; BootP/DHCP Client; DHCP Server; DHCP Relay; Dual Images; Port Description; Multiple Configuration Files; Dual Image Services; Simple Network Management Protocol (SNMP) v1/v2c/v3; Remote Monitoring (RMON) v1; Simple Network Time Protocol (SNTP); System Log	
Physical &	Dimension	19-inch; 1U Rack-Mount; 440 x 389 x 44mm (W x D x H)
	Weight	6kg
	Power Input	Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply
	Max. Power Consumption	525W (With All PoE Ports in Operation)
	PoE	Power Budget: 370A; Per Port: 15.4W
	RPS	DPS-600
	Temperature	0 to 40 °C (Operation); -10 to 70 °C (Storage)
Humidity	10%~90% (Operation); 5%~90% (Storage) Non-Condensing	
EMI-EMC	FCC Class A; CE; VCCI; C-Tick; ICES-003; EN 60601 1-2	
Safety	UL/cUL; CB	

Unified Access Point - DWL-8600AP

Model	DWL-8600AP	
IEEE Wired Standard	802.3; 802.3u; 802.3ab; 802.3af	
IEEE Wireless Standard	802.11a; 802.11b; 802.11g; 802.11n	
Data Transfer Rate	802.11a	54, 48, 36, 24, 18, 12, 9, 6 Mbps
	802.11b	11, 5.5, 2, 1 Mbps
	802.11g	54, 48, 36, 24, 18, 12, 9, 6 Mbps
	802.11n	Up to 300 Mbps
Wireless Frequency Range	802.11a	5.15GHz to 5.35GHz
	802.11b/g	5.47GHz to 5.825GHz
	802.11n	2.4GHz to 2.4835GHz 2.4GHz to 2.497GHz 4.9GHz to 5.85 GHz
RF Channel	5GHz	US & Canada: 12; Europe: 19; Japan: 8; China: 5 (Non-Overlapping)
	2.4GHz	US: 11; Europe: 13; Japan: 13
Radio and Modulation Type		DBPSK@1Mbps; DQPSK@2Mbps; CCK@5.5/11Mbps
	802.11a/g (OFDM)	BPSK@6/9Mbps; QPSK@12/18Mbps; 16QAM@24/36Mbps; 64QAM@48/54Mbps
Transmit Output Power (Typical)	802.11n	PSK/CCK, DQPSK, DBPSK, OFDM
	802.11a	17dBm@6/9/12/18Mbps; 15dBm@24/36Mbps; 14dBm@48Mbps; 13dBm@54Mbps
	802.11b	17dBm@1/2/5.5/11Mbps
	802.11g	17dBm@6/9/12/18Mbps; 16dBm@24/36Mbps; 15dBm@48Mbps; 14dBm@54Mbps
Receiver Sensitivity	802.11n	5GHz Band/HT-20: 12 to 17dBm; 5GHz Band/HT-40: 11 to 16dBm; 2.4GHz Band/HT-20: 13 to 17dBm; 2.4GHz Band/HT-40: 12 to 16dBm
	802.11a	-87dBm@6Mbps; -86dBm@9Mbps; -84dBm@12Mbps; -81dBm@18Mbps; -77dBm@24Mbps; -75dBm@36Mbps; -68dBm@48Mbps; -67dBm@54Mbps
	802.11b	-92dBm@1Mbps; -90dBm@2Mbps; -88dBm@5.5Mbps; -84dBm@11Mbps
	802.11g	-87dBm@6Mbps; -87dBm@9Mbps; -85dBm@12Mbps; -82dBm@18Mbps; -79dBm@24Mbps; -76dBm@36Mbps; -71dBm@48Mbps; -70dBm@54Mbps
Antennas		4 Dual Band Detachable Dipole Antennas with Reverse SMA Connectors
	Antenna Gain	6dBi for 5GHz Band; 4dBi for 2.4GHz Band
Ethernet Interface	10/100/1000BASE-T Port with 802.3af Power over Ethernet (PoE)	
Configuration Operation Modes	Access Point Only; Wireless Distribution System (WDS); Access Point with WDS	
Security	64/128/152-bit Wired Equivalent Privacy; MAC Address Filtering: Local/RADIUS; Wi-Fi Protected Access (WPA)/WPA2 Extensible Authentication Protocol (EAP); WPA/WPA2 Pre-Shared Key (PSK); Temporal Key Integrity Protocol (TKIP); Advanced Encryption Standard (AES); 802.1Q SSID Broadcast Enable/Disable; 16 SSID Per Frequency Band; 32 SSID Per AP; 802.11i/WPA2; RADIUS: Max. 4 External RADIUS Servers; Isolated Security for Each SSID; Station Isolation; IEEE 802.1X Supplicant	
	Management Methods & Protocols	Protocols Supported in DWS-4026; HTTP/HTTPS; SSH; SNMP; Syslog; Telnet
	Dimension	190.5 x 198.8 x 36.8mm (L x W x H)
	Weight	1.02kg
Physical &	Power Input	Via 48VDC, 0.4A External Power Adapter Operating Voltage: 48VDC +/- 10% for PoE
	Power	11W with PoE; 12W with PoE (Maximum)
	Operation Storage	0 to 40 °C -20 to 65 °C
	Operation Humidity	10% to 90% (Non-Condensing)
	Storage Humidity	5% to 95% (Non-Condensing)
	Certification	FCC Class B; CE; C-Tick; VCCI; TELEC; Wi-Fi; ICES-003; EN60601 1-2; NCC; CSA International

Unified Switch Selection Matrix

Models	DWS-4000 Series	DWS-3000 Series
General		
Maximum Switching Capacity	88Gbps	48Gbps
Fixed 10/100/1000BASE-T Port	24	24
Fixed Small Form-Factor Pluggable (SFP) Port	4	4
Optional 10G XFP Uplink Capability	Yes (2)	No
Redundant Power Supply	Yes (DPS-600)	Yes (DPS-600)
Layer 2 Features		
Jumbo Frame (Size)	Yes (9kbytes)	Yes (9kbytes)
802.1D/802.1w/802.1s Spanning Tree Protocol (STP)	Yes	Yes
802.3ad Link Aggregation	Yes	Yes
Port Mirroring	Yes	Yes
Layer 2 Multicast		
Internet Group Management Protocol (IGMP) Snooping	Yes (v1/v2/v3)	Yes (v1/v2/v3)
Multicast Listener Discover (MLD) Snooping	Yes (v1/v2)	Yes (v1/v2)
Virtual LAN (VLAN)		
802.1Q VLAN Tagging	Yes	Yes
802.1v Protocol VLAN Classification	Yes	Yes
Q-in-Q (Double VLAN)	Yes	Yes
Voice VLAN	Yes	No
Layer 3 Features		
Routing Table Size	128 Static routes	128 Static routes
Routing Information Protocol v1/v2	Yes	No
Virtual Router Redundancy Protocol (VRRP)	Yes	Yes
Wireless LAN		
Max. APs Per switch	64	DWS-3024L: 24; DWS-3024: 48
Max. Users Per Switch	Up to 1024 Tunneled Users Up to 2048 Non-Tunneled Users	Up to 1024 Tunneled Users Up to 2048 Non-Tunneled Users
Switch/AP Discovery	Yes	Yes
Fast Roaming	Yes	Yes
Intra-Switch Roaming	Yes	Yes
Inter-Switch Roaming (No. of Peer Switches)	Yes (8)	Yes (4)
L2 Roaming (Intra-Subnet Roaming)	Yes	Yes
L3 Roaming (Inter-Subnet Roaming)	Yes	Yes
IP-IP Tunnel	Yes	Yes
AP-AP Tunnel	Yes	No
Path MTU	Yes	Yes
MSS Reduction	Yes	Yes
Adaptable Wireless	Yes	Yes
RF Management and Control		
Multiple ESSIDs Per AP (VAP Per Radio / VAP Per AP)	Yes (16 / 32)	Yes (8 / 16)
Automatic RF Channel Adjustment	Yes	Yes
Automatic AP Transmit Output Power Adjustment	Yes	Yes
RF Self-Healing Around Failed AP	Yes	Yes
AP Load Balancing	Yes	Yes
Access Point (AP) Management		
AP Software Version Auto-Detection & Central Firmware Dispatch	Yes	Yes
AP Auto-Discovery	Yes	Yes
AP Authentication	Yes	Yes
Remote AP Boot	Yes	Yes
AP Monitoring / Client Monitoring	Yes	Yes
Centralized RF / Security Policy Management	Yes	Yes
Visualized AP Management Tool	Yes	Yes
Unified AP Support (AP supports Managed/Standalone mode)	DWL-8600AP	DWL-3500AP / DWL-8500AP
Quality of Service (QoS)		
Number of Queues Per Port	8	8
Strict Priority	Yes	Yes
Weighted Round Robin (WRR)	Yes	Yes
Bandwidth Control (min. granularity)	Yes (64kbps)	Yes (64kbps)
Auto-VoIP	Yes	No
802.11e Wireless Multimedia (WMM)	Yes	Yes
Access Control List (ACL)		
Access Control List	Yes	Yes
ACL Max Profiles / Rules	Max 100 ACLs; Max 10 Rules Per ACL	Max 100 ACLs; Max 10 Rules Per ACL
Security		
Rogue AP Identification & Classification	Yes	Yes
Wireless Intrusion Detection System (WIDS)	Yes	No
Dynamic ARP Inspection (DAI)	Yes	No
DHCP Snooping	Yes	No
Secure Shell (SSH)	Yes (v1/v2)	Yes (v1/v2)
Secure Sockets Layer (SSL)	Yes (v3)	Yes (v3)
Port Security (Entries Per Port)	Yes (20)	Yes (20)
Broadcast/Multicast/Unicast Storm Control (min. granularity)	Yes (1% link speed)	Yes (1% link speed)
Authentication, Authorization & Accounting (AAA)		
802.1X Access Control	Yes	Yes
Captive Portal	Yes	Yes
MAC Authentication	Yes	Yes
Guest VLAN	Yes	Yes
Dynamic VLAN Assignment	Yes	Yes
RADIUS & TACACS+ Authentication for Management Access	Yes	Yes
Management		
Web GUI & CLI	Yes	Yes
Switch Clustering	Yes	No
Link Layer Discovery Protocol (LLDP)	Yes	Yes
Simple Network Management Protocol (SNMP)	Yes (v1/v2c/v3)	Yes (v1/v2c/v3)
Remote Monitoring (RMON)	Yes (v1)	Yes (v1)
DHCP Server, DHCP Relay	Yes	Yes
Multiple Image, Multiple Configuration	Yes	Yes

SECURITY

Protecting a network against attacks and unauthorized access is key to the survival of any business. D-Link security solutions offer end to end defense to ensure all areas of the network are secured. Products under this category include Intrusion Prevention System (IPS) and Unified Threat Management (UTM) Firewalls, Service Routers, VPN Routers and Load Balancing Router.



IPS Firewalls



D NETDEFEND™



Being part of D-Link Gateway Security, NetDefend IPS Firewalls provide critical protection for networking infrastructure with powerful firewall/VPN features and innovative NetDefend IPS service.

- Transparent Mode
- Application Layer Gateway (ALG)
- IPSec/PPTP/L2TP VPN
- VPN Hub and Spoke
- Outbound Load Balancing
- Traffic Redirect at Fail-Over
- Policy-based Traffic Shaping
- Guaranteed Bandwidth
- WAN Failover
- Intrusion Detection & Prevention System (IDP/IPS)
- HTTP/Script/Email Type Content Filtering
- External Database Content Filtering** (DFL-210 & DFL-800)
- Real Time Anti-Virus Scanning** (DFL-210 & DFL-800)
- D-Link ZoneDefense (DFL-800, DFL-1600 & DFL-2500)
- Server Load Balancing (DFL-800, DFL-1600 & DFL-2500)
- Device & Link Failure Detection (DFL-1600 & DFL-2500)
- LCD Panel (DFL-1600 & DFL-2500)
- Anti-Virus over VPN** (DFL-210 & DFL-800)

Optional Accessories

Licenses

DFL-210-AV-12	DFL-210 Anti-Virus Signature Upgrade License (12 Months)
DFL-210-IPS-12	DFL-210 IPS Signature Upgrade License (12 Months)
DFL-210-WCF-12	DFL-210 Web Content Filtering Signature License (12 Months)
DFL-800-AV-12	DFL-800 Anti-Virus Signature Upgrade License (12 Months)
DFL-800-IPS-12	DFL-800 IPS Signature Upgrade License (12 Months)
DFL-800-WCF-12	DFL-800 Web Content Filtering Signature License (12 Months)
DFL-1600-IPS-12	DFL-1600 IPS Signature Upgrade License (12 Months)
DFL-2500-IPS-12	DFL-2500 IPS Signature Upgrade License (12 Months)

NetDefend Security Service

IPS Signature License of 90 days is shipped with the equipment.
Anti-Virus Signature and Web Content Filtering License of 90 days are shipped with DFL-210/DFL-800** firewalls.

Please register your product at <http://security.dlink.com.tw>.

DFL-210

- 10/100BASE-TX x 6
(WAN x 1 / DMZ x 1 / LAN x 4)
- External Power Supply

DFL-800

- 10/100BASE-TX x 10
(WAN x 2 / DMZ x 1 / LAN x 7)
- External Power Supply

DFL-1600

- 10/100/1000BASE-T x 6
(WAN / DMZ / LAN User Configurable)
- 19" Rackmount

DFL-2500

- 10/100/1000BASE-T x 8
(WAN / DMZ / LAN User Configurable)
- 19" Rackmount

IPS Firewalls

Model		DFL-210	DFL-800	DFL-1600	DFL-2500
Port Interface	Ethernet WAN Port	1	2	-	-
	Ethernet DMZ Port (User-Configurable)	1	1	-	-
	Ethernet LAN Port	4	7	-	-
	User-Configurable Gigabit Port	-	-	6	8
	DB-9 RS-232 Console	-	-	1	-
System Performance	Firewall Throughput	80Mbps	150Mbps	320Mbps	600Mbps
	VPN Throughput	25Mbps	45Mbps	120Mbps	300Mbps
	IPS Throughput	20Mbps	40Mbps	150Mbps	400Mbps
	Anti-Virus Throughput	10Mbps**	20Mbps**	-	-
	Concurrent Sessions	10,000**	20,000**	400,000	1,000,000
	New Sessions (per second)	2,000	4,000	10,000	15,000
	Policies	500	1,000	2,500	4,000
Firewall System	Transparent Mode; Network Address Translation (NAT), Port Address Translation (PAT); Dynamic Routing Protocol: Open Shortest Path First (OSPF) (Not applicable for DFL-210); H.323 NAT Traversal; Time-Scheduled Policies; Application Layer Gateway (ALG); Proactive Network Security: ZoneDefense (Not applicable on DFL-210)				
Networking	DHCP Server/Client; DHCP Relay; Policy-based Routing; IP Multicast: IGMPv3				
Virtual LAN (VLAN)	8	16	128	1,024	
Virtual Private Network (VPN)	Encryption Methods: DES/3DES/AES/Twofish/Browfish/CAST-128; IPSec NAT Traversal; Dedicated VPN Tunnels: 100 (DFL-210), 200** (DFL-800), 1,200 (DFL-1600), 2,500 (DFL-2500); Point-to-Point Tunneling Protocol (PPTP) / Layer 2 Tunneling Protocol (L2TP) Server; Hub and Spoke				
System Management	RS-232 Console Interface; Web-based User Interface: HTTP, HTTPS; Command Line/Secure Shell (SSH); Firmware Upgrade; Configuration Backup/Restoration				
User Authentication	Built-in Database; Remote Authentication Dial In User Service (RADIUS); Lightweight Directory Access Protocol (LDAP): Microsoft AD 2003/2008 OpenLDAP 2.2.26; Microsoft Internet Authentication Service (IAS); XAUTH for IPSec Authentication				
Logging and Monitoring	Internal Log; External Log: Syslog Server; E-Mail Notification; Event Log and Alarm; Simple Network Management Protocol (SNMP) v1/v2c, SNMP Traps				
Traffic Load Balancing	Outbound Load Balancing; Server Load Balancing (Not applicable for DFL-210); Traffic Redirect at Fail-Over; Outbound Load Balance Algorithms: Round-Robin, Weight-based Round-Robin, Destination-based, Spill-over				
Bandwidth Management	Policy-based Traffic Shaping; Guaranteed Bandwidth; Maximum Bandwidth; Priority Bandwidth; Dynamic Bandwidth Balancing				
High Availability (HA)	WAN Fail-Over (DFL-210: When DMZ Port is Configured as WAN Port); Active/Passive Modes (Not applicable on DFL-210/800); Device Failure Detection (Not applicable on DFL-210/800); Link Failure Detection (Not applicable on DFL-210/800); Firmware / Virtual Private Network (VPN) Session Synchronization (Not applicable on DFL-210/800)				
Intrusion Detection & Prevention System (IDP/IPS)	Automatic Pattern Update; Denial of Service (DoS), Distributed DoS (DDoS) Update; Attack Alarm via Email; Advanced IDP/IPS Subscription; IP Blacklist by Threshold or IPS/IDP (Not applicable on DFL-210)				
Content Filtering	HTTP Type: URL Blacklist/Whitelist; Script Type: Java, Cookie, ActiveX, VB; Email Type: Email Blacklist/Whitelist; External Database Content Filtering** (Available on DFL-210/800 only)				
Anti-Virus** (Applicable on DFL-210 / DFL-800 only)	Real Time AV Scanning; Unlimited File Size; Scans VLAN Tunnels; Support Compressed Files; Signature Licensor: Kaspersky; Automatic Pattern Update				
Physical & Environmental	Dimension (W x D x H)	Desktop; 235 x 162 x 36mm	11-inch Desktop; 1U Height; 280 x 214 x 44mm	19-inch Rack-Mount; 1U Height; 440 x 254 x 44mm	19-inch Rack-Mount; 1U Height; 440 x 454 x 44mm
	Power Input	External Power Adapter		Internal Universal Power Supply	
	Operating Temperature	0 to 40 °C			
	Storage Temperature	-20 to 70 °C			
	Operating Humidity	5% to 95% Non-Condensing			
	Mean Time Before Failure (MTBF)	186,614 hours	140,532 hours	71,965 hours	101,819 hours
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; C-Tick; VCCI			
	Safety Compliance	UL; LVD (EN60950-1)	LVD (EN60950-1)		

** Available in Firmware 2.26.00 and above; Performance based on Firmware 2.26.00 and above

UTM Firewalls



Apart from IPS Firewall capabilities, NetDefend UTM Firewalls provide comprehensive security services, such as NetDefend IPS, Anti-Virus and Web Content Filtering.

- Transparent Mode
- Application Layer Gateway (ALG)
- IPSec/PPTP/L2TP VPN
- VPN Hub and Spoke
- Outbound Load Balancing
- Traffic Redirect at Fail-Over
- Guaranteed Bandwidth
- Intrusion Detection & Prevention System (IDP/IPS)
- HTTP Type Content Filtering
- Real Time Anti-Virus Scanning
- Anti-Virus over VPN
- Policy-based Traffic Shaping
- WAN Failover
- HTTP/Script/Email Type Content Filtering
- External Database Content Filtering
- D-Link ZoneDefense (DFL-860, DFL-1660, DFL-2560 & DFL-2560G)
- Server Load Balancing (DFL-860, DFL-1660, DFL-2560 & DFL-2560G)
- Device & Link Failure Detection (DFL-1660, DFL-2560 & DFL-2560G)

Optional Accessories

Licenses

DFL-260-AV-12	DFL-260 Anti-Virus Signature Upgrade License (12 Months)
DFL-260-IPS-12	DFL-260 IPS Signature Upgrade License (12 Months)
DFL-260-WCF-12	DFL-260 Web Content Filtering Signature License (12 Months)
DFL-860-AV-12	DFL-860 Anti-Virus Signature Upgrade License (12 Months)
DFL-860-IPS-12	DFL-860 IPS Signature Upgrade License (12 Months)
DFL-860-WCF-12	DFL-860 Web Content Filtering Signature License (12 Months)
DFL-1660-AV-12	DFL-1660 Anti-Virus Signature Upgrade License (12 Months)
DFL-1660-IPS-12	DFL-1660 IPS Signature Upgrade License (12 Months)
DFL-1660-WCF-12	DFL-1660 Web Content Filtering Signature License (12 Months)
DFL-2560-AV-12	DFL-2560/DFL-2560G Anti-Virus Signature Upgrade License (12 Months)
DFL-2560-IPS-12	DFL-2560/DFL-2560G IPS Signature Upgrade License (12 Months)
DFL-2560-WCF-12	DFL-2560/DFL-2560G Web Content Filtering Signature License (12 Months)

Gigabit Ethernet SFP Transceivers (for DFL-2560G)

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers (for DFL-2560G)

DEM-330T/R	1000BASE-BX, SMF, 15km
DEM-331T/R	1000BASE-BX, SMF, 40km

NetDefend Security Service

IPS & Anti-Virus Signature License of one year and Web Content Filtering License of 90 days are shipped with the equipment.

Please register your product at <http://security.dlink.com.tw>.

DFL-260

- 10/100BASE-TX x 6 (WAN x 1 / DMZ x 1 / LAN x 4)
- External Power Supply

DFL-860

- 10/100BASE-TX x 10 (WAN x 2 / DMZ x 1 / LAN x 7)
- External Power Supply

DFL-1660

- 10/100/1000BASE-T x 6 (WAN / DMZ / LAN User Configurable)
- USB 2.0 x 2
- Internal Power Supply
- 19" Rackmount

DFL-2560

- 10/100/1000BASE-T x 10 (WAN / DMZ / LAN User Configurable)
- USB 2.0 x 2
- Internal Power Supply
- 19" Rackmount

DFL-2560G

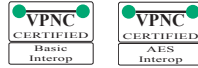
- 10/100/1000BASE-T x 6 (WAN / DMZ / LAN User Configurable)
- SFP x 4 (WAN / DMZ / LAN User Configurable)
- USB 2.0 x 2
- Internal Power Supply
- 19" Rackmount

UTM Firewalls

Model		DFL-260	DFL-860	DFL-1660	DFL-2560	DFL-2560G
Port Interface	Ethernet WAN Port	1	2		-	
	Ethernet DMZ Port (User-configurable)	1	1		-	
	Ethernet LAN Port	4	7		-	
	User-Configurable Gigabit RJ-45 Port		-	6	10	6
	User-Configurable Gigabit SFP Port			-		4
	USB 2.0		-		2 (Reserved)	
	DB-9 RS-232 Console			1		
System Performance	Firewall Throughput	80Mbps	150Mbps	1.2Gbps		2Gbps
	VPN Throughput	25Mbps	45Mbps	350Mbps		1Gbps
	IPS Throughput	20Mbps	40Mbps	400Mbps		600Mbps
	Anti-Virus Throughput	10Mbps	20Mbps	225Mbps		450Mbps
	Concurrent Sessions	10,000**	20,000**	600,000		1,500,000
	New Sessions (per second)	2,000	4,000	15,000		20,000
	Policies	500	1,000	4,000		6,000
Firewall System	Transparent Mode; Network Address Translation (NAT), Port Address Translation (PAT); Dynamic Routing Protocol: Open Shortest Path First (OSPF) (Not applicable on DFL-160/260); H.323 NAT Traversal (Not applicable on DFL-160); Time-Scheduled Policies; Application Layer Gateway (ALG); Proactive Network Security: ZoneDefense (Not applicable on DFL-160/210)					
Networking	DHCP Server/Client; DHCP Relay; Policy-based Routing; IP Multicast: IGMPv3					
Virtual LAN (VLAN)	8	16	1,024		2,048	
Virtual Private Network (VPN)	Encryption Methods: DES/3DES/AES/Twofish/Browfish/CAST-128; IPsec NAT Traversal; Dedicated VPN Tunnels: 30 (DFL-160), 100 (DFL-260), 200** (DFL-860), 2,500 (DFL-1660), 5,000 (DFL-2560/2560G); Point-to-Point Tunneling Protocol (PPTP) / Layer 2 Tunneling Protocol (L2TP) Server; Hub and Spoke (Not applicable on DFL-160)					
Traffic Load Balancing (Not applicable on DFL-160)	Outbound Load Balancing; Server Load Balancing (Not applicable for DFL-260); Traffic Redirect at Fail-Over; Outbound Load Balance Algorithms: Round-Robin, Weight-based Round-Robin, Destination-based, Spill-over					
Bandwidth Management (Not applicable on DFL-160)	Policy-based Traffic Shaping; Guaranteed Bandwidth; Maximum Bandwidth; Priority Bandwidth; Dynamic Bandwidth Balancing					
High Availability (HA) (Not applicable on DFL-160)	WAN Fail-Over (DFL-210: When DMZ Port is Configured as WAN Port); Active/Passive Modes (Not applicable on DFL-260/860); Device Failure Detection (Not applicable on DFL-260/860); Link Failure Detection (Not applicable on DFL-260/860); Firmware / Virtual Private Network (VPN) Session Synchronization (Not applicable on DFL-260/860)					
Intrusion Detection & Prevention System (IDP/IPS)	Automatic Pattern Update; Denial of Service (DoS), Distributed DoS (DDoS) Update; Attack Alarm via Email; Advanced IDP/IPS Subscription; IP Blacklist by Threshold or IPS/IDP (Not applicable on DFL-160/210)					
Content Filtering	HTTP Type: URL Blacklist/Whitelist; Script Type: Java, Cookie, ActiveX, VB (Not applicable on DFL-160); Email Type: Email Blacklist/Whitelist (Not applicable on DFL-160); External Database Content Filtering					
Anti-Virus	Real Time AV Scanning; Unlimited File Size; Scans VPN Tunnels; Support Compressed Files; Signature Licensor: Kaspersky; Automatic Pattern Update					
Physical & Environmental	Dimension (WxDxH)	Desktop; 235x162x36mm	11-inch Desktop; 1U Height; 280x214x44mm	19-inch Rack-Mount; 1U Height; 440x400x44mm		
	Power Input	External Power Adapter		80 PLUS Internal Universal Power Supply		
	Operating Temperature	0 to 40 °C				
	Storage Temperature	-20 to 70 °C				
	Operating Humidity	5% to 95% Non-Condensing				
	Mean Time Before Failure (MTBF)	186,614 hours	140,532 hours	400,000 hours	310,000 hours	
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI; C-Tick				
	Safety Compliance	UL; LVD(EN60950-1)	LVD (EN60950-1)	cUL; CB		

** Available in Firmware 2.26.00 and above; Performance based on Firmware 2.26.00 and above

Unified Services Routers



Customized for small businesses, D-Link Unified Services Router is an all-in-one gateway device providing outstanding performance and rich functionalities, including IEEE 802.11n (ratified version), 3G WAN redundancy, IPv6 and comprehensive VPN features (SSL/IPSec/PPTP/L2TP).

- Static/Dynamic IP WAN Type
- Point-to-Point over Ethernet (PPPoE)
- SSL/IPSec/PPTP/L2TP VPN
- VPN Hub & Spoke
- IPSec/PPTP/L2TP VPN Pass-through
- 3G WAN Redundancy (DSR-1000N)
- Network Address Translation (NAT)
- Transparent Mode
- Dynamic Routing (RIP, OSPF*)
- WAN Traffic Failover
- Outbound Load Balancing*
- Remote Management (Web, SNMP, SSH, Telnet)
- XML-Agent Support (Yahoo Widget, etc)
- Internet Group Management Protocol (IGMP) Proxy/Snooping
- Stateful Packet Inspection (SPI)
- L2 to L7 Access Control
- IP/MAC Binding
- Virtual LAN (VLAN)
- Intrusion Prevention System (IPS)
- 3 x 3 MIMO
- Wireless Security (WEP, WPA, WPA2, WPS)
- Wireless Connect Now (WCN) 2.0
- Radio Profile
- Multiple SSIDs
- SSID-to-VLAN Mapping
- IPv6 Phase 2 Certified*

DSR-1000N

- 10/100/1000BASE-T x 2 (WAN)
- 10/100/1000BASE-T x 4 (LAN)
- IEEE 802.11n Wireless LAN (2.4GHz/5GHz)
- USB 2.0 Port x 2
- 2dBi Dipole Antenna x 3
- 3 x 3 MIMO
- Detectable Antenna with RP-SMA Interface
- Internal Power Supply
- D-Link Green Technology

* Available in future firmware upgrade

Unified Services Routers

Model		DSR-1000N
Port Interface	Ethernet WAN	Two 10/100/1000BASE-T Gigabit Ethernet Port for xDSL/Cable Connection
	Ethernet Wired LAN	Four 10/100/1000BASE-T Gigabit Ethernet LAN Connection
	Wireless LAN	IEEE 802.11a/b/g/n (2.4GHz & 5GHz) Wireless LAN Three Detectable 2dBi (3 * 3 MIMO) Omni-Directional Antennas
	Universal Serial Bus (USB)	Two USB 2.0 Interfaces (3G Dongle Compatible) Share Port; WCN Configuration
System Performance	Firewall Throughput	130Mbps
	Concurrent Sessions	60,000
	New Sessions (Per Second)	600
	AES Throughput Policies	Over 80Mbps 100 (each feature); 600 (firewall rule)
Internet Connection	Static IP Address; Dynamic IP Address; Point-to-Point over Ethernet (PPPoE); Point-to-Point Tunneling Protocol (PPTP); Layer 2 Tunneling Protocol (L2TP); Japan Multiple/Unnumbered PPPoE; Russia Dual Access L2TP; 3G USB Adapter (Applicable for DSR-1000N)	
Firewall System	Transparent Mode; Network Address Translation (NAT) Mode; Router Mode; Dynamic Routing: Routing Information Protocol (RIP), Open Shortest Path First (OSPF) Network Address Translation (NAT) Endpoint Filtering; H.323 NAT Traversal; Application Layer Gateway (ALG); VPN Pass-Through; Pre-Defined Service Definitions	
Networking	DHCP Server; DHCP Relay; DHCP Reservation; DHCP Client List; Universal Plug and Play (UPnP); Multicast Stream	
Wireless	Wireless Security Mode: Wired Equivalent Privacy (WEP), Wi-Fi Protected Access-Personal Mode (WPA-Personal), Wi-Fi Protected Access-Enterprise Mode (WPA-Enterprise); Transmission Speed: Auto Adjustment, Manual Adjustment; WLAN Partition; Power Save; Request-to-Send (RTS) Threshold; Fragment Threshold	
Internet Protocol Version 6 (IPv6)	Native IPv6 Connectivity; Static IPv6 Address and Route; DHCPv6; IPv6 over PPPoE; IPv6 in IPv4 Tunneling; 6to4 Tunneling; Teredo Tunneling; Link-Local Connectivity	
Virtual Private Network (VPN)	Encryption Methods: DES/3DES/AES/Twofish/Blowfish/CAST-128/NULL; IPSec NAT Traversal; Dedicated VPN Tunnels: 35 (DSR-500N), 70 (DSR-1000N); SSL VPN Tunnel: 10 (DSR-500N), 20 (DSR-1000N); Hub and Spoke; DHCP over IPSec; Dynamic Authentication; Perfect Forward Secrecy	
Advanced Functions	Port-Forwarding; Application Rules; Website Filter; Intrusion Prevention System (IPS); Anti-Spoof Checking; Anti-Denial of Service (Anti-DoS); Traffic Management	
Physical & Environment	Dimension (W x D x H)	Desktop; 1U Height; 280 x 180 x 44mm
	Power Input	Internal Power Supply
	Operating Temperature	0 to 40 °C
	Storage Temperature	-20 to 70 °C
Certification	Operating Humidity	5% to 95% Non-Condensing
	EMI-EMC Compliance Safety Compliance	FCC Class B; CE Class B; VCCI*; C-Tick*; IC* cUL; LVD (EN60950-1)

NetDefend Firewall Selection Matrix

	IPS Firewalls				UTM Firewalls				
	DFL-210	DFL-800	DFL-1600	DFL-2500	DFL-260	DFL-860	DFL-1660	DFL-2560	DFL-2560G
Interface									
Ethernet WAN Port	1	2	-	-	1	2	-	-	-
Ethernet DMZ Port	1	1	-	-	1	1	-	-	-
Ethernet LAN Port	4	7	-	-	4	7	-	-	-
User-Configurable Gigabit RJ-45 Port	-	-	6	8	-	-	6	10	6
User-Configurable Gigabit SFP Port	-	-	-	-	-	-	-	-	4
System Performance									
Firewall Throughput (Mbps)	80	150	320	600	80	150	1,200	2,000	2,000
VPN Throughput (Mbps)	25	45	120	300	25	45	350	1,000	1,000
Concurrent Sessions	10K	20K	400K	1,000K	10K	20K	600K	1,500K	1,500K
Policies	500	1,000	2,500	4,000	500	1,000	4,000	6,000	6,000
Firewall System									
Transparent Mode	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Network & Port Address Translation (NAT, PAT)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
OSFP Dynamic Routing Protocol	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Time-Scheduled Policies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Proactive Network Security (ZoneDefense)	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
ICSA Firewall Corporate Level Certified	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Networking									
DHCP Server / Client	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DHCP Relay / Policy-based Routing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IEEE 802.1Q Virtual LAN (VLAN)	8	16	128	1,024	8	16	1,024	2,048	2,048
IP Multicast (IGMPv3)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Virtual Private Network (VPN)									
DES/3DES/AES/Twofish/Blowfish/CAST-128	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dedicated VPN Tunnels	100	200	1,200	2,500	100	200	2,500	5,000	5,000
PPTP/L2TP Server / IPSec NAT Traversal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hub and Spoke	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ICSA IPsec 1.3 Enhanced Certified	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
System Management									
Web-Based User Interface (HTTP/HTTPS)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Command Line/SSH	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Configuration Backup/Restore	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
User Authentication									
Built-in Database	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
External RADIUS / LDAP (IPSec only) Server	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
External Microsoft IAS Server	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XAUTH for IPSec Authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Logging and Monitoring									
Internal / External Log (Syslog Server)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Email Notification, Event Log & Alarm	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SNMP v1, v2c	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Traffic Load Balancing									
Outbound Traffic Load Balancing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Server Load Balancing	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Algorithms for Outbound Traffic Load Balancing									
Round-Robin, Destination-Based, Spillover	Yes ¹	Yes ¹	Yes ¹	Yes ¹	Yes ¹	Yes ¹	Yes	Yes	Yes
Bandwidth Management									
Policy-Based Traffic Shaping	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Guaranteed / Maximum / Priority Bandwidth	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dynamic Bandwidth Balancing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth Management in VPN Tunnel	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
High Availability (HA)									
WAN Fail-Over / Traffic Redirect at Fail-Over	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Device / Link Failure Detection	No	No	Yes	Yes	No	No	Yes	Yes	Yes
Intrusion Detection & Prevention System (IDP/IPS)									
Automatic Pattern Update	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DoS, DDoS Protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IP Blacklist by Threshold or IPS/IDP	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Content Filtering									
HTTP / Script / Email Type	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
External Database Content Filtering	Yes ²	Yes ²	No	No	Yes	Yes	Yes	Yes	Yes
Anti-Virus									
Real Time AV Scanning / Unlimited File Size	Yes ²	Yes ²	No	No	Yes	Yes	Yes	Yes	Yes
Scans VPN Tunnels / Compression File	Yes ²	Yes ²	No	No	Yes	Yes	Yes	Yes	Yes
Signature Licensor (Kaspersky)	Yes ²	Yes ²	No	No	Yes	Yes	Yes	Yes	Yes
Automatic Pattern Update	Yes ²	Yes ²	No	No	Yes	Yes	Yes	Yes	Yes
Email Security									
SMTP & POP3 Protocol Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MIME Header Check for File Extension Filtering	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Email Rate & Size Protection (SMTP Protocol only)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Anti-Spam (for SMTP Protocol only)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IM/P2P Blocking	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

¹Available in Firmware 2.25.01

²Available in Firmware 2.26.00

IP SURVEILLANCE

Keeping an eye on the business anywhere in the world is what all businesses need. Choosing to implement IP surveillance offers the advantage of leveraging existing network infrastructure to maximize investment. Products under this category include Network Cameras, Network Video Recorders, Video Server and Surveillance Starter Kits.





Fixed Network Cameras

D-Link offers SecurICam, which is a wide range of fixed network cameras to meet different surveillance requirements from indoor to outdoor and from day to night. Our fixed network cameras are reliable, economical and of high-quality. The cameras can be connected to a network to provide a fixed viewing direction once they are mounted.

DCS-3110

Megapixel PoE Camera



Main Features

- MPEG4/MJPEG Dual-Stream
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- 1.3 Megapixel Progressive Color CMOS Sensor
- Vari-Focal DC-Iris CS Mount Lens
- IR Cut Removable (ICR) Filter
- CF Card Slot
- Digital Input/Digital Output
- Audio Line In/Out

Optional Accessories

- DCS-45/50/60 (Outdoor Enclosure)

DCS-3411

PoE Day & Night Camera



Main Features

- H.264/MPEG-4/MJPEG Multi-Profile Compression
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- CMOS Sensor, CS Mount Lens
- IR Cut Removable (ICR) Filter
- SD Card Slot
- Digital Input/Digital Output
- BNC Output, Audio Line In/Out

Optional Accessories

- DCS-25 (Vari-Focal Auto-Iris Lens)
- DCS-45/50/60 (Outdoor Enclosure)

DCS-3415

18x PoE Camera



Main Features

- MPEG4/MJPEG Dual-Stream
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- Sony Progressive Scan CCD Sensor
- IR Cut Removable (ICR) Filter
- CF Card Slot
- Digital Input/Digital Output
- Audio Line In/Out

Optional Accessories

- DCS-60 (Outdoor Enclosure)

Fixed Network Cameras

Model		DCS-3110	DCS-3411	DCS-3415	
IEEE Standard	Wired		802.3, 802.3u, 802.3af		
Wired Network	Port Interface		10/100BASE-TX		
	Power over Ethernet		Yes		
Camera Specification	Image Sensor	1/4" 1.3 Megapixel Progressive Color CMOS	1/4" CMOS	1/4" Sony Progressive Scan CCD	
	Lens	Vari-Focal, DC-Iris CS Mount	CS Mount	Fixed	
	Focal Length	4.5 ~ 10mm	6mm	4.1 ~ 73.8mm	
	F-Number	F1.6	F1.8	F1.4 (Wide); F3.0 (Tele)	
	Minimum Illumination	1.5 Lux	0.5 Lux (typical) 0 Lux (10m with IR Lens)	1.61 Lux (typical) 0.38 Lux (with ICR On)	
	Angle of View (Horizontal)	80.5°~37°	41°	48° ~ 2.8°	
	Angle of View (Vertical)	60° ~ 28°	31°	-	
	Digital Zoom	4x	16x	4x	
	Optical Zoom	-	-	18x	
	Day & Night		IR Cut Removable Filter		
Video Management	Video Format	MPEG-4 / MJPEG	H.264 / MPEG-4 / MJPEG	MPEG-4 / MJPEG	
	Dual Stream	Yes	-	Yes	
	Multi-Profile	-	Yes	-	
	Video Bit Rate	20kbps ~ 4Mbps	64kbps ~ 2Mbps	20kbps ~ 4Mbps	
	Max. Video Resolution	1280 x 1024 (MJPEG) 640 x 480 (MPEG-4)	704 x 480 (NTSC) 704 x 576 (PAL)	640 x 480	
	Frame Rate (fps)	8 (MJPEG); 30 (MPEG-4)	30 (NTSC); 25 (PAL)	30	
	Automatic Electronic Shutter		Yes		
	Automatic Gain Control		Yes		
	Automatic White Balance		Yes		
	Electronic Shutter (Seconds)	1/5~1/15,000	1/60~1/100,000 (NTSC) 1/50~1/110,000 (PAL)	1/2~1/10,000	
	Flip & Mirror		Yes		
	Mobile Video		3GPP		
	Monitor Output	-	BNC	-	
	Audio Management	2-Way Audio		Yes	
		Built-in Microphone		Yes	
External Microphone (Line In)			Yes		
External Speaker (Line Out)			Yes		
Audio Recording			Yes		
Audio Codec		AAC / GSM-AMR	GSM-AMR / ADPCM	AAC / GSM-AMR	
Sampling Rate		ACC: 16~128kbps GSM-AMR: 4.75~12.2kbps	GSM-AMR: 12.2kbps ADPCM: 8kbps	ACC: 16~128kbps GSM-AMR: 4.75~12.2kbps	
Audio Frequency		20 ~ 20,000Hz			
Audio Mute	Hardware & Software	Software	Hardware & Software		
Event Management	Motion Detection		Yes		
	Event Triggered Recording		Yes		
	Email Alarm Notification		Yes		
	Pre/Post Alarm Buffer	Yes	-	Yes	
Storage Management	Direct to NAS		Yes		
	Direct to Card Slot		Yes		
	External Card Slot	CF Card	SD Card	CF Card	
I/O Connector	Digital Input / Digital Output (DI/DO)	1 / 1	2 / 1	1 / 1	
	RS-485 Interface		Yes		
Outdoor Usage		With Outdoor Enclosure DCS-45/ DCS-50/DCS-60		With Outdoor Enclosure DCS-60	
Physical and Environment	Dimension (W x D x H)	80 x 143.8 x 62 mm	78 x 177 x 60 mm	80 x 143.5 x 92.4 mm	
	Weight	521 grams	577.8 grams	1012 grams	
	Power Input	Via External Power Adapter or Power over Ethernet (PoE)			
	Max. Power Consumption	4W	5.484W	5.4W	
	Power over Ethernet (IEEE 802.3af)		Class 2/3 ¹		
	Operating Temperature		0 to 40°C		
	Storage Temperature		-20 to 70°C		
Humidity		20% to 80% Non-Condensing			
Certification	FCC; CE; C-Tick	FCC, CE, C-Tick, IC, LVD	FCC; CE; C-Tick		

¹Include Power Output for External Devices

Fixed Network Cameras

DCS-3430

Wireless N D&N Camera



Main Features

- MJPEG/MPEG4/H.264 Multi-Profile Compression
- 4 Concurrent Video Profiles
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for Network NAS

Physical Features

- CMOS Sensor, CS Mount Lens
- IR Cut Removable (ICR) Filter
- SD Card Slot
- Digital Input/Digital Output
- BNC Output, Audio Line In/Out

Optional Accessories

- DCS-25 (CS Mount Vari-Focal Auto-Iris Lens)
- DWL-P50 (PoE Splitter)

DCS-3710

HDTV WDR Camera



Main Features

- MPEG4/MJPEG Multi-Profile
- 3GPP Mobile Surveillance
- Low-Light Recording
- Samba Client for NAS
- HTTPS, Privacy Mask
- HDTV Resolution
- Wide Dynamic Range (WDR)

Physical Features

- 1.3 Megapixel WDR Progressive Scan
- CMOS Sensor
- Vari-Focal DC-Iris Lens
- IR Cut Removable (ICR) Filter
- SD Card Slot
- Digital Input/Digital Output
- BNC Output, Audio Line In/Out

Optional Accessories

- DCS-45/50/60 (Outdoor Enclosure)

DCS-7410

D&N Outdoor PoE Camera



Main Features

- MPEG4/MJPEG Multi-Profile
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- Color CCD Sensor
- Dual-Band Filter
- Built-in 30m IR LED
- Digital Input/Digital Output
- BNC Video Output
- Audio Line In/Out
- IP66 Certified Casing for Outdoor Use

DCS-7510

D&N Outdoor PoE Camera



Main Features

- MPEG4/MJPEG Multi-Profile
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- Color CCD Sensor
- Vari-Focal Auto-Iris Lens
- IR Cut Removable (ICR) Filter
- Built-in 50m IR LED
- Digital Input/Digital Output
- BNC Video Output
- Audio Line In/Out
- IP66 Certified Casing for Outdoor Use

Fixed Network Cameras

Model		DCS-3430	DCS-3710	DCS-7410	DCS-7510	
IEEE Standard	Wired	802.3, 802.3u		802.3, 802.3u, 802.3af		
	Wireless	802.11n, 802.11g		-		
Wired Network	Port Interface		10/100BASE-TX			
	Power over Ethernet	-		Yes		
Wireless Network	Frequency Range	2.412~2.4835GHz		-		
	Data Rate	802.11n: MCS0~MCS15 802.11g: 6~54Mbps		-		
	Antenna	2dBi Dipole		-		
Camera Specification	Image Sensor	1/4" CMOS	1/3" 1.3 Megapixel WDR Progressive Scan CMOS	1/3" Color CCD	1/3" Color CCD	
	Lens	CS Mount	Vari-Focal, DC Iris	Fixed	Vari-Focal Auto Iris	
	Focal Length	6mm	2.8 ~ 12mm	12mm	9 ~ 22mm	
	F-Number	F1.8	F1.3	F1.4	F1.5~360	
	Minimum Illumination	0.5 Lux (typical) 0 Lux (10m with IR Lens)	0.1 Lux (Color) 0.02 Lux (B/W)	0.7 Lux	1 Lux	
	Angle of View (Horizontal)	41°	102.2° ~ 23.7°	22°	31° ~ 13°	
	Angle of View (Vertical)	31°	-	17°	23° ~ 10°	
	Digital Zoom	16x	10x	16x	16x	
	Optical Zoom	-	-	-	-	
Day & Night	IR Cut Removable Filter	IR Cut Removable Filter	Dual-Band Filter IR LEDs (30m)	IR Cut Removable Filter IR LEDs (50m)		
Video Management	Video Format	H.264 / MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	
	Dual Stream	-	-	-	-	
	Multi-Profile	Yes	Yes	Yes	Yes	
	Video Bit Rate	64kbps ~ 2Mbps 704 x 480 (NTSC) 704 x 576 (PAL)	64kbps ~ 8Mbps	64kbps ~ 2Mbps 720 x 480 (NTSC) 720 x 576 (PAL)	64kbps ~ 2Mbps 720 x 480 (NTSC) 720 x 576 (PAL)	
	Max. Video Resolution	704 x 480 (NTSC) 704 x 576 (PAL)	1280 x 960	720 x 480 (NTSC) 720 x 576 (PAL)	720 x 480 (NTSC) 720 x 576 (PAL)	
	Frame Rate (fps)	30 (NTSC); 25 (PAL)	30	30 (NTSC); 25 (PAL)	30 (NTSC); 25 (PAL)	
	Wide Dynamic Range (WDR)	-	Yes	-	-	
	Automatic Electronic Shutter	Yes	Yes	Yes	Yes	
	Automatic Gain Control	Yes	Yes	Yes	Yes	
	Automatic White Balance	Yes	Yes	Yes	Yes	
	Electronic Shutter (Seconds)	1/60~1/100,000 (NTSC) 1/50~1/110,000 (PAL)	1/2~100,000	1/60~1/100,000 (NTSC) 1/50~1/110,000 (PAL)	1/60~1/100,000 (NTSC) 1/50~1/110,000 (PAL)	
	Configurable Privacy Mask	-	3 Zones	-	-	
	Flip & Mirror	Yes	Yes	Yes	Yes	
Mobile Video	3GPP	3GPP	3GPP	3GPP		
Monitor Output	BNC	BNC	BNC	BNC		
Audio Management	2-Way Audio	Yes	Yes	Yes	Yes	
	Built-in Microphone	Yes	-	-	-	
	External Microphone (Line In)	Yes	Yes	Yes	Yes	
	External Speaker (Line Out)	Yes	Yes	Yes	Yes	
	Audio Recording	Yes	Yes	Yes	Yes	
	Audio Codec	GSM-AMR / ADPCM	ADPCM	GSM-AMR / ADPCM	GSM-AMR / ADPCM	
	Sampling Rate	GSM-AMR: 12.2kbps ADPCM: 8kbps	ADPCM: 8kbps	GSM-AMR: 12.2kbps ADPCM: 8kbps	GSM-AMR: 12.2kbps ADPCM: 8kbps	
	Audio Frequency	20 ~ 20,000Hz	20 ~ 20,000Hz	20 ~ 20,000Hz	20 ~ 20,000Hz	
Audio Mute	Software	Software	Software	Software		
Event Management	Motion Detection	Yes	Yes	Yes	Yes	
	Event Triggered Recording	Yes	Yes	Yes	Yes	
	Email Alarm Notification	Yes	Yes	Yes	Yes	
	Pre/Post Alarm Buffer	-	Yes	-	-	
Storage Management	Direct to NAS	Yes	Yes	Yes	Yes	
	Direct to Card Slot	Yes	Yes	-	-	
	External Card Slot	SD Card	SD Card	-	-	
I/O Connector	Digital Input / Digital Output (DI/DO)	2 / 1	2 / 1	2 / 1	2 / 1	
	RS-485 Interface	Yes	Yes	Yes	Yes	
Outdoor Usage	-	With Outdoor Enclosure DCS-45/DCS-50/DCS-60	IP66 Certified Weather Proof Casing			
Physical and Environment	Dimension (W x D x H)	78 x 177 x 60 mm	80 x 140 x 53 mm	8.79 x 240 x 84.1 mm	8.79 x 240 x 109.1 mm	
	Weight	577.8 grams	576 grams	1.63 kg	1.72 kg	
	Power Input	Via External Power Adapter			Via External Power Adapter or Power over Ethernet (PoE)	
	Max. Power Consumption	6.9W	2W	7.88W	7.95W	
	Power over Ethernet (IEEE 802.3af)	PoE Splitter Required ²	Class 2/3 ¹	Class 2/3 ¹	Class 2/3 ¹	
	Operating Temperature	0 to 40°C				
	Storage Temperature	-20 to 70°C				
Humidity	20% to 80% Non-Condensing					
Certification	FCC, CE, C-Tick, IC, LVD	FCC, CE, C-Tick	FCC, CE, C-Tick, IC	FCC, CE, C-Tick, IC	FCC, CE, C-Tick, IC	

¹ Include Power Output for External Devices² PoE Splitter - DWL-P50 (Refer to Network Peripheral-Power Over Ethernet Section)

PTZ Network Cameras

D-Link PTZ network cameras feature motorized pan, tilt and digital zoom for greater remote viewing options.

DCS-5605

H.264 PTZ Camera



Main Features

- MJPEG/MPEG4/H.264 Multi-Profile Compression
- 4 Concurrent Video Profiles
- Day and Night Monitoring
- 3GPP/RTSP Mobile Surveillance
- 2-Way Audio, Privacy Mask
- Samba Client for NAS

Physical Features

- Samsung De-Interlace CCD Sensor
- IR Cut Removable (ICR) Filter
- MicroSD Card Slot
- Digital Input/Digital Output
- RS-485 Interface
- AV Video Out Output
- Audio Line In/Out

DCS-5635

Wireless N PTZ Camera



Main Features

- MJPEG/MPEG4/H.264 Multi-Profile Compression
- 4 Concurrent Video Profiles
- Day and Night Monitoring
- 3GPP/RTSP Mobile Surveillance
- 2-Way Audio, Privacy Mask
- Samba Client for NAS

Physical Features

- Samsung De-Interlace CCD Sensor
- IR Cut Removable (ICR) Filter
- MicroSD Card Slot
- Digital Input/Digital Output
- RS-485 Interface
- AV Video Out Output
- Audio Line In/Out

PTZ Network Cameras

Model	DCS-5605	DCS-5635
	Wired	802.3, 802.3u
	Wireless	-
Wired Network	Port Interface	10/100BASE-TX
	Frequency Range	-
Wireless Network	Data Rate	2.412~2.4835GHz
	Antenna	802.11n: MCS0~15 802.11g: 6~54Mbps
	Image Sensor	Embedded Antenna PIFA
Camera Specification	Lens	1/3" Samsung De-Interlace CCD
	Focal Length	Fixed
	F-Number	3.8 ~ 38mm
	Minimum Illumination	F1.8
	Angle of View (Horizontal)	0.7 (Color)
	Angle of View (Vertical)	0.02 (B/W)
	Pan Range	51° ~ 6°
	Tilt Range	40° ~ 4°
	Digital Zoom	+165° to -165°
	Optical Zoom	+87° to -34°
	Day & Night	16x
	Video Format	10x
	Multi-Profile	IR Cut
	Video Bit Rate	Removable Filter
	Max. Video Resolution	H.264 / MPEG-4 / MJPEG
	Frame Rate (fps)	Yes
	Automatic Electronic Shutter	Yes
	Automatic Gain Control	Yes
	Automatic White Balance	Yes
	Electronic Shutter (Seconds)	704 x 480 (NTSC)
	Privacy Mask	704 x 576 (PAL)
	Flip & Mirror	30 (NTSC); 25 (PAL)
	Mobile Video	Yes
	Monitor Output	Yes
	2-Way Audio	Yes
	Built-in Microphone	Yes
	External Microphone (Line In)	Yes
	External Speaker (Line Out)	Yes
	Audio Recording	Yes
	Audio Codec	GSM-AMR / ADPCM
	Sampling Rate	GSM-AMR: 12.2kbps ADPCM: 8kbps
	Audio Frequency	50~16,000Hz
	Audio Mute	Software
	Motion Detection	Yes
	Event Triggered Recording	Yes
	Email Alarm Notification	Yes
	Direct to Card Slot	Yes
	External Card Slot	MicroSD Card
	Digital Input / Digital Output (DI/DO)	1 / 1
	Dimension (W x D x H)	136.1x140.3x140.1 mm
	Weight	810 grams
	Power Input	Via External Power Adapter
	Max. Power Consumption	11.92W
	Operating Temperature	0 to 40°C
	Storage Temperature	-20 to 70°C
	Humidity	20% to 80% Non-Condensing
Certification		FCC, CE, C-Tick, IC

Fixed Dome Network Cameras

D-Link high-performance fixed dome network cameras provide the necessary professional look and surveillance for business environments, and are especially popular with CCTV. They are equipped with progressive CMOS technology which delivers exceptional picture quality.

D-Link D-ViewCam software, which comes included with the cameras, provides the ability to view up to 32 camera sites concurrently with a single computer screen at a central location.

DCS-6110

Fixed Dome Camera



Main Features

- MPEG4/MJPEG Dual-Streaming
- 3GPP Mobile Surveillance
- Samba Client for NAS

Physical Features

- VGA Progressive CMOS Sensor
- Vari-Focal, Board Mount Lens
- Dual-Band Filter
- Digital Input/Digital Output

DCS-6111

Fixed Dome Camera



Main Features

- MPEG4/MJPEG Dual-Stream
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS
- HTTPS, IPv6, Privacy Mask
- Link Layer Topology Discovery
- Wide Dynamic Range (WDR)

Physical Features

- WDR VGA CMOS Sensor
- Vari-Focal, Board Mount lens
- Built-in 20m IR LED
- IR-Cut Removable (ICR) Filter
- Digital Input/Digital Output
- Audio Line In/Out
- 3-Axis Mechanical Design

Fix Dome Network Cameras

Model		DCS-6110	DCS-6111
IEEE Standard	Wired	802.3, 802.3u, 803.3af	
Wired Network	Port Interface	10/100BASE-TX	
	Power over Ethernet	Yes	
Camera Specification	Image Sensor	1/4" VGA Progressive CMOS	1/4" WDR VGA CMOS
	Lens	Vari-Focal, Board Mount	
	Focal Length	3.7 ~ 12mm	3.3 ~ 12mm
	F-Number	F1.4~F2.8	F1.4~F2.9
	Minimum Illumination	1.5 Lux	
	Angle of View (Horizontal)	77° ~ 23° ~	63° ~ 18°
	Angle of View (Vertical)	57° ~ 17°	47° ~ 13°
	Digital Zoom	4x	
	Day & Night	Dual-Band Filter	IR Cut Removable Filter IR LED (20m)
	Video Management	Video Format	MPEG-4 / MJPEG
Dual Stream		Yes	
Video Bit Rate		20kbps ~ 4Mbps	
Max. Video Resolution		640 x 480	
Frame Rate (fps)		30	
Wide Dynamic Range (WDR)		-	Yes
Automatic Electronic Shutter		Yes	
Automatic Gain Control		Yes	
Automatic White Balance		Yes	
Electronic Shutter (Seconds)		1/5 ~ 1/15,000	
Configurable Privacy Mask		-	5 Zones
Flip & Mirror		Yes	
Mobile Video		3GPP	
Audio Management	2-Way Audio	-	Yes
	External Microphone (Line In)	-	Yes
	External Speaker (Line Out)	-	Yes
	Audio Recording	-	Yes
	Audio Codec	-	AAC / GSM-AMR
	Sampling Rate	-	ACC: 16~128kbps GSM-AMR: 4.75~12.2kbps
	Audio Frequency	-	20~20,000Hz
	Audio Mute	-	Hardware & Software
Event Management	Motion Detection	Yes	
	Event Triggered Recording	Yes	
	Email Alarm Notification	Yes	
	Pre/Post Alarm Buffer	Yes	
Storage Management	Direct to NAS	Yes	
I/O Connector	Digital Input / Digital Output (DI/DO)	1 / 1	
Physical and Environment	Dimension (W x D x H)	194 x 180 x 107 mm	
	Weight	630 grams	650 grams
	Power Input	Via External Power Adapter or Power over Ethernet (PoE)	
	Max. Power Consumption	3.6W	11W
	Power over Ethernet (IEEE 802.3af)	Class 1	Class 3
	Operating Temperature	0 to 40°C	
	Storage Temperature	-20 to 70°C	
	Humidity	20% to 80% Non-Condensing	
Certification	FCC, CE, C-Tick		

¹ Include Power Output for External Devices

PTZ Dome Network Cameras

These high speed dome cameras feature endless (360°) pan for wide range surveillance. Equipped with outdoor enclosure and ultra low lux CCD sensor and ICR support, this series is very useful for many applications. It has many preset points and an auto patrol cruise that can work as multiple camera inside or outside of the building.

DCS-6815

18x Speed Dome Camera



Main Features

- MPEG4/MJPEG
- Day and Night Monitoring
- Wide Dynamic Range (WDR)
- 256 Preset Points
- Auto Cruise PTZ
- Privacy Mask

Physical Features

- Sony Exview CCD Sensor
- Auto Iris Lens
- IR-Cut Removable (ICR) Filter
- Dual-Band Filter
- Digital Input x 8
- Digital Output x 1
- BNC Video Output
- Built-in Fan and Heater
- IP66 Certified Casing for Outdoor

PTZ Dome Network Cameras

Model		DCS-6815
IEEE Standard	Wired	802.3, 802.3u
Wired Network	Port Interface	10/100BASE-TX
Camera Specification	Image Sensor	1/4" Exview CCD
	Lens	Auto Iris
	Focal Length	3.4~61.2mm
	F-Number	F1.4~F3.0
	Minimum Illumination	0.1 Lux (Color); 0.01 Lux (B/W)
	Angle of View (Horizontal)	60.8° ~ 3.6°
	Pan Range	360°
	Tilt Range	-10° to 190°
	Preset Point	256
	Auto Cruise	Yes
	Manual Speed	0° to 90° per second
	Pan/Tilt Preset Accuracy	0.225°
	Pan/Tilt Preset Speed	5° to 400°
	Digital Zoom	12x
	Optical Zoom	18x
Day & Night	IR Cut Removable Filter	
Video Management	Video Format	MPEG-4 / MJPEG
	Video Bit Rate	Up to 3Mbps
	Max.Video Resolution	720 x 480 (NTSC)
		720 x 576 (PAL)
	Frame Rate (fps)	30 (NTSC); 25 (PAL)
	Automatic Focus	Yes
	Automatic Gain Control	Yes
	Automatic White Balance	Yes
	Electronic Shutter (Seconds)	1/1 ~ 1/10,000
	Configurable Privacy Mask	16 Zones
Auto Flip	Yes	
Event Management	Monitor Output	BNC
	Motion Detection	Yes
	Event Triggered Recording	Yes
	Email Alarm Notification	Yes
I/O Connector	Pre/Post Alarm Buffer	Yes
	Digital Input / Digital Output (DI/DO)	8 / 1
Outdoor Usage		IP66 Standard, Built-in Heater and Fan
Physical and Environment	Dimension (Diameter x Height)	172 x 302.5 mm; 190 x 302.5mm (with sunshield)
	Weight	6kg
	Power Input	Via External Power Adapter
	Max. Power Consumption	65W (with heater)
	Operating Temperature	-40 to 50°C
	Storage Temperature	-20 to 70°C
Certification	Humidity	20% to 80% Non-Condensing
		FCC, CE, C-Tick, RoHS

Network Camera Outdoor Enclosures

D-Link SecuriCam network camera enclosures provide a cost-effective solution for protecting D-Link network cameras from the rigors of outdoor use. The fixed enclosures include heavy-duty, angle-adjustable mounting brackets that can be used for securing the cameras on a vertical or horizontal surface. These enclosures maximize the full potential of D-Link network cameras for outdoor installations.

DCS-60

Outdoor Enclosure



Physical Features

- IP44 Certified
- Water-Resistant
- Dust-Proof
- Built-in Power Supply
- Heater and Blower

Supported Cameras

- DCS-3110
- DCS-3410
- DCS-3411
- DCS-3415
- DCS-3710

DCS-70

Outdoor Enclosure



Physical Features

- IP66 Certified
- Water-Resistant
- Dust-Proof
- Built-in Power Supply
- Heater and Blower
- Dome Type

Supported Cameras

- DCS-5300
- DCS-5610

Network Camera vs Optional Accessory Compatible Matrix

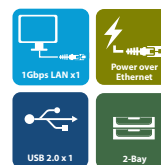
	Outdoor Enclosures		Power over Ethernet Splitter
	DCS-60	DCS-70	DWL-P50
Fixed Cameras			
DCS-3110	Yes	-	-
DCS-3411	Yes	-	-
DCS-3415	Yes	-	-
DCS-3430	-	-	Yes
DCS-3710	Yes	-	-

Network Video Recorders

D-Link standalone wired Network Video Recorders (NVR) support 8-channel network cameras with M-JPEG, MPEG4 or H.264 recording with 2 high-speed 3.5-inch SATA hard disks for long term recording. The NVR can record video from network cameras located in local or remote sites into a dedicated HDD storage without turning on a computer. D-Link NVR supports real-time monitoring and playback anytime anywhere via IE web browser.

DNS-722-4

2-Bay Basic NVR



Main Features

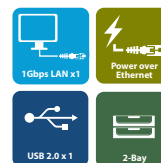
- 8-channel Network Camera Recording
- Real-time Monitoring and Playback
- Scheduled, Motion Detection, Manual Recording
- E-map
- Schedule Auto Backup
- Support D-Link Network Cameras

Physical Features

- USB Port for UPS Status Update
- 2 Bays for SATA HDD
- Key Lock for Device and Front Panel

DNS-726-4

2-Bay Pro NVR



Main Features

- 8-channel Network Camera Recording
- Real-time Monitoring and Playback
- Scheduled, Motion Detection, Manual and Event Recording
- E-map
- Schedule Auto Backup
- Smart Search for Advance Playback
- Support D-Link, ACTi, Arecont, Axis, Cisco, IQinVision, Mobotix, Panasonic, Sony Network Cameras

Physical Features

- USB Port for UPS Status Update
- 2 Bays for SATA HDD
- Key Lock for Device and Front Panel

Network Video Recorders

Model	DNS-722-4	DNS-726-4
Hardware Specification	IEEE Standard	802.3; 802.3u; 802.3ab
	Network Port	One 10/100/1000BASE-T Gigabit Ethernet Port
	Universal Serial Bus (USB)	One USB 2.0 Port for UPS Status Update (Power Failure Update)
	Memory	Flash ROM: 32MByte; RAM: 128MByte DDR
	Hard Disk Drive (HDD)	2-Bay; SATA I, II; Control & Manage via PC; Reformat Disk; Redundant Array of Inexpensive Disks (RAID) 0, 1, Just a Bunch of Drives (JBOD)
	Reset to Factory Default	Hardware Reset Button; Reset Button in Firmware GUI
	Device Security	Front Panel Lock; Device Lock Hole
Firmware Specification	Operating System	Linux
	Supported Network Cameras	D-Link Network Cameras D-Link, ACTi, Arecont, Axis, Cisco, IQinVision, Mobotix, Panasonic, Sony Network Cameras
	Recording Performance	NTSC: Up to 120fps; PAL: Up to 200fps at CIF
	Camera Search	Universal Plug-and-Play (UPnP)
	Audio & Video Recording	Synchronized Audio & Video Recording
	Compression Format	H.264; MPEG-4; MJPEG (for supported cameras)
	Video Setting	Resolution; Quality; Frame Rate; Enable Audio; Go to Camera Interface
	Recording Type	Record by Schedule; Manual Record; Event Record (Motion Detection)
	Remote Live View	Via Internet Explorer Remote Live Viewer; Maximum four Simultaneous Channels
	Remote Live View Control	Live View; Preset/Go; Patrol; Focus; PTZ Function; Snapshot; Full Screen; Digital Zoom
	Remote Playback	Internet Explorer and NVR Client; Playback System with Timeline GUI, Search by Event, Area, Camera, Date and Time Support One-Channel Playback Digital Zoom to Specific Area
	Remote Playback Control	Playback with Normal, Fast Forward/Rewind and Step Forward/Rewind
	Overwrite Recording	Automatic Recycling when Disk Storage is Full
	File Export	Export Videos to "AVI" or "ASF" File (ASF with Timestamp) Export Images to "BMP" or "JPG" File
	User Account	Additional Accounts can be created to allow User Access to the System and specify Authorization for Camera Channels, PTZ, etc
	Dynamic Domain Name System (DDNS)	D-Link DDNS Server
	System Time	Set System Time (D-Link NTP, Input Time, Sync with Computer, Daylight Saving Time)
	Remote Backup	Remote Software can Backup Raw Data to Redundant Storage
	System Status	Camera Status; System Status
	Network Service Protocol	Internet Protocol Version 4 (IPv4); Address Resolution Protocol (ARP); User Datagram Protocol (UDP); Internet Control Message Protocol (ICMP); Dynamic Host Configuration Protocol (DHCP) Client; D-Link Network Time Protocol (NTP); Domain Name System (DNS) Client; Dynamic DNS (DDNS) Client; Simple Mail Transfer Protocol (SMTP); HyperText Transfer Protocol HTTP); Point-to-Point over Ethernet (PPPoE); Universal Plug-and-Play (UPnP); IP Filtering
User Interface	Internet Explorer and NVR Client;	
Physical and Environment	Dimension (W x D x H)	198 x 104 x 132 mm
	Weight	1.23 kg
	Power Input	External Power Adapter
	Max. Power Consumption	23.59W; Standby State: 7.26W
	Operating Temperature	0°C to 55°C
	Storage Temperature	-20°C to 70°C
	Operating Humidity	5% to 90% (Non-Condensing)

Video Encoders

D-Link high-performance, single channel video encoder integrates an existing analog CCTV (closed circuit television) into an IP-based video surveillance system.

DVS-210-1

Video Encoder



Main Features

- MPEG4/MJPEG Dual-Codec
- 2-Way Audio
- Motion Detection

Physical Features

- 1-Channel BNC Input
- SD Card Slot
- Digital Input/Digital Output
- Alarm Input x 2
- Alarm Output x 1
- RS-485 Interface
- Audio Line In/Out

Video Encoders

Model		DVS-210-1
Network Specifications	Local Area Network (LAN)	One 10/100BASE-TX RJ-45
	Network Protocols	Transmission Control Protocol / Internet Protocol (TCP/IP); Dynamic Host Configuration Protocol (DHCP); HyperText Transfer Protocol (HTTP); Dynamic domain Name System (DDNS); Network Time Protocol (NTP); File Transfer Protocol (FTP); Simple Mail Transfer Protocol (SMTP); User Datagram Protocol (UDP); Real Time Protocol (RTP); Real Time Streaming Protocol (RTSP); Universal Plug-and-Play (UPnP)
Video Specifications	Video Format	MJPEG and MPEG-4 Simultaneous Dual Codec
	Frame Rate	NTSC: 30fps; PAL: 25fps
	Bit Rate	64kbps to 4Mbps
	Resolution	NTSC: 720 x 480 (D1), 352 x 240 (CIF), 176 x 120 (QCIF) PAL: 720 x 576 (D1), 352 x 288 (CIF), 176 x 144 (QCIF)
	Video Input	1CH; NTSC/PAL; BNC Connector; 1.0Vp-p with 75Ω loading
Audio Specification	Video Recording	Instant Local Video Recording
	Video Buffer	Pre/Post Buffer for Image/Video Capture
	Audio Input	8kHz Sample Rate; Adaptive Differential Pulse-Code Modulation (ADPCM)
	Audio Output	8kHz Sample Rate; Adaptive Differential Pulse-Code Modulation (ADPCM)
Pan/Tilt/Zoom Specification	Audio Connector	3.5mm Stereo Input/Output
	Audio Direction	Bi-Directional Audio
	PTZ Protocols	PelcoP; PelcoD; Merit Lilin; Visca; DynaColor; Transparent
Alarm Handling	Baud Rate	1200, 1800, 2400, 4800, 9600, 19200
	PTZ Connector	RS-485 for PTZ Control
Storage	Loss Detection	Video and Network Loss Detection
	Motion Alarm	Built-in Motion Alarm with Configurable Detection Areas
Minimum System Requirement	Event Handler	FTP and E-mail Event Handler
	Local Storage	Store video to removable SD Card (Local SD Card Slot)
	Central Processing Unit (CPU)	Pentium 4, 2.4GHz and above
	Hard Disk	40GB or higher
	Memory	512MB or higher
	Operating System	Windows 7 / Windows Vista / Windows XP SP2 or higher / Windows 2000 SP4 or higher
	Video Resolution	1024 x 768 (SVGA/XGA)
Physical and Environment	Software	DirectX 9.0c or higher
	Browser	Microsoft Internet Explorer 6.0 or higher
	Dimension (L x W x H)	90 x 78 x 36 mm
	Weight	232 gram
	Power Input	Via External Power Adapter
Physical and Environment	Operating Temperature	0°C to 40°C
	Operating Humidity	20% to 80% Non-Condensing

Video Management Software (VMS)

D-ViewCam Standard (DCS-100) video management software (VMS), bundled with D-Link network cameras, provides video recording, live view and playback management for network cameras and video servers.

D-ViewCam Professional (DCS-220) and D-ViewCam Enterprise (DCS-230) VMS provide advance management features and supports more live view and playback channels.

D-ViewCam NVR software is bundled with D-Link network video recorders (DNS-722-4 and DNS-726-4) for video management.

D-ViewCam Standard

D-ViewCam Standard 3.0 network camera surveillance software (DCS-100) is bundled with D-Link network cameras and is a comprehensive surveillance system designed to centrally manage multiple network cameras for Home, Small Office and Home Office (SOHO), or Small and Medium Business (SMB) users. Supporting up to 32 network cameras, D-ViewCam 3.0 is compatible with all current D-Link network cameras and video servers. It offers digital monitoring and recording capabilities of video, audio and events for various security applications. This software provides users with a wide array of features including video recording, playback and video live view.

The easy-to-use D-ViewCam 3.0 software allows users to manage up to 32 network cameras on one screen and display real-time operating information from the camera on the main screen. The e-map mode allows users to arrange a map with camera locations and orientation. Additional features such as auto-patrol, rotate, zoom, and focus provide users with optimal control over their video surveillance. Up to 64 live clients can monitor videos via browsers.

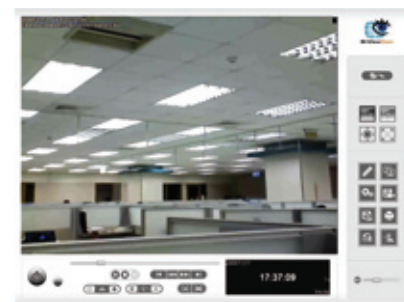
D-ViewCam 3.0 offers users scheduled, motion and manual recording options to meet individual needs. Recorded files can be searched by video type and selected within the user interface where the files can be played, edited and converted into AVI or ASF files.

Event action configuration provides users with optimal surveillance and security by detecting motion occurring on the cameras or through added devices such as smoke detectors, magnetic door sensors, emergency buttons, card readers and other I/O devices. By attaching these devices to a compatible D-Link network camera, a warning will be sent to D-ViewCam 3.0 to notify users during the occurrence of an event. Users can combine event actions, such as triggering I/O devices and send email notifications when an event occurs.

The backup function of D-ViewCam 3.0 saves everything from the playback panel including log information. Users can load backup files to any PC with Windows operating system. D-ViewCam 3.0 also provides DB-Tool utility to help user reconstruct, repair or relocate the database in local drive, external drive or network drive. Backup videos and logs can also be burned into CDs.



Video Display



Video Playback

D-ViewCam Professional & Enterprise

D-ViewCam Professional and D-ViewCam Enterprise video management software solutions provide users the ability to perform surveillance management and are ideal for small and medium enterprise (SME) and campus environment.

These VMS offer powerful digital surveillance management platform similar to D-ViewCam 3.0. D-ViewCam Professional (DCS-220) can manage up to 32 network cameras on one screen, while D-ViewCam Enterprise (DCS-230) can managed up to 64 cameras. Both software support dual monitor and are compatible with all current D-Link network cameras, video servers and network video recorders (NVR). Users can include up to 7 layers e-maps to arrange camera locations and orientation at different areas. Up to 128 live clients can monitor videos via browsers.

These VMS offer simliar event actions as D-ViewCam 3.0. When an event occurs, besides triggering I/O devices and sending email notifications and SMS alerts. Users can playback 4 channels simultaneously. The smart search tool allows users to locate the desired video clips easily. Backup videos and logs can be burned into both CDs and DVDs. It is also compatible with third party CMS.



View Display

D-ViewCam NVR

D-ViewCAM NVR software is bundled with D-Link network video recorders (NVR) and it consists of three main components: Playback Manager, Backup and File Manager and Multi-NVR Viewer. D-Link NVR models are DNS-722-4 and DNS-726-4. DNS-722-4 supports all D-Link network cameras, while DNS-726-4 also supports other branded network cameras, such as ACTi, Arecont, Axis, Cisco, IQinVision, Mobotix, Panasonic and Sony.

Multi-NVR Viewer supports up to 8 concurrent live view channels. The views can be organized easily by dragging and dropping video directly onto the display window. Cameras managed by NVR can be viewed as individual sites or categorized into groups. DNS-726-4 supports digital input trigger and motion detection from cameras.

The Playback Manager has a clean and simple web GUI interface which allows users to play, search or export video. DNS-722-4 supports only 1 playback channel while, DNS-726-4 supports 4 playback channels. DNS-726-4 supports smart search tool which allows users to locate desired video clips easily.

The Backup and File Manager is a flexible backup utility which simplifies the process of backing up video data from the NVR to external storage.



Live View Display

D-ViewCam

		Video Management Software	Standalone Network Video Recorder	
Product Name		D-ViewCam Standard	D-ViewCam NVR	
Model		DCS-100	With DNS-722-4	With DNS-726-4
Tools		Remote Live Viewer Playback System Backup System	Playback Manager Backup Manager	Multi-NVR Viewer Playback Manager Backup Manager
General	Operating System	Microsoft Windows XP Pro (SP2 or higher) / 2003 / Vista	Embedded Linux	
	Recording Performance	1200fps@CIF with Intel Core 2 Quad Q6600 CPU	240fps@CIF	
	Video Input	32 Channels	8 Channels	
	Compression Format	H.264 / MPEG-4 / MJPEG		
	Camera Support	All D-Link Cameras	All D-Link Cameras and Other Brands ²	
Display Mode	Video Setting	Megapixel (Depend on Network Cameras)	Up to 1.3 Megapixel	
	Monitor Support	Single Monitor	Single Monitor	
	Auto Scan	Yes	Yes ¹	
	Camera OSD Option	Yes	Yes ¹	
	Event Popup	Yes	-	
	I/O Control Panel	Yes	-	Yes ¹
	PTZ Control	Yes	Yes ¹	
	Digital PTZ Control	Yes	-	
	Preset Control	Yes	Yes ¹	
	Auto Patrol	Yes	Yes ¹	
Recording	Full Screen	Yes	Yes ¹	
	SMS Alert	-	-	
	Live View Channel	64 Channels	Yes ¹	16 Channels
	Privilege (Camera, PTZ, Audio)	Yes	Yes ¹	Yes
	Concurrent Login Users	64 Live Clients 16 Playback Clients	Yes ¹	32 Live Clients 8 Playback Clients
	Display Mode	1, 4, 6, 9, 10, 13, 16, 25, 36 Channels	Yes ¹	1, 4, 9, 16 Channels
	Recording Type	By Schedule, Manual and Event	By Schedule, Manual and Event ¹	
	Schedule Recording	No Limitation	No Limitation ¹	
	Digital Input Trigger	-	-	Yes ¹
	Motion Detection from Camera	Yes	Yes ¹	
Playback / Remote Playback	Audio Recording	Yes	Yes ¹	
	Store Video for Fixed Days	Yes	Yes ¹	
	Pre-Record / Post-Record	Yes	Yes ¹	
	Automatic Overwrite	Yes	Yes ¹	
	Playback Client	Browser / Remote Client	NVR Client	
	Playback Channel	1 Channel	1 Channel	4 Channels
	Playback Mode	Video Control-Play, Stop, Pause, Forward, Backward, Next, Previous		
	Video Search	By Time, Event, Camera		
	Smart Search	-	-	Yes
	Image Export	BMP / JPG		
E-Map	Video Export	AVI / ASF (Support OSD Export)	AVI / ASF (With Time Stamp)	
	E-Map Support	2 Layers	1 Layer ¹	
	Indicator	Camera and I/O	-	
	E-Map Type	BMP / JPG / GIF / PNG / TIF	BMP / JPG ¹	
	Unlimited E-Map Pictures	Yes	-	
Storage / Backup	Camera Preview	Yes	-	
	Multiple Storage	Yes	-	
	Network Storage Device		Yes	
	CD Burning		Yes	
Security	DVD Burning	-	-	
	CMS Support	-	-	
	Power Recovery Auto Boot	-	Yes ¹	
	Device Lock	-	Front Panel Lock, Rear Panel Key Slot ¹	

¹ Supported on Hardware (Standalone NVR)

² Other brands include ACTi, Arecont, Axis, Cisco, IQinVision, Mobotix, Panasonic, Sony

Network Camera Selection Matrix

Model	Fixed Network Camera							PTZ Network Camera		Fixed Dome Camera		PTZ Dome Camera
	DCS-3110	DCS-3411	DCS-3415	DCS-3430	DCS-3710	DCS-7410	DCS-7510	DCS-5605	DCS-5635	DCS-6110	DCS-6111	DCS-6815
Image Sensor	1/4" 1.3 Megapixel Progressive Color CMOS	1/4" CMOS	1/4" Sony Progressive Scan CCD	1/4" CMOS	1/3" 1.3 Megapixel WDR Progressive Scan CMOS	1/3" Color CCD	1/3" Color CCD	1/3" Samsung De-Interlace CCD	1/3" Samsung De-Interlace CCD	1/4" VGA Progressive CMOS	1/4" WDR VGA CMOS	1/4" Sony Exview CCD
Lens	Vari-Focal DC-Iris CS Mount 4.5~10mm F1.6	CS Mount 6mm/F1.8	Fixed 4.1~73.8mm F1.4~F3.0	CS Mount 6mm/F1.8	Vari-Focal DC Iris 2.8~12mm F1.3	Fixed 12mm/F1.4	Vari-Focal Auto-Iris 9~22mm F1.5-360	Fixed 3.8~38mm F1.8	Fixed 3.8~38mm F1.8	Vari-Focal Board Mount 3.7~12mm F1.4~F2.8	Vari-Focal Board Mount 3.3~12mm F1.4~F2.9	Auto Iris 3.4~61.2mm F1.4~F3.0
Minimum Illumination / Light Sensitivity (Lux)	1.5 Lux	0.5 Lux (typical), 0 Lux (10m with IR Lens)	1.61 Lux (typical), 0.38 Lux (with ICR On)	0.5 Lux (typical), 0 Lux (10m with IR Lens)	0.1 Lux (Color) 0.02 Lux (B/W)	0.7 Lux	1 Lux	0.7 (Color) 0.02 (B/W)	0.7 (Color) 0.02 (B/W)	1.5 Lux	1.5 Lux	0.1 Lux (Color) 0.01 Lux (B/W)
Angle of View (Horizontal/Vertical)	80.5°~37° / 60°~28°	41° / 31°	48°~2.8° / -	41° / 31°	102.2°~23.7° / -	22° / 17°	31°~13° / 23°~10°	51°~6° / 40°~4°	51°~6° / 40°~4°	77°~23° / 57°~17°	63°~18° / 47°~13°	60.8°~3.6° / -
Pan/Tilt	-	-	-	-	-	-	-	+165°~165° / +87°~34°	+165°~165° / +87°~34°	-	-	256 Presets Auto Cruise 5~400° Preset Speed
Zoom Ratio	4x Digital	16x Digital	4x Digital 18X Optical	16x Digital	10x Digital	16x Digital	16x Digital	16x Digital 10x Optical	16x Digital 10x Optical	4x Digital	4x Digital	12x Digital 18x Optical
Max. Video Resolution (Pixels)	1280 x 1024 (MJPEG) 640 x 480 (MPEG-4)	704 x 480 (NTSC) 704 x 576 (PAL)	640 x 480	704 x 480 (NTSC) 704 x 576 (PAL)	1280 x 960	720 x 480 (NTSC) 720 x 576 (PAL)	720 x 480 (NTSC) 720 x 576 (PAL)	720 x 480 (NTSC) 720 x 576 (PAL)	720 x 480 (NTSC) 720 x 576 (PAL)	640 x 480	640 x 480	720 x 480 (NTSC) 720 x 576 (PAL)
Video Compression	MPEG-4 / MJPEG	H.264 / MPEG-4 / MJPEG	MPEG-4 / MJPEG	H.264 / MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	H.264 / MPEG-4 / MJPEG	H.264 / MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG
Dual Stream	Yes	-	Yes	-	-	-	-	-	-	-	-	-
Multi-Profile	-	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-
Frame Rate (fps)	30	30 (NTSC) 25 (PAL)	30	30 (NTSC) 25 (PAL)	30	30 (NTSC) 25 (PAL)	30 (NTSC) 25 (PAL)	30 (NTSC) 25 (PAL)	30 (NTSC) 25 (PAL)	30	30	30 (NTSC) 25 (PAL)
Video Bit Rate Range	20kbps~4Mbps	64kbps~2Mbps	20kbps~4Mbps	64kbps~2Mbps	64kbps~8Mbps	64kbps~2Mbps	64kbps~2Mbps	64kbps~2Mbps	64kbps~2Mbps	20kbps~4Mbps	20kbps~4Mbps	Up to 3Mbps
3A Control ¹	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AGC / AF / AWB
Wide Dynamic Range (WDR)	-	-	-	-	Yes	-	-	-	-	-	-	Yes
Day & Night	ICR Filter	ICR Filter	ICR Filter	ICR Filter	ICR Filter	Dual-Band Filter IR LEDs (30m)	ICR Filter IR LEDs (50m)	ICR Filter	ICR Filter	Dual-Band Filter	ICR Filter IR LED (20m)	ICR Filter Dual-Band Filter
Audio Support	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Line In/Out	• 2-Way Audio • Line In/Out	• 2-Way Audio • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	-	• 2-Way Audio • Line In/Out	-
Audio Codec ²	AAC / AMR	AMR / ADPCM	AAC / AMR	AMR / ADPCM	ADPCM	AMR / ADPCM	AMR / ADPCM	AMR / ADPCM	AMR / ADPCM	-	AAC / AMR	-
Audio Recording	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	-
Intelligent Video	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording
Network Security	• Multi-Level Password • HTTP & RTSP Digest Encryption • IP Filtering	• Administrator & User Group Protected • Password Authentication	• Multi-Level Password • HTTP & RTSP Digest Encryption • IP Filtering	• Administrator & User Group Protected • Password Authentication	• Administrator & User Group Protected • Password Authentication	• Administrator & User Group Protected • Password Authentication	• Administrator & User Group Protected • Password Authentication	• Administrator & User Group Protected • Password Authentication	• Administrator & User Group Protected • Password Authentication	• Multi-Level Password • HTTP & RTSP Digest Encryption • IP Filtering	• Multi-Level Password • HTTP & RTSP Digest Encryption • Password Authentication • IP Filtering	• Administrator & User Group Protected
Privacy Masking	-	-	-	-	3 Zones	-	-	3 Zones	3 Zones	-	5 Zones	16 Zones
Storage Support	Direct to NAS or CF Card	Direct to NAS or SD Card	Direct to NAS or CF Card	Direct to NAS or SD Card	Direct to NAS or SD Card	Direct to NAS	Direct to NAS	Direct to NAS or MicroSD Card	Direct to NAS or MicroSD Card	Direct to NAS	Direct to NAS	-
Mobile Video Surveillance	3GPP	3GPP	3GPP	3GPP	3GPP	3GPP	3GPP	3GPP, RTSP	3GPP, RTSP	3GPP	3GPP	-
Digital Input/Digital Output (DI/DO)	1 / 1	2 / 1	1 / 1	2 / 1	1 / 1	2 / 1	2 / 1	1 / 1	1 / 1	1 / 1	1 / 1	8 / 1
External Device Interface	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	-	-	-
Monitor Output	-	BNC	-	BNC	BNC	BNC	BNC	AV	AV	-	-	BNC
External Card Slot	CF Card	SD Card	CF Card	SD Card	SD Card	-	-	MicroSD Card	MicroSD Card	-	-	-
Power over Ethernet (IEEE 802.3af)	Class 2/3 ⁴	Class 2/3 ⁴	Class 2/3 ⁴	PoE Splitter Required ³	Class 2/3 ⁴	Class 2/3 ⁴	Class 2/3 ⁴	-	-	Class 1	Class 3	-
Wireless LAN	-	-	-	802.11n 802.11g	-	-	-	-	802.11n 802.11g	-	-	-
Max. Power Consumption	4W	5.484W	5.4W	6.9W	2W	7.88W	7.95W	11.92W	13.37W	3.6W	11W	65W (with heater)
Outdoor Usage	Yes ⁵	Yes ⁵	Yes ⁵	-	Yes ⁵	Yes (IP66 Certified)	Yes (IP66 Certified)	-	-	-	-	Yes (IP66 Certified)

¹ AES (Automatic Electronic Shutter); AGC (Automatic Gain Control); AWB (Automatic White Balance); AF (Auto-Focus)

² AAC (Advanced Audio Coding); AMR (Adaptive Multi-Rate); ADPCM (Adaptive Differential Pulse-Code Modulation)

³ PoE Splitter - DWL-P50 (Refer to Network Peripheral-Power Over Ethernet Section)

⁴ Class 3: Include Power Output for External Devices

⁵ Outdoor Enclosure Required

NETWORK STORAGE

With the ever increasing volume of information required for the smooth running of business operations, ensuring information availability when needed is of great importance. Reliable information storage is an essential part of every business. Products under this category include Storage Area Network (SAN) Arrays.



Storage Area Network (SAN) Arrays

D-Link Storage Area Network (SAN) arrays are designed to provide reliable network data storage solution for entry-level and SMB segments using the 10Gbit iSCSI System-on-a-Chip (SoC). These SAN arrays can be easily implemented as nearline storage or as a supplement to the primary backup and recovery devices.

DSN-1100-10

5-Bay iSCSI SAN Array



Main Features

- Support RAID
- SATA-II
- Online Capacity Expansion and RAID Level Migration

Physical Features

- 5 Real Trays

Optional Accessories

- DSN-010 (Single Real Tray)
- DSN-020 (Single Dummy Tray)

DSN-2100-10

8-Bay iSCSI SAN Array



Main Features

- Support RAID
- SATA-II
- Online Capacity Expansion and RAID Level Migration

Physical Features

- 8 Real Trays

Optional Accessories

- DSN-030 (Power Supply)
- DSN-040 (Fan)
- DSN-050 (Battery)

DSN-3200-10

15-Bay iSCSI SAN Array



Main Features

- Support RAID
- SATA-II
- Online Capacity Expansion and RAID Level Migration

Physical Features

- 15 Real Trays

Optional Accessories

- DSN-010 (Single Real Tray)
- DSN-020 (Single Dummy Tray)
- DSN-030 (Power Supply)
- DSN-040 (Fan)
- DSN-050 (Battery)

DSN-3400-10

15-Bay iSCSI SAN Array with XFP



Main Features

- Support RAID
- SATA-II
- Online Capacity Expansion and RAID Level Migration

Physical Features

- 15 Real Trays

Optional Accessories

- DSN-010 (Single Real Tray)
- DSN-020 (Single Dummy Tray)
- DSN-030 (Power)
- DSN-040 (Fan)
- DSN-050 (Battery)
- 10-Gigabit XFP Transceivers
DEM-421XT / DEM-422XT / DEM-423XT

Storage Area Network (SAN) Arrays

Model	DSN-1100-10	DSN-2100-10	DSN-3200-10	DSN-3400-10
Drive Bay	5	8	15	
Drive Interface Support	SATA-II			
System Memory	256MB to 512MB (256MB Standard)	256MB to 512MB (512MB Standard)		
Cache Memory	256MB to 1GB (256MB Standard)	256MB to 4GB (512MB Standard)		
Battery Backup for Cache	Standard (Approximately 72 hours on Full Charge)			
Bandwidth	Up to 425MB/s		Up to 850MB/s	Up to 1160MB/s
Storage Capacity ¹	5TB with 1TB HDDs	8TB with 1TB HDDs	15TB with 1TB HDDs	
Storage Feature	Intel® Pro 1000MT & XT (1GbE) Alacritech® SES2104ET (SNP 9.1.0.1092 & 7.3.1.0) Alacritech® SES2102ET (SNP 9.1.0.1092 & 7.3.1.0) Qlogic® 4010C, 4052C & 4062C		Intel® Pro 1000MT & XT (1GbE) Intel® Pro 1000 CX4 (1GbE) Myricom 10G-PCI-E-8A-C+E (10GbE) Chelsio® S310X-SR-XFP (10GbE) Neterion® Xframe® II & Xframe® E (10GbE) Alacritech® SES2104ET (SNP 9.1.0.1092 & 7.3.1.0) Alacritech® SES2102ET (SNP 9.1.0.1092 & 7.3.1.0) Qlogic® 4010C, 4052C & 4062C	
Supported Operating Systems ²	Windows Vista® 32-bit & x64 (Ultimate & Enterprise) with Built-in iSCSI Initiator Windows Server 2003® 32-bit & x64 SP1 (Standard & Enterprise) with v2.07 iSCSI Initiator Windows Server 2003® R2 32-bit & x64 SP1 (Standard & Enterprise) with v2.07 iSCSI Initiator Windows XP Pro® 32-bit & x64 with v2.07 iSCSI Initiator Windows 2000 Advanced Server® with v1.6 & v2.01 iSCSI Initiator Red Hat® 7.3; Red Hat® Enterprise AS Update 5 SuSE® Enterprise Server 10.2 32-bit (x86); SuSE® Professional 9.3 32-bit & x64 Mac OS X (10.4 & 10.5)			
iSCSI Network Interface	Four 1GbE Copper Ports		Eight 1GbE Copper Ports	One 10GbE XFP (XFP sold separately)
Host Interface	iSCSI Draft 20 Compliant Initiator			
Connections	1,024 Hosts			
CHAP Authentication	Yes			
Access Control of Management	Yes			
iSCSI/TCP/IP Full Hardware Offload	Yes			
Jumbo Frame	Yes			
IEEE 802.3ad Link Aggregation	Up to Four LAGs		Up to Eight LAGs	Not Applicable
IEEE 802.1Q Virtual LAN (VLAN)	Up to Four 1-to-1 Mapping between IP Subnet and VLAN	Up to Eight 1-to-1 Mapping between IP Subnet and VLAN		
RAID Controller	Single-Integrated in ASIC			
RAID Support	RAID Levels 0, 1, 1+0 and 5			
Volumes	1,024 Virtual Volumes (256 Accessible per Initiator)			
Target Nodes	1,024			
Online Capacity Expansion	Yes			
Hot-Swappable Drives	Yes			
Instant Volume Access	Yes			
Free Space Defragmentation	Yes			
Auto-Detection Failed Drive	Yes			
Auto-Rebuild Spare Drive	Yes			
RAID Level Migration	Yes			
Drive Roaming in Power Off	Yes (Configured Drives are Not Bay-Specific)			
Micro Rebuilds	Yes			
Storage Management	Embedded IP-based Management GUI Create, Mange, Expand and Monitor Storage Pool, Volumes and RAID			
Firmware Field Upgradable	Yes			
Power	Supply Type: 1U 200-Watt	Redundant 2U 400-Watt	Redundant 3U 2+1 760-Watt	
Input Voltage	100~240 VAC		90~264 VAC (Auto-Switching)	
Input Frequency	50~60Hz	47~63Hz		
Input Current (Maximum)	4A	8A@100VAC; 4A@240VAC	20A@90VAC; 10A@264VAC	
Power Factor Correction	95%@110V, Full Load			
Power Consumption (Full Configuration)	112-Watt	360-Watt	570-Watt	
Thermal (Full Configuration)	815 BTU/hour	1,260 BTU/hour	2,000 BTU/hour	
Environmental	Operating Temperature: 0°C to 40°C			
Storage Temperature	-20°C to 70°C			
Operating Humidity	20% to 90% (Non-Condensing)			
Storage Humidity	10% to 95% (Non-Condensing)			
Physical	Form Factor: Tower	2U, 19-inch Rack-Mount	3U, 19-inch Rack-Mount	
Dimension (W x D x H)	167 x 273 x 259 mm	438 x 635 x 89 mm	438 x 571 x 133 mm	
Weight (Full Configuration)	4.0 kg	20.4 kg	33 kg	
Certification	Emission: FCC Class A; CE Class A; C-Tick Class A; VCCI Class A Safety: CSA 60950-1; UL 60950-1; IEC 60950-1; EN 60950-1			

¹ Support for higher capacity drives as they are introduced² Please refer to D-Link website for latest support information

Network Storage Selection Matrix

SAN Arrays

Model	DSN-1100-10	DSN-2100-10	DSN-3400-10	DSN-3400-10
Network Interface				
Gigabit 10/100/1000BASE-T	4	4	8	-
10-Gigabit XFP Slot	-	-	-	1
Hard Disk Drive				
Number of Bays/Trays	5	8	15	15
Drive Type	3.5-inch SATA-II	3.5-inch SATA-II	3.5-inch SATA-II	3.5-inch SATA-II
Storage Capacity ¹	5TB with 1TB HDDs	8TB with 1TB HDDs	15TB with 1TB HDDs	15TB with 1TB HDD
RAID Support	Standard; RAID 0, 1, 1+0, 5; JBOD	Standard; RAID 0, 1, 1+0, 5; JBOD	Standard; RAID 0, 1, 1+0, 5; JBOD	Standard; RAID 0, 1, 1+0, 5; JBOD
RAID Level Migration	Yes	Yes	Yes	Yes
Hot-Swappable Drive	Yes	Yes	Yes	Yes
Instant Volume Access	Yes	Yes	Yes	Yes
Free Space Defragmentation	Yes	Yes	Yes	Yes
Micro Rebuild	Yes	Yes	Yes	Yes
Drive Roaming in Power Off	Yes	Yes	Yes	Yes
S.M.A.R.T for HDD Self-Diagnostic	Yes	Yes	Yes	Yes
File Sharing				
Target Nodes	1,024	1,024	1,024	1,024
iSCSI Network				
iSCSI Technology	Yes	Yes	Yes	Yes
CHAP Authentication	Yes	Yes	Yes	Yes
Access Control of Management	Yes	Yes	Yes	Yes
IEEE 802.3ad Link Aggregation	Yes	Yes	Yes	-
IEEE 802.1Q Virtual VLAN (VLAN)	Yes	Yes	Yes	Yes
Volume Visualization	Yes	Yes	Yes	Yes
Jumbo Frame	Yes	Yes	Yes	Yes

¹ Support for higher capacity drives as they are introduced

NETWORK PERIPHERALS

Accessories that help support network solutions. Products under this category include Power over Ethernet (PoE) Adapters.



Power over Ethernet (PoE)

D-Link Power over Ethernet (PoE) adapters are designed to help simplify network maintenance and deployments at offices, factories and Wi-Fi hot spots. These adapters allow surveillance cameras and wireless access points to be installed on building rooftops, ceilings or high walls where wall AC outlets may be inaccessible.

DWL-P50

5/12VDC PoE Splitter



Main Features

- Use with a PoE Switch or Midspan
- Supply Power to Devices

Physical Features

- IEEE 802.3af Power over Ethernet
- Terminal Unit x 1
- 5VDC and 12VDC Output
- Output Selection via DIP Switch

DWL-P200

5/12VDC PoE Kit



Main Features

- Use without a PoE Switch
- Supply Power to Devices

Physical Features

- Base Unit x 1
- Terminal Unit x 1
- 5VDC and 12VDC Output
- Output Selection via DIP Switch

Index

Business Solution

7200-1200AC	6		57	DFL-860-IPS-12	66
7200-1200DC	6		57	DFL-860-WCF-12	66
7200-2000AC	6			DGS-1016D	34
7200-24	6	DEM-421XT	42	DGS-1024D	34
7200-24G	6	DEM-422XT	42	DGS-1210-10P	26
7200-24G2XGE	6	DEM-423XT	42	DGS-1210-16	26
7200-24GE	6	DEM-CB300CX	40	DGS-1210-24	26
7200-24P	6	DES-1016D	36	DGS-1210-48	26
7200-2XG	6	DES-1016R+	36	DGS-1216T	28
7200-48	6	DES-1024D	36	DGS-1224T	28
7200-48E	6	DES-1024R+	36	DGS-1224TP	28
7200-48P	6	DES-1026G	36	DGS-1248T	28
7200-4XG	6	DES-102F	36	DGS-3100-24	20
7200-512RAM	6		40	DGS-3100-24P	20
7200-ASE2	6	DES-1210-28	30	DGS-3100-24TG	20
7200-ASE3	6	DES-1210-52	30	DGS-3100-48	20
7200-CM1	6	DES-1228	32	DGS-3100-48P	20
7200-CM2	6	DES-1228P	32	DGS-3200-10	14
7200-CM3	6	DES-1252	32	DGS-3200-24	14
7200-CM4	6	DES-3010F	24	DGS-3426P	12
7206-FAN	6	DES-3010G	24	DGS-3427	12
7210-FAN	6	DES-3026	24	DGS-3450	12
DAP-2590	51	DES-3028	22	DGS-3612G	8
DAP-2690	51	DES-3028P	22	DGS-3627	8
DCS-3110	72	DES-3052	22	DGS-3627G	8
DCS-3411	72	DES-3052P	22	DGS-3650	8
DCS-3415	72	DES-3200-10	18	DMC-1000	46
DCS-3430	74	DES-3200-18	18	DMC-1001	46
DCS-3710	74	DES-3200-28	18	DMC-1002	46
DCS-5605	76	DES-3200-28F	18	DMC-300SC	46
DCS-5635	76	DES-3528	16	DMC-515SC	46
DCS-60	82	DES-3528P	16	DMC-530SC	46
DCS-6110	78	DES-3552	16	DMC-560SC	46
DCS-6111	78	DES-3828	10	DMC-615SC	46
DCS-6815	80	DES-3828DC	10	DMC-700SC	46
DCS-70	82	DES-3828P	10	DMC-810SC	46
DCS-7410	74	DES-3852	10	DPS-200	42
DCS-7510	74	DES-7206-BASE	6	DPS-500	42
DEM-201F	24	DES-7210-BASE	6	DPS-500DC	42
	40	DFL-1600	64	DPS-600	42
DEM-201FL	24	DFL-1600-IPS-12	64	DPS-800	42
	40	DFL-1660	66	DPS-900	42
DEM-210	42	DFL-1660-AV-12	66	DPS-CB400	42
DEM-211	42	DFL-1660-IPS-12	66	DSN-1100-10	92
DEM-301G	24	DFL-1660-WCF-12	66	DSN-2100-10	92
	40	DFL-210	64	DSN-3200-10	92
DEM-301T	24	DFL-210-AV-12	64	DSN-3400-10	92
	40	DFL-210-IPS-12	64	DSR-1000N	68
DEM-310GT	42	DFL-210-WCF-12	64	DV-600P	38
DEM-311GT	42	DFL-2500	64	DV-600S	38
DEM-312GT2	42	DFL-2500-IPS-12	64	DVS-210-1	86
DEM-314GT	42	DFL-2560	66	DWL-2200AP	53
DEM-315GT	42	DFL-2560-AV-12	66	DWL-2700AP	55
DEM-330R	42	DFL-2560G	66	DWL-3200AP	53
DEM-330T	42	DFL-2560-IPS-12	66	DWL-3260AP	53
DEM-331R	42	DFL-2560-WCF-12	66	DWL-3500AP	57
DEM-331T	42	DFL-260	66	DWL-8200AP	53
DEM-410CX	8	DFL-260-AV-12	66	DWL-8500AP	57
	12	DFL-260-IPS-12	66	DWL-8600AP	59
	40	DFL-260-WCF-12	66	DWL-P200	96
	57	DFL-800	64	DWL-P50	96
DEM-410X	8	DFL-800-AV-12	64	DWS-3024	57
	12	DFL-800-IPS-12	64	DWS-3024L	57
	40	DFL-800-WCF-12	64	DWS-4026	59
		DFL-860	66		
		DFL-860-AV-12	66		

D-Link Europe

D-Link European HQ
www.dlink.eu

Albania
www.dlink.eu

Adria
www.dlink.eu

Austria
www.dlink.at

Belgium
www.dlink.be

Bosnia & Herzegovina
www.dlink.eu

Bulgaria
www.dlink.eu

Croatia
www.dlink.eu

Czech Republic
www.dlink.cz

Denmark
www.dlink.dk

Finland
www.dlink.fi

France
www.dlink.fr

Germany
www.dlink.de

Greece
www.dlink.gr

Hungary
www.dlink.hu

Italy
www.dlink.it

Kosovo
www.dlink.eu

Luxembourg
www.dlink.lu

Montenegro
www.dlink.eu

Netherlands
www.dlink.nl

Norway
www.dlink.no

Poland
www.dlink.pl

Portugal
www.dlink.pt

Romania
www.dlink.ro

Serbia
www.dlink.eu

Slovenia
www.dlink.eu

Spain
www.dlink.es

Sweden
www.dlink.se

Switzerland
www.dlink.ch

UK & Ireland
www.dlink.co.uk

Disclaimers

The disclaimer: ©2009 D-Link Europe Limited (Ltd). xStack, AirPremier, NetDefend, Safeguard Engine and D-Link are trademarks or registered trademarks of D-Link Europe Ltd. in Europe and/or other countries. Other brand and product names may be the trademarks of their respective holders. All information is subject to change without notice. All rights reserved.

Trademarks

D-Link is a registered trademark of D-Link Corporation and its subsidiaries. D-View, D-ViewCam, AirPremier, NetDefend, ZoneDefense, xStack, SecuriCam and others registered by D-Link which may have not been included in this list, are trademarks of D-Link Corporation and its subsidiaries. All other trade names and trademarks are properties of their respective proprietors. Copyright © 2009 D-Link Corporation. All rights reserved.

Exclusions of liability

We have used all reasonable endeavours to ensure that the data within this Business Solutions guide is accurate at the time of going to press and to correct any errors or omissions as soon as practicable after being notified of them. Guide specifics are subject to change without notice.

The heart of the network

D-Link[®]