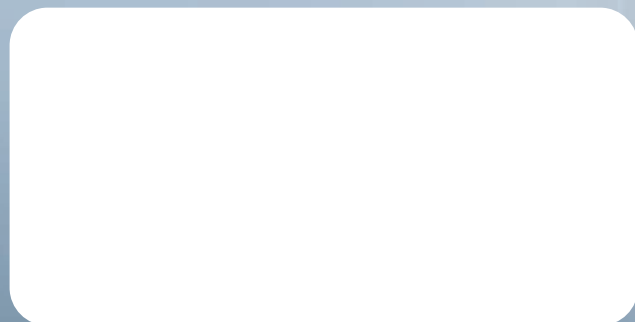




POWER UP YOUR BUSINESS



D-Link[®]
Building Networks for People



D-Link[®]
Building Networks for People

Reliable and environmental friendly solutions

D-Link Unified Endpoint Security and Management offers highly reliable solution for securing entire network.

D-Link Green Ethernet Series Switches provide eco-friendly benefits with energy savings without sacrificing operational performance or functionality.



D-Link Products are RoHS Compliance

RoHS Directive

The RoHS Directive stands for "the restriction of the use of certain hazardous substances in electrical and electronic equipment". This Directive bans the placing on the EU market of new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants.

The RoHS Directive and the UK RoHS regulations came into force on 1 July 2006 and is an Article 95 single market directive.

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				5 - 15 Ports	16 - 28 Ports	29 Ports & above	
xStack L3 Core ▶ p26 - p29	DGS-3600 Series* 10 Giga  <ul style="list-style-type: none"> Physical Stack Virtual Stack (SIM) SNMP OSPF VRRP 4K VLAN QoS MLD Snooping User Authentication ZoneDefense L4 ACL 	 <ul style="list-style-type: none"> Virtual Stack (SIM) 4K VLAN MLD Snooping ZoneDefense 	xStack L3 GE Core SW DGS-3612 (12xGbE + 4xSFP Combo) DGS-3612G (12xSFP + 4xGbE Combo)	DGS-3627 (24xGbE + 4xSFP Combo + 3x10GbE)* DGS-3627G (24xSFP + 4xGbE Combo + 3x10GbE)*	DGS-3650 (48xGbE + 4xSFP Combo + 2x10GbE)*		
	DES-3800 Series PoE (3828P) DC Power (3828DC)		xStack L3 FE Core SW —	DES-3828 (24xFE + 4xGbE + 2xSFP Combo) DES-3828DC (24xFE + 4xGbE + 2xSFP Combo) DES-3828P (24xFE PoE + 4xGbE + 2xSFP Combo)	DES-3852 (24xFE + 4xGbE + 2xSFP Combo)		
xStack L2 Edge ▶ p30 - p33	DGS-3400 Series* 10 Giga PoE (3426P)	 <ul style="list-style-type: none"> Physical Stack SNMP QoS User Authentication 	xStack L2 GE Edge SW —	DGS-3426 (24xGbE + 4xSFP Combo + 2x10GbE)* DGS-3426P (24xGbE PoE + 4xSFP Combo + 2x10GbE)* DGS-3427 (24xGbE + 4xSFP Combo + 3x10GbE)*	DGS-3450 (48xGbE + 4xSFP Combo + 2x10GbE)*		
	DES-3528/52 Series PoE (3528P/3552P) DC Power (3528DC)		xStack L2 FE Edge SW —	DES-3528 (24xFE + 4xGbE + 2xSFP Combo) DES-3528DC (24xFE + 4xGbE x 2xSFP Combo) DES-3528P (24xFE PoE + 4xGbE x 2xSFP Combo)	DES-3552 (48xFE + 4xGbE + 2xSFP Combo) DES-3552P (48xFE PoE + 4xGbE + 2xSFP Combo)		
	DES-3500 Series DC Power (3526DC)		<ul style="list-style-type: none"> Virtual Stack (SIM) ZoneDefense L4 ACL QoS 	<ul style="list-style-type: none"> SNMP VLAN User Authentication 	DES-3526 (24xFE + 2xGbE + 2xSFP Combo) DES-3526DC (24xFE + 2xGbE + 2xSFP Combo)	DES-3550 (48xFE + 2xGbE + 2xSFP Combo)	
L2 Entry-Level ▶ p34 - p41	DGS-3200 Series NEW  <ul style="list-style-type: none"> Virtual Stack (SIM) SNMP QoS User Authentication L4 ACL 	 <ul style="list-style-type: none"> Virtual Stack (SIM) SNMP 4K VLAN QoS User Authentication L4 ACL 	L2 GE Entry-Level SW DGS-3200-10 (10xGbE + 2xSFP Combo)	DGS-3100-24 (24xGbE + 4xSFP Combo + 2x10GbE Stack) DGS-3100-24P (24xGbE PoE + 4xSFP Combo + 2x10GbE Stack) DGS-3100-24TG (8xGbE PoE + 16xSFP)	DGS-3100-48 (48xGbE + 4xSFP Combo + 2x10GbE Stack) DGS-3100-48P (48xGbE PoE + 4xSFP Combo + 2x10GbE Stack)		
	DGS-3100 Series PoE (3100-24P/3100-48P)		<ul style="list-style-type: none"> Physical Stack VLAN User Authentication 	<ul style="list-style-type: none"> SNMP QoS L4 ACL 	L2 FE Entry-Level SW DGS-3010F (8xFE + 1xGbE x 1x100FX Multi-Mode) DGS-3010FL (8xFE + 1xGbE x 1x100FX Single-Mode) DES-3010G (8xFE + 1xGbE x 1xSFP)	DES-3026 (24xFE + 2xGbE) DES-3028 (24xFE + 4xGbE x 2xSFP Combo) DES-3028P (24xFE PoE + 4xGbE x 2xSFP Combo)	DES-3052 (48xFE + 4xGbE x 2xSFP Combo) DES-3052P (48xFE PoE + 4xGbE x 2xSFP Combo)
	DES-3028/52 Series PoE (3028P/3052P)		<ul style="list-style-type: none"> Virtual Stack (SIM) SNMP 4K VLAN QoS User Authentication L4 ACL 	<ul style="list-style-type: none"> Virtual Stack (SIM) SNMP VLAN QoS User Authentication 		DES-3026 (24xFE + 2xGbE) DES-3028 (24xFE + 4xGbE x 2xSFP Combo) DES-3028P (24xFE PoE + 4xGbE x 2xSFP Combo)	DES-3052 (48xFE + 4xGbE x 2xSFP Combo) DES-3052P (48xFE PoE + 4xGbE x 2xSFP Combo)
	DES-3000 Series		<ul style="list-style-type: none"> Virtual Stack (SIM) SNMP VLAN QoS User Authentication 	DES-3026 (24xFE + 2xGbE) DES-3028 (24xFE + 4xGbE x 2xSFP Combo) DES-3028P (24xFE PoE + 4xGbE x 2xSFP Combo)		DES-3052 (48xFE + 4xGbE x 2xSFP Combo) DES-3052P (48xFE PoE + 4xGbE x 2xSFP Combo)	
Web Smart ▶ p42 - p43	DGS-1200 Series Green Ethernet  <ul style="list-style-type: none"> SNMP VLAN QoS User Authentication 		GE Web Smart SW —	DGS-1216T (16xGbE PoE + 2xSFP Combo) DGS-1224T (24xGbE PoE + 2xSFP Combo)	DGS-1248T (48xGbE PoE + 2xSFP Combo)		
	DES-1200 Series PoE (1228P)		FE Web Smart SW —	DES-1228 (24xFE + 4xGbE x 2xSFP Combo) DES-1228P (24xFE PoE + 4xGbE x 2xSFP Combo)	DES-1252 (48xFE + 4xGbE x 2xSFP Combo)		
Unmanaged ▶ p44 - p45	DGS-1000 Series Green Ethernet  <ul style="list-style-type: none"> Flow Control QoS Energy Saving 	 <ul style="list-style-type: none"> Flow Control 	GE Unmanaged SW DGS-1005D (5xGbE: External Power) DGS-1008D (8xGbE: External Power) DGS-1008TL (8xGbE: Internal Power)	DGS-1016D (16xGbE: Internal Power) DGS-1024D (24xGbE: Internal Power)	—		
	DES-1000 Series		FE Unmanaged SW DES-1005D (5xFE: External Power) DES-1008D (8xFE: External Power)	DES-1016D (16xFE: Internal Power) DES-1024D (24xFE: Internal Power)	DES-1050G (48xFE + 2GbE: Internal Power)		

Unified Endpoint Security Feature Matrix

Feature	Model	LAN Quarantine	802.1X Auth + VLAN Auth	Web Auth + Dynamic VLAN	Web Auth + VLAN Auth	IP-MAC -Port BINDING	Zone Defense
		DES-1200 Series	-	○ No VLAN Auth	-	-	-
DES-3000 Series	-	○	-	-	○	-	
DES-3028/52 Series	-	○	-	-	○*	-	
DES-3500 Series	Microsoft NAP	○	-	-	○	○	
DES-3528/52 Series	Microsoft NAP	○	○*	○*	○	○	
DES-3800 Series	-	○	○	○	○	○	
Gigabit L2/L3 Switch	DGS-1200 Series	-	○ No VLAN Auth	-	-	-	-
	DGS-3100 Series	Microsoft NAP	○ No VLAN Auth	-	○ No VLAN Auth	-	-
	DGS-3200 Series	Microsoft NAP	○	○	○	○	○
	DGS-3400 Series	Microsoft NAP	○	○	○	○	○
	DGS-3600 Series	Microsoft NAP	○	○	○*	○	○*

Wireless LAN Endpoint Security Feature Matrix

Feature	Model	Supported AP	Centralized Mgt	Auto Setup	Wireless Output	Rogue AP Detection	802.11i	WEB Auth	Roaming
		DWS-3024 DWS-3026	DWL-3500AP DWL-8500AP	○	○	○	○	○	○
DES-1228P	DWL-3140AP	○	○	-	-	○	-	-	
Wired/Wireless Unified Security Appliance	DSA-6100*	DWL-2100AP DWL-3200AP DWL-8200AP	○	-	-	-	○	○	-
	DSA-3600*		○	-	-	-	○	○	○

WAN Endpoint Security Feature Matrix

Feature	Model	Stateful Packet Inspection	IDP	VPN	Anti-Virus (Kaspersky)	URL Filtering	Web Content Filtering	Zone Defense
		DFL-210	○	○	○	-	○	-
DFL-800	○	○	○	○	-	○	-	○
DFL-1600/2500	○	○	○	○	-	○	-	○
UTM	DFL-260	○	○	○	○	○	○	-
	DFL-860	○	○	○	○	○	○	○*

Wired LAN Switch Feature Matrix

Feature	Model	Layer 2-3	VLAN	Stack	ACL	QoS	Management
		DES-1200 Series	IGMP Snooping v1, v2, v3, Snooping, STP, Trunking	256 VLAN	-	-	4 Queues, WRR
DES-3000 Series	IGMP Snooping v1, v2, v3, Snooping, STP, RSTP, 802.3ad	255 VLAN Traffic Segmentation	Virtual Stack (SIM) 32 Units	-	4 Queues, WRR, Strict Priority, Bandwidth Control	CLI, Web GUI, SNMPv1, v2c, v3, RMONv1, Traffic Monitoring, STP Loopback Detection, Loopback Detection v4.0, DHCP Client	
DES-3028/52 Series	IGMP Snooping v1, v2, v3, Snooping, STP, RSTP, MSTP, 802.3ad, Jumbo Frame	4K VLAN, VLAN, Authentication, GVRP, Traffic Segmentation	Virtual Stack (SIM) 32 Units	Switch Port, MAC, VLAN, 802.1p, DSCP, IPv4, Protocol Type, TCP/UDP Port	4 Queues, WRR, Strict Priority, Bandwidth Control	CLI, Web GUI, SNMPv1, v2c, v3, RMONv2, Traffic Monitoring, STP Loopback Detection, Loopback Detection v4.0, DHCP Client, DHCP Relay	
DES-3500 Series	IGMP Snooping v1, v2, v3, Snooping, STP, RSTP, MSTP, 802.3ad	255 VLAN VLAN Authentication GVRP, Traffic Segmentation	Virtual Stack (SIM) 32 Units	MAC, VLAN, 802.1p, DSCP, IPv4, Protocol Type, TCP/UDP Port	4 Queues, WRR, Strict Priority, Bandwidth Control	CLI, Web GUI, SNMPv1, v2c, v3, RMONv1, Traffic Monitoring, STP Loopback Detection, Loopback Detection v4.0, DHCP Client, DHCP Relay	
DES-3528/52 Series	IGMP Snooping v1, v2, v3, Snooping, MLD Snooping, STP, RSTP, 802.3ad, Jumbo Frame	4K VLAN, VLAN, Authentication, GVRP, Asymmetric VLAN, 802.1X Double VLAN	Physical Stack 8 Units*, Virtual Stack (SIM) 32 units	MAC, VLAN, 802.1p, DSCP, IPv4, Protocol Type, TCP/UDP Port	8 Queues, WRR, Strict Priority, Bandwidth Control	CLI, Web GUI, SNMPv1, v2c, v3, RMONv1, Traffic Monitoring, STP Loopback Detection, Loopback Detection v4.0, DHCP Client, DHCP Relay	
DES-3800 Series	RIP, OSPF, VRRP, Static Route, IGMPv1, v2, v3, MLD Snooping, STP, RSTP, MSTP, 802.3ad, Jumbo Frame	4K VLAN, VLAN, Authentication, GVRP, Double VLAN, Traffic Segmentation	Virtual Stack (SIM) 32 Units	Switch Port, MAC, VLAN, 802.1p, DSCP, IPv4, Protocol Type, TCP/UDP Port	8 Queues, WRR, Strict Priority, Bandwidth Control	CLI, Web GUI, SNMPv1, v2c, v3, RMONv2, Traffic Monitoring, STP Loopback Detection, Loopback Detection v4.0, DHCP Client, DHCP Relay	
Gigabit Ethernet L2/L3 Switch	DGS-1200 Series	IGMP Snooping v1, v2, v3, Snooping, STP, Trunking, Jumbo Frame	256 VLAN, GVRP, Double VLAN*, Traffic Segmentation	-	-	4 Queues, WRR	Web GUI, SNMPv1, DHCP Client,
	DGS-3100 Series	IGMP Snooping v1, v2, v3, MLD Snooping, v1, v2, v3, STP, RSTP, MTP, 802.3ad, Jumbo Frame	4K VLAN, VLAN, Authentication, GVRP, MAC Based VLAN, Traffic Segmentation	Physical Stack 6 Units	-	4 Queues, WRR, Strict Priority, Bandwidth Control	CLI, Web GUI, SNMPv1, v2c, v3, RMONv1, Traffic Monitoring, STP Loopback Detection v4.0, DHCP Client,
	DGS-3200 Series	IGMP Snooping v1, v2, v3, MLD Snooping v1, v2, v3, STP, RSTP	4K VLAN, VLAN, Authentication, GVRP, MAC Based VLAN*, Double VLAN Traffic Segmentation	Virtual Stack (SIM) 32 Units	Switch Port, MAC, VLAN, 802.1p, DSCP, IPv4, Protocol Type, TCP/UDP Port	8 Queues, WRR, Strict Priority, Bandwidth Control	CLI, Web GUI, SNMPv1, v2c, v3, RMONv2, Traffic Monitoring, STP Loopback Detection, Loopback Detection v4.0, DHCP Client, DHCP Relay
	DGS-3400 Series	Static Route IGMP Snooping v1, v2, v3, MLD Snooping v1, v2, v3, STP, RSTP, MTP, 802.3ad, Jumbo Frame	4K VLAN, VLAN, Authentication, GVRP, MAC Based VLAN*, Double VLAN Traffic Segmentation	Physical Stack 12 Units Virtual Stack (SIM) 32 Units	Switch Port, MAC, VLAN, 802.1p, DSCP, IPv4, IPv6, IPv6 Traffic Class, IPv6 Flow Label, Protocol Type, TCP/UDP Port	8 Queues, WRR, Strict Priority, Bandwidth Control	CLI, Web GUI, SNMPv1, v2c, v3, RMONv2, Traffic Monitoring, STP Loopback Detection, Loopback Detection v4.0, DHCP Client, DHCP Relay
	DGS-3600 Series	RIP, OSPF, VRRP, Static Route, IGMPv1, v2, v3, MLD Snooping, STP, RSTP, MSTP, 802.3ad, Jumbo Frame	4K VLAN, VLAN, Authentication, GVRP, MAC Based VLAN*, Double VLAN Traffic Segmentation	Physical Stack 12 Units Virtual Stack (SIM) 32 Units	Switch Port, MAC, VLAN, 802.1p, DSCP, IPv4, IPv6, IPv6 Traffic Class, IPv6 Flow Label, Protocol Type, TCP/UDP Port	8 Queues, WRR, Strict Priority, Bandwidth Control	sFlow, CLI, LLDP, Web GUI, SNMPv1, v2c, v3, RMONv2, Traffic Monitoring, STP Loopback Detection, Loopback Detection v4.0, DHCP Client, DHCP Relay, DHCP Server
Wireless Switch	DWS-3000 Series	Static Route IGMP Snooping v1, v2, v3, MLD Snooping v1, v2, v3, STP, RSTP, MTP, 802.3ad, Jumbo Frame	4K VLAN, GVRP, MAC Based VLAN	-	Switch Port, MAC, VLAN, 802.1p, DSCP, IPv4, Protocol Type, TCP/UDP Port	8 Queues, WRR, Strict Priority, Bandwidth Control	CLI, LLDP, Web GUI, SNMPv1, v2c, v3, RMONv1, DHCP Server

L2 Compact Secure Gigabit Switch DGS-3200-10 ▶ P.34

D-Link DGS-3200 Series is a compact Layer 2 secure Gigabit switch with 8 Gigabit Ethernet ports and 2 Combo 1000Base-T/SFP ports.

This switch comes equipped with many capabilities, including user-based identity control using host-based 802.1X authentication/authorization, clientless Web-based Access Control (WAC), and MAC-based Access Control (MAC), to enable the easy deployment of a safe and secure network. DGS-3200 supports IPv6 features, which include MLD snooping, IPv6 Flow Label-based ACL, and Traffic Class.

With comprehensive endpoint security features, SNMP, Single IP Management (SIM), and ZoneDefense, the DGS-3200 offers not only greater reliability and better performance for your network, but also provides a complete solution for your business.



DGS-3200-10



L2 Compact Secure Gigabit Switch DGS-3200-16 ▶ P.34

D-Link DGS-3200-10 10-Port Gigabit Switch has won the Grand Prize of Interop (Japan) 2007 Best of Show Award for Infrastructure Building Products (Edge). DGS-3200-16 is the 16-Port model.

DGS-3200-16 supports IPv6 and comes with security functions such as user-based identity control using host-based 802.1X authentication/authorization, clientless Web-based Access Control (WAC), and MAC-based Access Control (MAC).

Offering a complete list of endpoint security features, this switch also supports IPv6 features such as MLD snooping, and IPv6 Flow Label and Traffic Class ACL.



DGS-3200-16

Energy Saving - Gigabit Switch Green Ethernet Series ▶ P.42 ▶ P.44

D-Link Green Ethernet Series Gigabit Switches are environmentally-friendly devices that decrease energy costs through the reduction of power consumption, without sacrificing any operational performance or functionality, while providing benefits to both the ecosystem and Home/SOHO users. These switches are designed to help conserve energy, protect environment from harmful substances, and reduce waste by using recyclable packaging.

When using a standard switch, whether the ports are active or inactive, the power consumption remains the same. When a D-Link Green Ethernet Switch is used instead, electrical power consumption is automatically adjusted accordingly.

Furthermore, when using standard switch, full power is being utilized for data transmission regardless of the length of cable. When a D-Link Green Ethernet Switch is used instead, the electrical power consumption is adjusted according to the length of cable.

Under normal circumstances, ports on the switch are seldom concurrently utilized all at the same time, therefore, if Green Ethernet Switch is used instead, considerable amount of energy can be saved.



Port Inactive (no cable connection)	Power Saving	Power Saving ON	Power Saving OFF	Approximate 80% POWER SAVING
	Power Consumption	0.66W	0.66W	

* Based on DGS-1008D Data

DGS-1005D



DGS-1008D



DGS-1016D



DGS-1024D



DGS-1216T



DGS-1224T



DGS-1248T

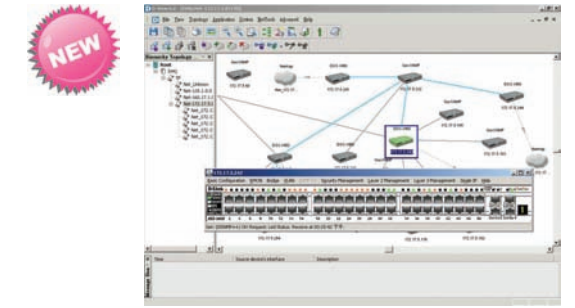


Unified SNMP Network Management Software D-View 6.0 ▶ P.72

D-View 6.0 is a SNMP network management software that can managed LAN switches, wireless access points, UTM firewalls and routers.

With the network topology display and node discovery function on D-View 6.0, automatic graphic display of network topology is possible, with ability to customize it later if required.

In addition, D-View is also able to monitor performance, customize configuration, upgrade firmware and provide alarm notification via email.



D-View 6.0 Standard Edition (DV-600S)

D-View 6.0 Professional Edition (DV-600P)

Compact Wired/Wireless VPN Router DIR-130/DIR-330 ▶ P.52

D-Link DIR-130/DIR-330 is a compact router designed for VPN connection of small office.

In a VPN environment with PPPoE and SPI Firewall function, this is constructively more cost effective. The DIR-130/330 can also be used as a gateway device to the Internet.

Compact VPN Router

DIR-130



Compact Wireless
11b/g VPN Router

DIR-330

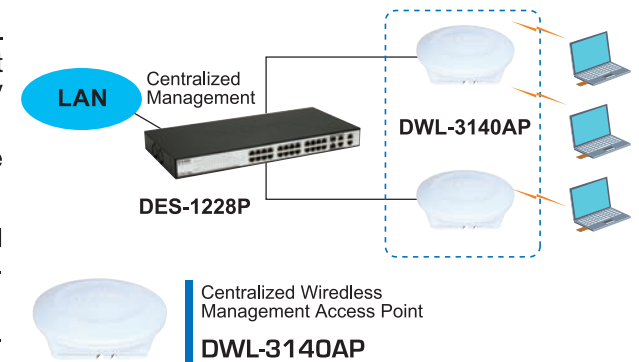


Wireless Centralized Management for Small & Medium Network with Wireless Access Point DES-1228P and DWL-3140AP

D-Link Wireless Aware Smart Switching is an inexpensive, easy-to-deploy solution designed to help small businesses implement a company-wide wireless network with reliable wireless connectivity and enhanced security.

A basic Wireless Aware Smart Switching system consists of one switch (DES-1228P PoE Smart Switch) with up to 24 wireless access points (DWL-3140AP Wireless 108G Web Smart Thin AP with PoE) directly connected to the switch, and a centralized cost-effective management software called Smart WLAN Manager.

DWL-3140AP is a ceiling mount AP that is able to receive PoE electricity. It is able to form a wireless network with simple wiring.



Draft 802.11n High Speed Wireless LAN

DIR-655/DAP-1353/DWA-140

With D-Link Draft 802.11n compliant devices, wireless access point DAP-1353, wireless router DIR-655 and wireless USB adapter DWA-140, are now able to construct a stable and high speed LAN environment that delivers up to 14x faster speed and 6x farther range than 802.11g devices.

Draft 802.11n/g/b
Wireless Router

DIR-655



Draft 802.11n/g/b
Wireless Access Point

DAP-1353



Draft 802.11n/g/b
Wireless USB Adapter

DWA-140



Coming
Soon

L2 xStack Management Switch DES-3528/52 Series

L2 Switch DES-3528/52 Series has enhanced security and management features such as physical stacking and quarantine functions.

This series comes with normal port models and auto-detect PoE port models.

DES-3528/52 Series



Switch Stack Technique **X S T A C K**

Unified Management Technology

D-Link Single IP Management (SIM) connects D-Link xStack core and edge switches to form a multi-level network structure with backbone and centralized high-speed servers.

Without any stacking cable, cable distance barrier, or physical stacking limitations, D-Link xStack is able to group units that are located anywhere on the same network domain in a stack, thus eliminating the possibility of single point of failure.

With this technology, management load can be decreased and enterprises can benefit from both speed and cost.

10G Bandwidth Physical Stacking

(shortest path algorithm, hot swappable, up to 40km between stack)

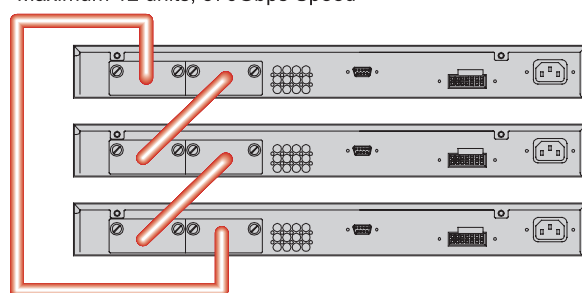
Physical stacking of DGS-3600/3400 Series uses the shortest path route algorithm with hot-swappable and redundant features, and can stack up to 12 units or 576 Gigabit ports in a stack.

The switch is managed as a switch, and reduces the management time and effort.

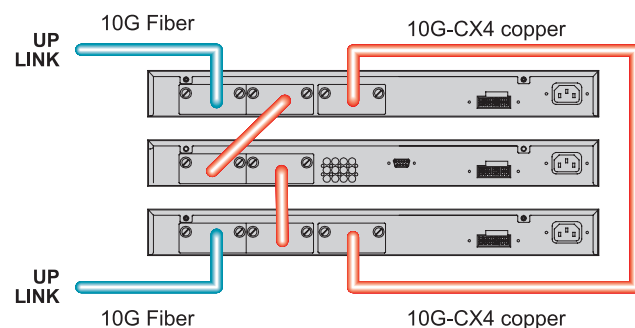
User can install one or two single-port modules, depending on whether the linear or fault-tolerant ring stacking is implemented.

Ring Physical Stack

Maximum 12 units, 576Gbps Speed



Both Physical Stack and Uplink with 10GE Connection



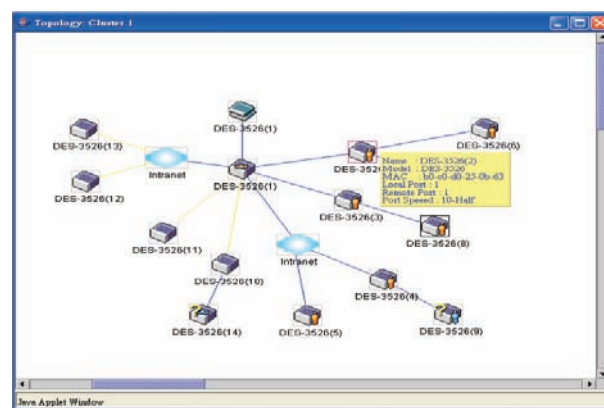
DGS-3427, DGS-3627 & DGS-3627G has 3 slots for 10G stack and uplink simultaneously

Web-Based Network Management Software with SIM, without the need of SNMP

Single IP Management (SIM) manages multiple switches with one IP address.

The switches can be stacked up to 32 units logically and are managed as a switch. Additional software is not necessary.

It is possible to modify the switches that are stacked logically as a stack and upgrade their firmware as a group.



Centralized SIM Management Feature

- Detailed Setup
- Web Management
- Restore Configuration File
- System Log File
- Topology Configuration
- Firmware Upgrade
- Setup Files

Product Information

Physical Stack		SIM (Single IP Management)	
DGS-3600 Series	P.26	DGS-3600 Series	P.26
DGS-3400 Series	P.30	DGS-3400 Series	P.30
DGS-3100 Series	P.36	DGS-3200 Series	P.34
DES-3528/52 Series	P.32	DES-3800 Series	P.28
		DES-3528/52 Series	P.32
		DES-3500 Series	P.32
		DES-3028/52 Series	P.38
		DES-3000 Series	P.40

Power Saving Technique **green ethernet**

High Performance and Low Emission Switch Management Technology

There is a worldwide increase in the demand of IT products, and this has increased the amount of power consumption and emission of CO₂ in the environment.

D-Link has therefore developed switches with Green Ethernet technology that uses lesser power consumption.

Comparing with standard switch, D-Link Green Ethernet switches can save up to 56%* of power consumption.

Energy cost can be reduced using Green technology, which can contribute to the reduction of environmental load to the planet.

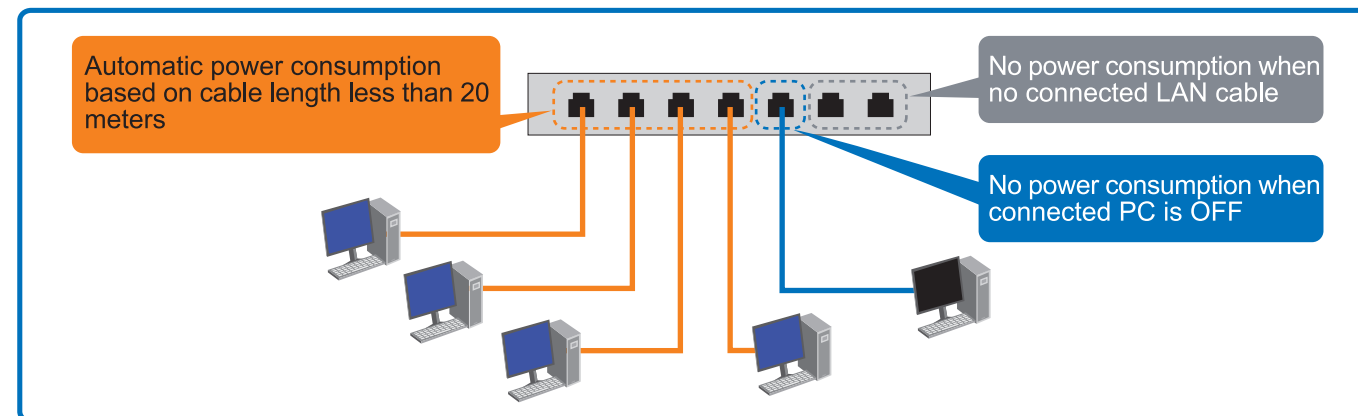
White Colour Enclosure with External Power Adapter
DGS-1005D/1008D



Internal Power for 16/24-Port Models
DGS-1016D/1024D



Internal Power for Web Smart Models
DGS-1216T/DGS-1224T/DGS-1248T



Inactive Port

The Green Ethernet switches can determine whether the port is active or inactive automatically. If the port is not used, it will be put to sleep mode automatically. The power consumption will then be reduced by approximately 56%*.

If the computer connected to the port is not powered on, the port will also be put to sleep mode.

Output Signal Control

The maximum Ethernet cable length is 100 meters and the output signal is designed for 100 meters. Most offices however only use short cables, therefore maximum power transmission is not necessary.

If the cable connected to the Green Ethernet switch is less than 20 meters, there is minimum output signal that can achieve approximately 10% energy savings.

Link Down (No Port Link)	
Power Saving	Power Consumption (W)
OFF	~4.6
ON	~0.96
Saving (W)	~3.64
Saving (%)	~95.65%

Link Up: Cable length (Class 1.20m)	
Power Saving	Power Consumption (W)
OFF	~7.53
ON	~6.85
Saving (W)	~0.7
Saving (%)	~9.30%

Savings* a day (10 hours link up & 14 hours link down) = 41%

* Based on a day of 24 hours, there are 10 working hours and 14 non-working hours

$$1 - \frac{[(\text{Non-Connected Green Ethernet Power Saving} \times 14) + (\text{Connected Green Ethernet Power Saving} \times 10)]}{[(\text{Non-Connected Normal Power Consumption} \times 14) + (\text{Connected Normal Power Consumption} \times 10)]} = 1 - \frac{(3.94 \times 14) + (0.7 \times 10)}{(4.6 \times 14) + (7.53 \times 10)}$$

=56%

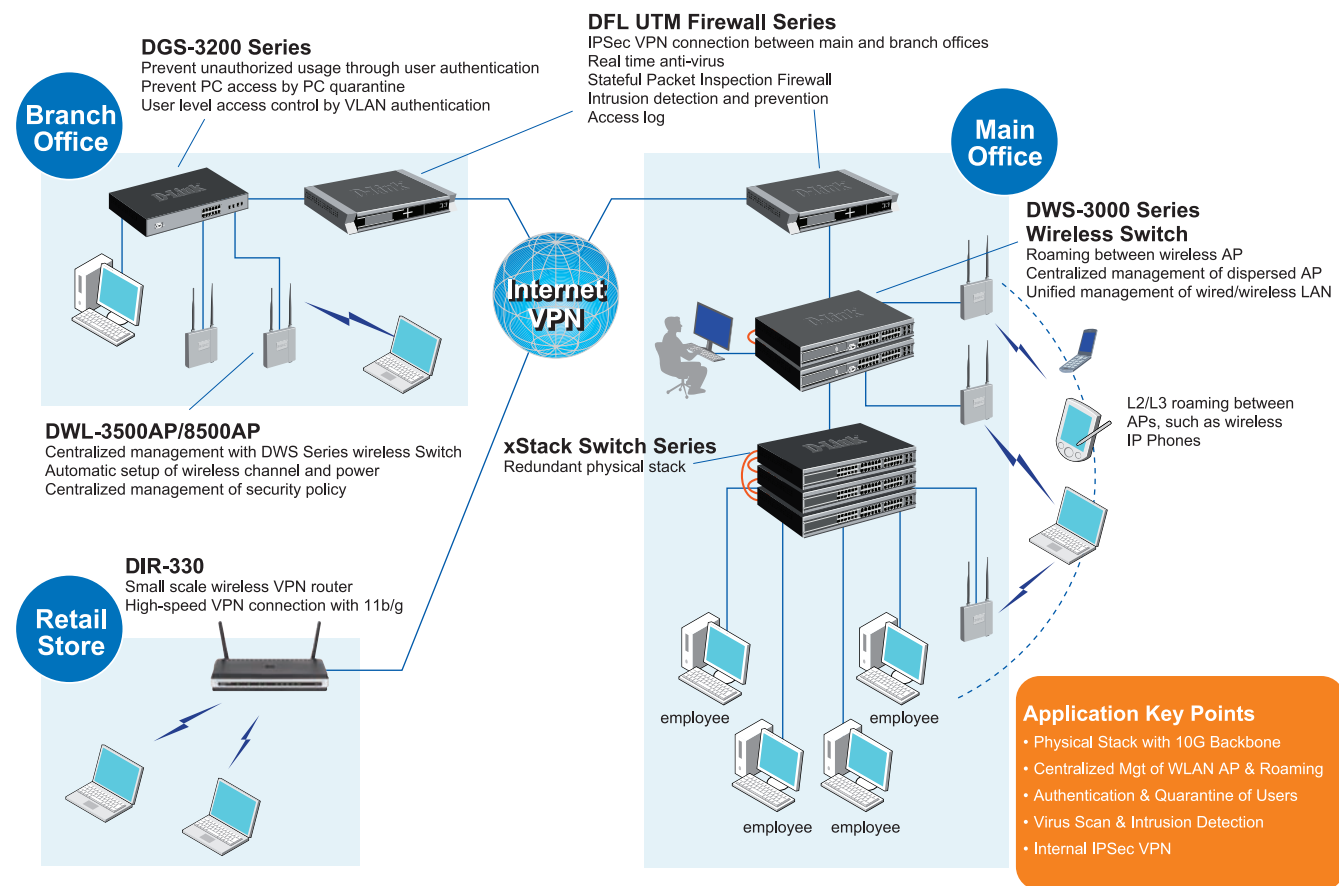
Save up to 56% power compared to a typical switch

* Based on D-Link DGS-1008D calculation and measurement tools

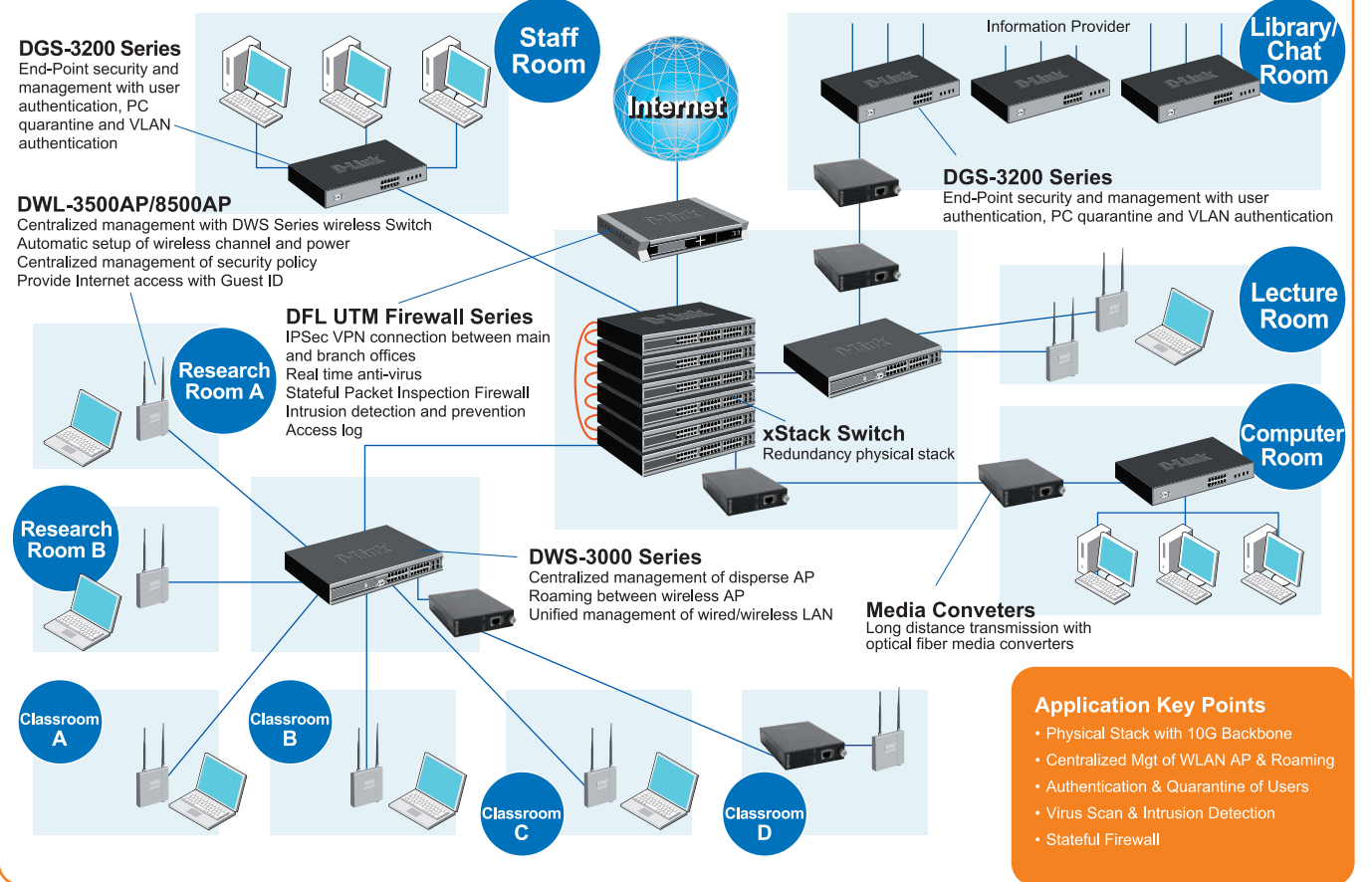
Product Information

Green Ethernet	
DGS-1200 Series	P.42
DGS-1000 Series	P.44

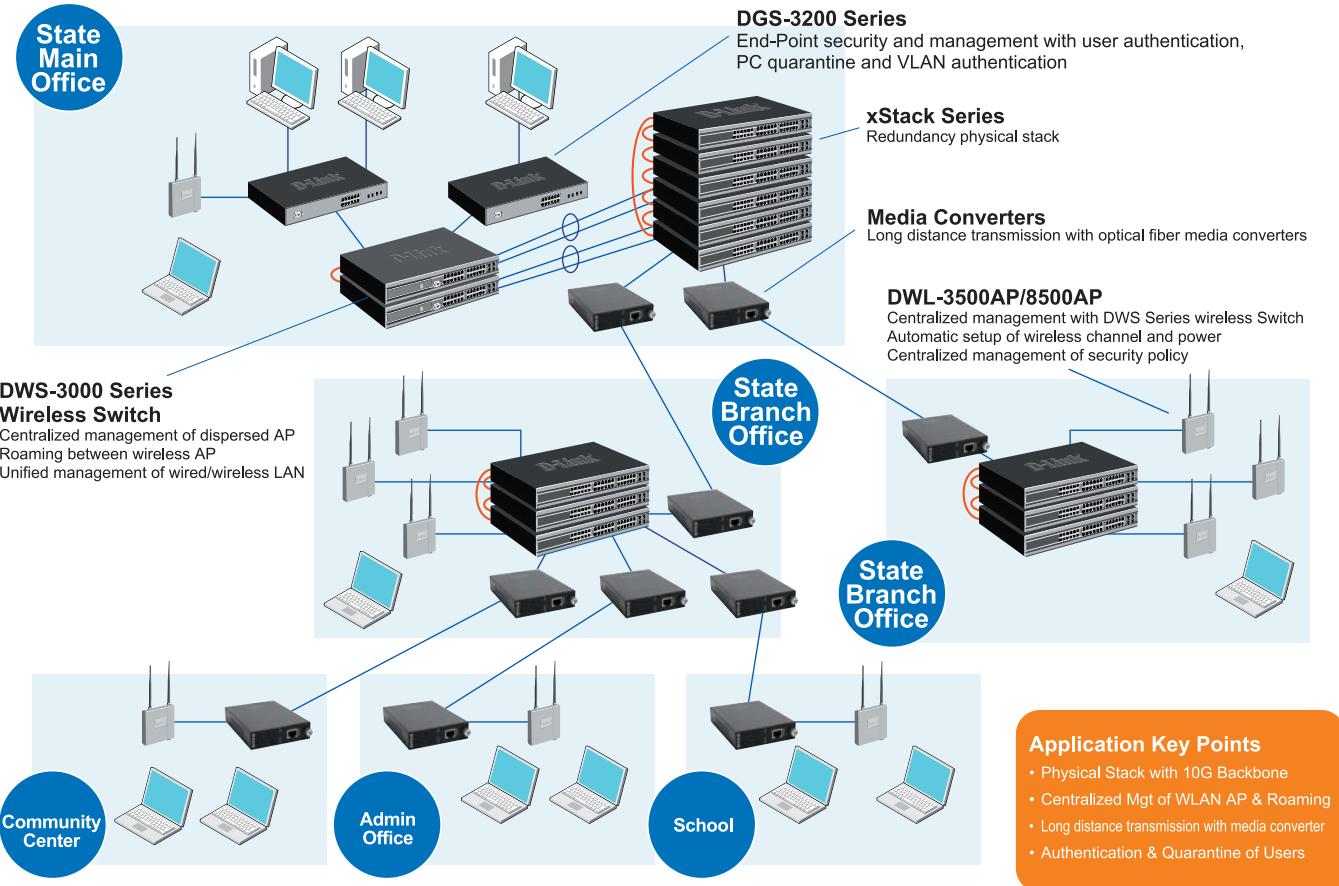
Enterprise Network Application Model



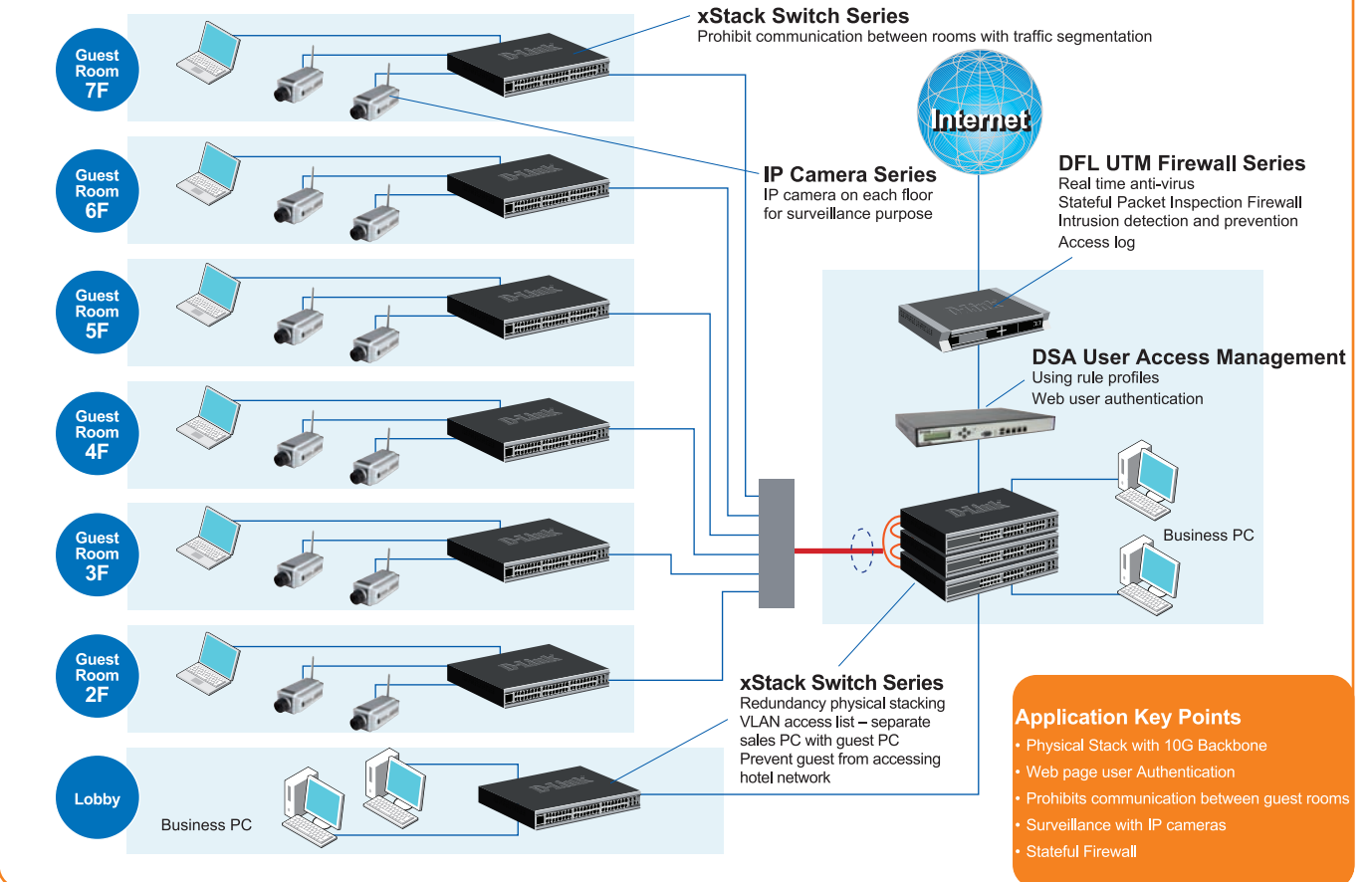
Education Application Model



Government Network Application Model



Hotel Network Application Model



D-Link Unified Endpoint Security & Management

The network of an enterprise environment is normally protected against threats from the Internet, but unprotected against threats from end point computers. It is therefore necessary to integrate and manage the security for the entire network efficiently. D-Link Unified Endpoint Security and Management provides a thorough and secure policy-based solution that can be standardized in the entire network.

D-Link Products in Unified Security and Management Environment

Wired LAN Security & Management Features

Wired LAN Products



- 802.1x User Authentication
- Web User Authentication
- IP-MAC-Port Binding
- LAN Quarantine
- ... etc
- VLAN Authentication
- MAC Authentication
- 802.1x Based Quarantine
- ZoneDefense

You can protect the wired LAN at the endpoint with powerful user authentication and LAN quarantine features. In this way, the organization's resources can be protected from illegitimate users.

WAN Security & Management Features

UTM / Firewall Products



- Firewall
- VPN
- Web Content Filtering
- Illegal Traffic Detection
- ZoneDefense ... etc
- Intrusion Detection / Prevention
- High Speed Anti-Virus Scan
- Application Control
- Communication Quarantine

The firewall, with built-in anti-virus feature, improves the security at the WAN boundary to remove threats from outside the LAN. With the integration of firewall and security switch, the illegitimate users can be isolated.

Wireless LAN Security & Management Features

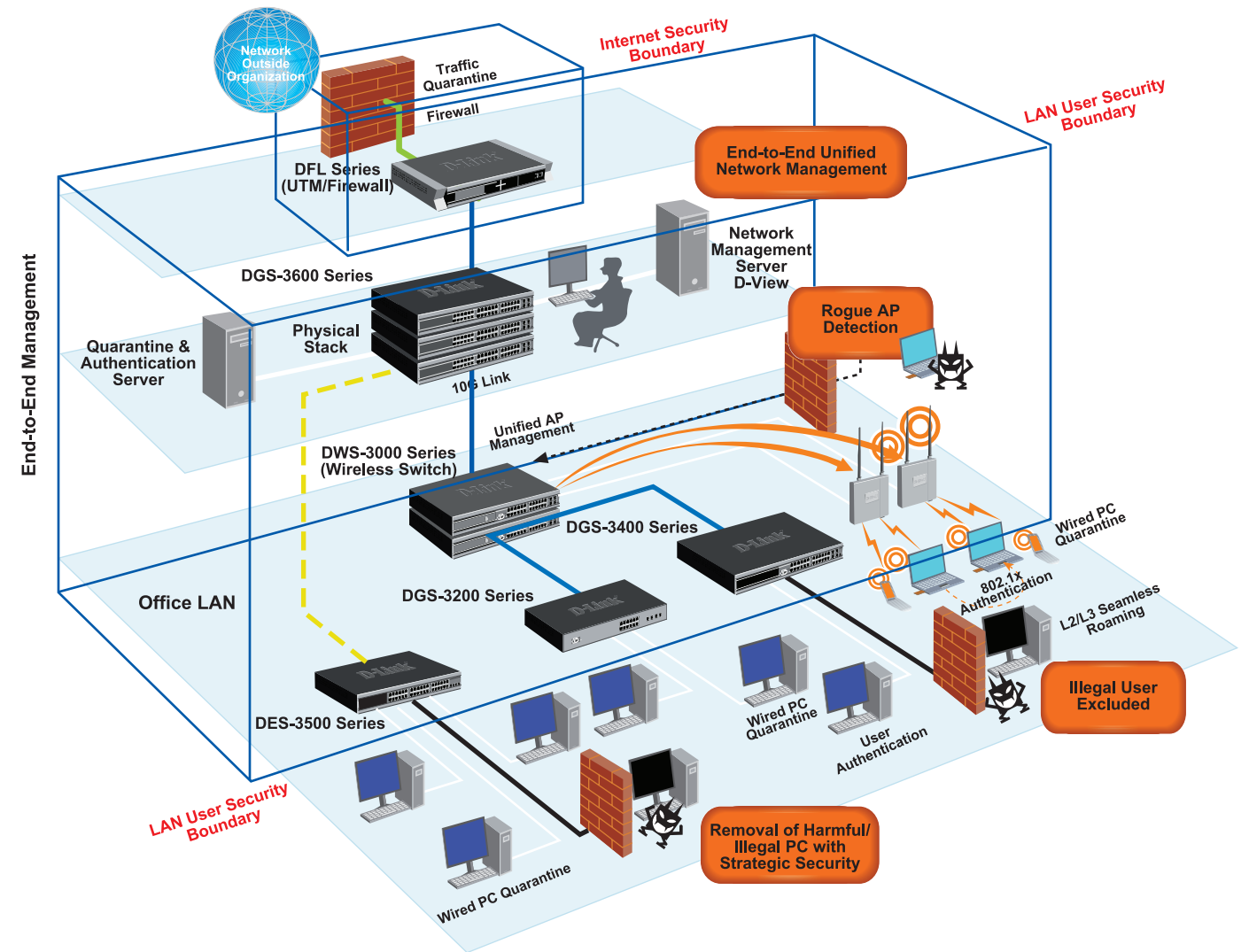
Wireless LAN Products

- 802.1x User Authentication
- MAC Address Authentication
- Ad hoc Client Detection
- Virtual AP
- AP Authentication
- Centralized AP Management
- Automatic Channel Setup ... etc
- AP Load Balance
- Web User Authentication
- Rogue AP Detection
- Automatic Wireless Output Setup
- DoS Attack Detection



The endpoint wireless LAN has powerful authentication and quarantine / prevention features. Removing illegal AP can improve security of the whole network.

Unified Endpoint Security & Management Construction Example



Wired LAN Endpoint Security & Management

Various security measures can be implemented when using DGS-3600/DGS-3400/DGS-3200 Series switch within the internal LAN, including user authentication from a various systems and the collaboration with quarantine servers to isolate illegitimate users outside the office LAN by identifying the security state of the computers. In addition, with SNMP management software D-View, end-to-end network management can also be realized.

Wireless LAN Endpoint Security & Management

With DWS-3000 Series wireless switches and corresponding wireless APs DWL-3500AP/DWL-8500AP, security features similar to wired LAN such as user authentication and LAN quarantine can also be achieved in a wireless environment. In addition, these switches also provide detection of illegitimate wireless APs, automatic setup and roaming.

WAN Endpoint Security & Management

With DFL Series UTM/Firewall, users quarantine and high speed anti-virus scan from inside or outside the office LAN can be performed. In addition, it can also detect illegitimate network communication and disable or shut down such communication. With ZoneDefense built in the DFL Series, collaboration with security features from D-Link wired switches are also possible. The DFL Series will notify the switches when there is illegitimate network communications, and will isolate these users within the LAN.

Product Information

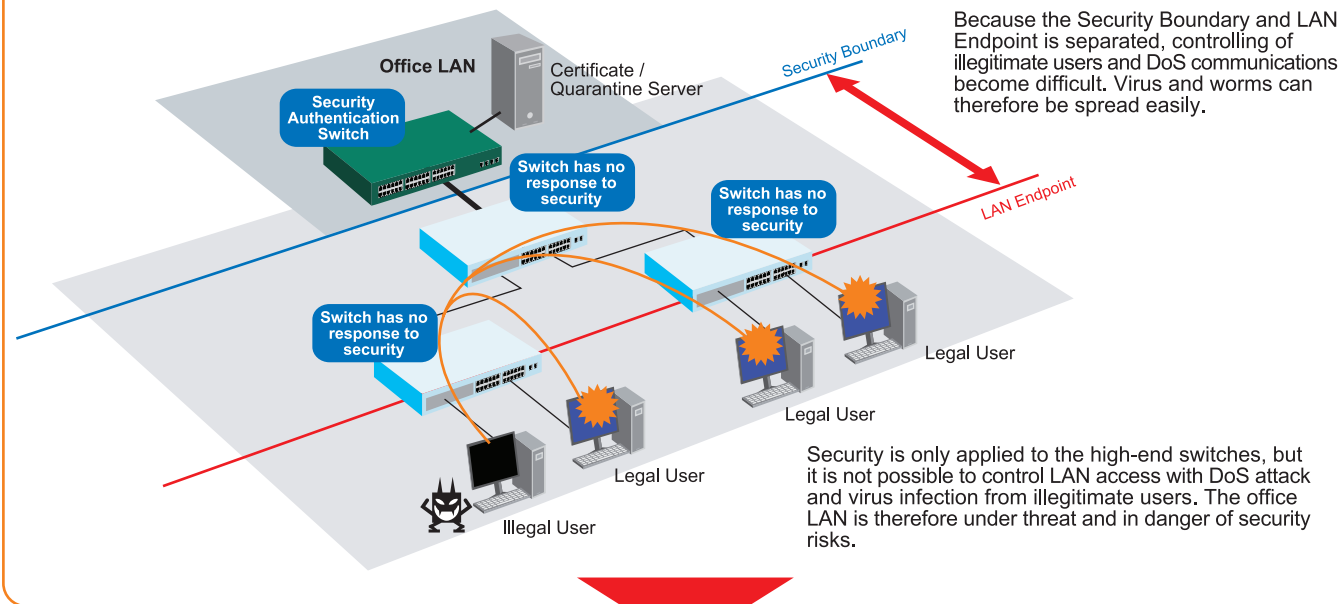
xStack Switch DGS-3600 Series	▶ P.26	xStack Switch DGS-3400 Series	▶ P.30	Wireless Switch & Access Point DWS-3000 Series	▶ P.56
Security Switch DGS-3200 Series	▶ P.34	UTM/Firewall	▶ P.60	DWL-3500AP/DWL-8500AP	▶ P.56

D-Link Endpoint Security to Desktop

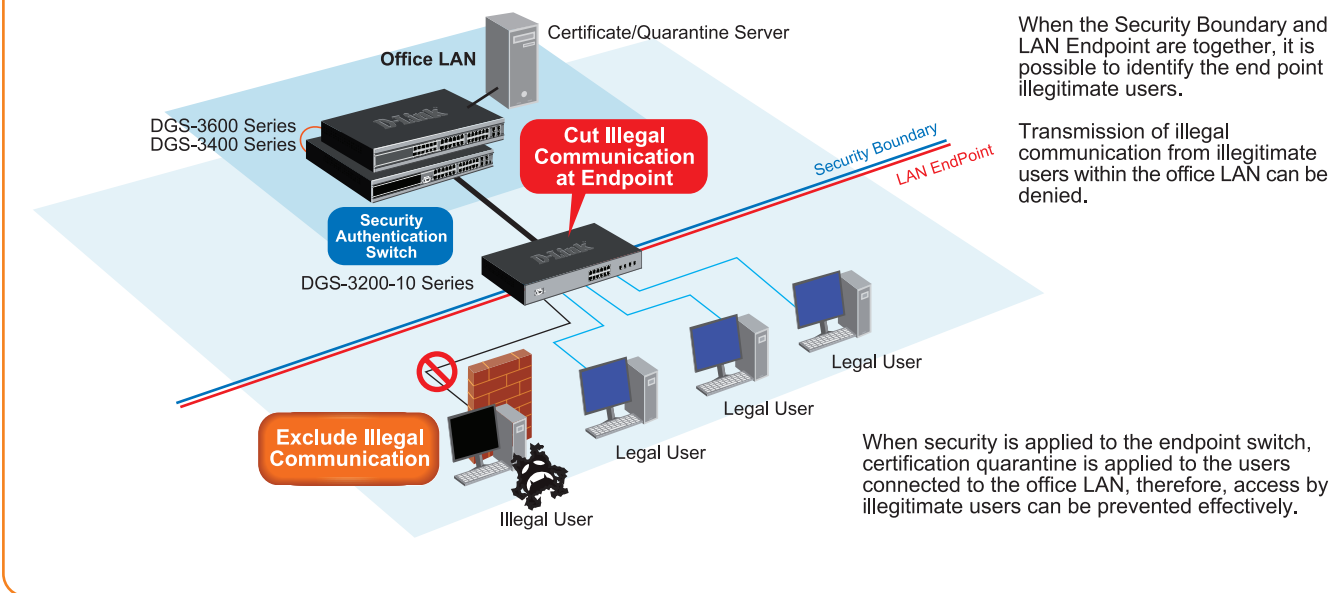
A major network concern for the enterprise and government sectors is security. Prevent internal information leakage is of utmost importance, and this is a key reason for the increased demand for security switches. A typical security switch, however, is very expensive.

D-Link offers a cost-effective security switch, DGS-3200-10, that comes with full end-to-end features at an affordable price.

Conventional Network Security Model



D-Link Network Security Model - Endpoint Security



Product Information

802.1X Authentication

- DGS-3600 Series ▶ P.26
- DGS-3400 Series ▶ P.30
- DGS-3200 Series ▶ P.34
- DGS-3100 Series ▶ P.36
- DGS-1200 Series ▶ P.42
- DES-3800 Series ▶ P.28
- DES-3528/52 Series ▶ P.32
- DES-3500 Series ▶ P.32
- DES-3028/52 Series ▶ P.38
- DES-3000 Series ▶ P.40
- DES-1200 Series ▶ P.42

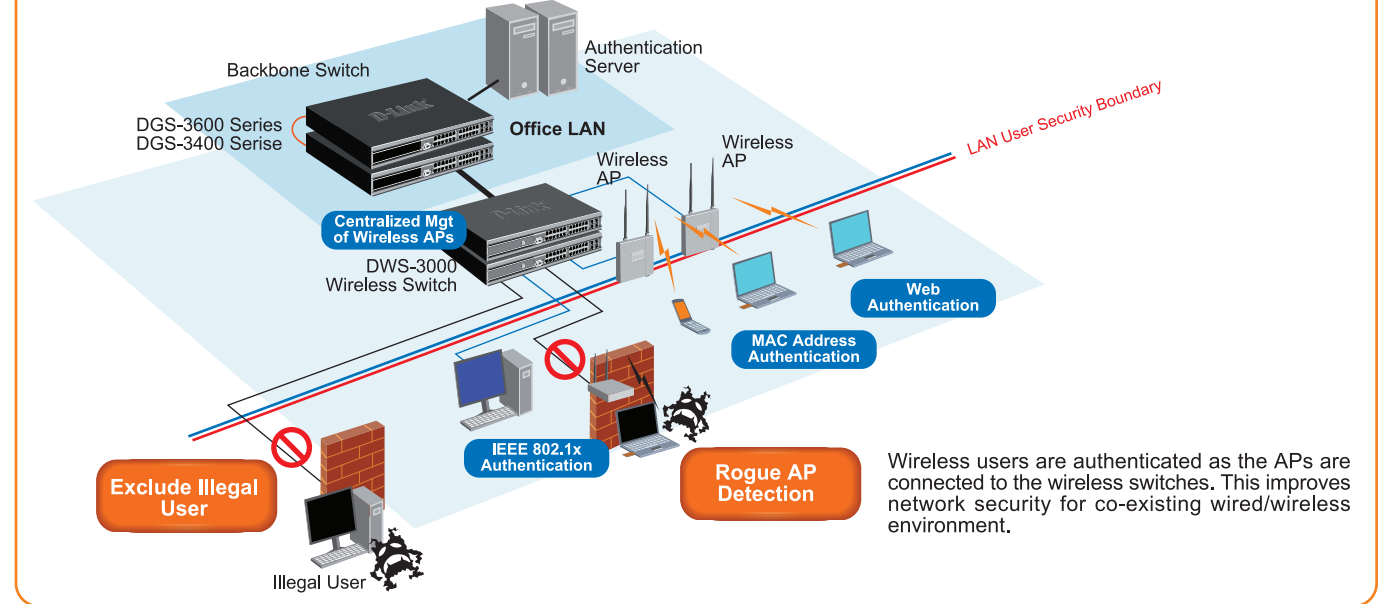
Unified Security in Wired/Wireless, IPv4/IPv6 Mixed Environment

The use of wireless connectivity in a wired LAN environment has continually been increasing. Therefore, it is common to see organizations now integrating both wired and wireless LAN in the same network.

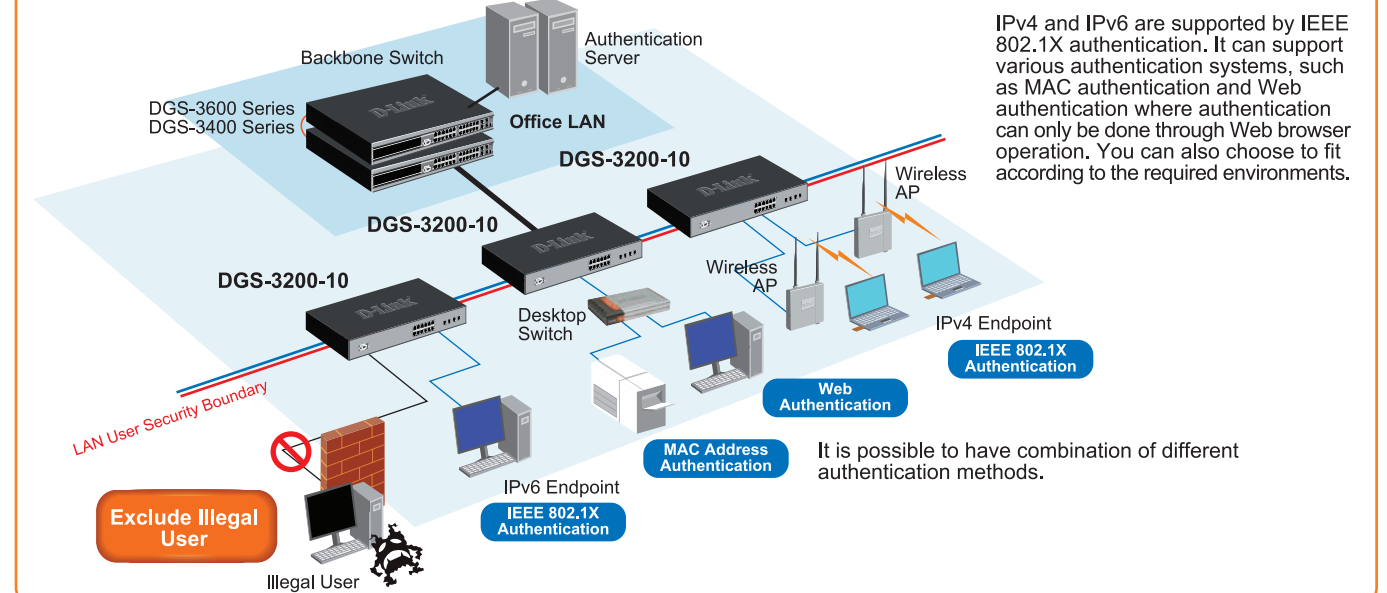
In a typical wired LAN environment, security settings are usually insufficient to quarantine illegitimate users in a co-existing wired and wireless LAN environment. Network security applications will also need to take into consideration the support for IPv6 implementation in the future.

All these requirements can now be met with D-Link's integrated solution for wired/wireless and IPv4/IPv6 environments.

Unified Security Model in Wired/Wireless Mixed Environment



Unified Security Model in IPv4/IPv6 Mixed Environment



Product Information

Web Based Authentication

- DGS-3600 Series ▶ P.26
- DGS-3400 Series ▶ P.30
- DGS-3200 Series ▶ P.34

MAC Address Authentication

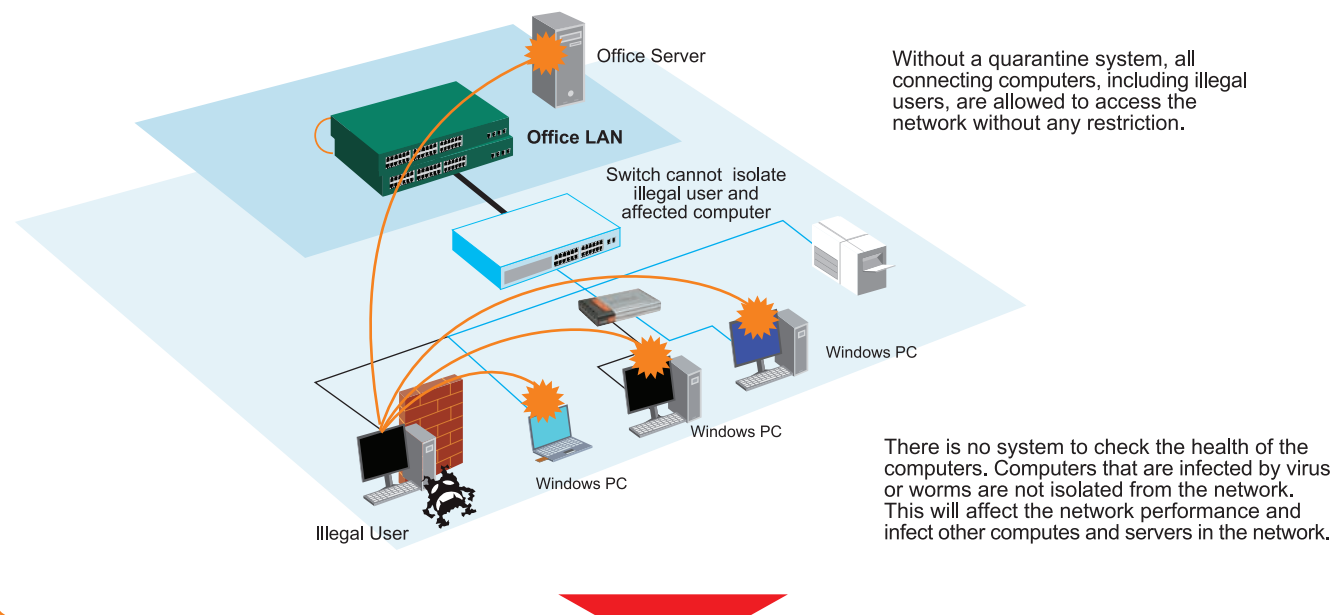
- DES-3800 Series ▶ P.28
- DGS-3600 Series ▶ P.26
- DGS-3400 Series ▶ P.30
- DGS-3200 Series ▶ P.34
- DGS-3100 Series ▶ P.36
- DES-3800 Series ▶ P.28
- DES-3528/52 Series ▶ P.32

LAN Security with Automatic Quarantine

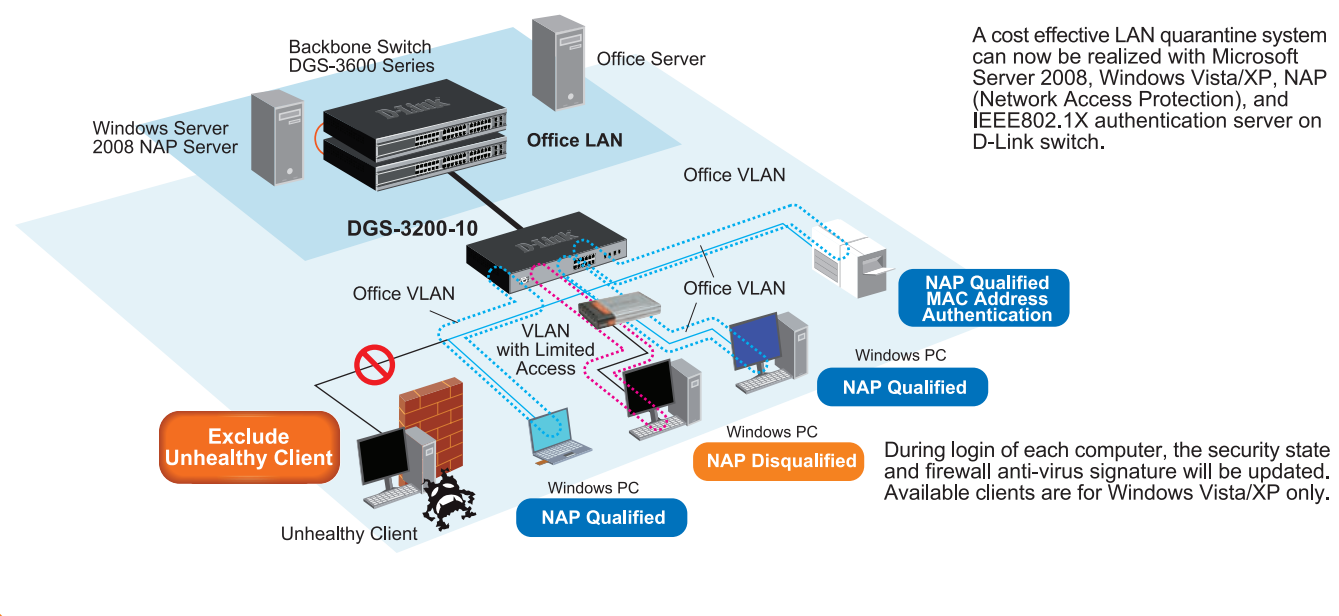
D-Link switches work with Microsoft Windows Server 2008 Network Access Protection (NAP) scheme to form a complete network quarantine system.

When this quarantine system is introduced in a LAN, it will undergo a health check, and will collect security information of computers in the office LAN at the time of login. Invasion of virus and spyware, in this way, can be detected and prevented from the office LAN.

LAN without Microsoft Network Access Protection (NAP)



LAN Quarantine Model with Microsoft Network Access Protection (NAP)



Product Information

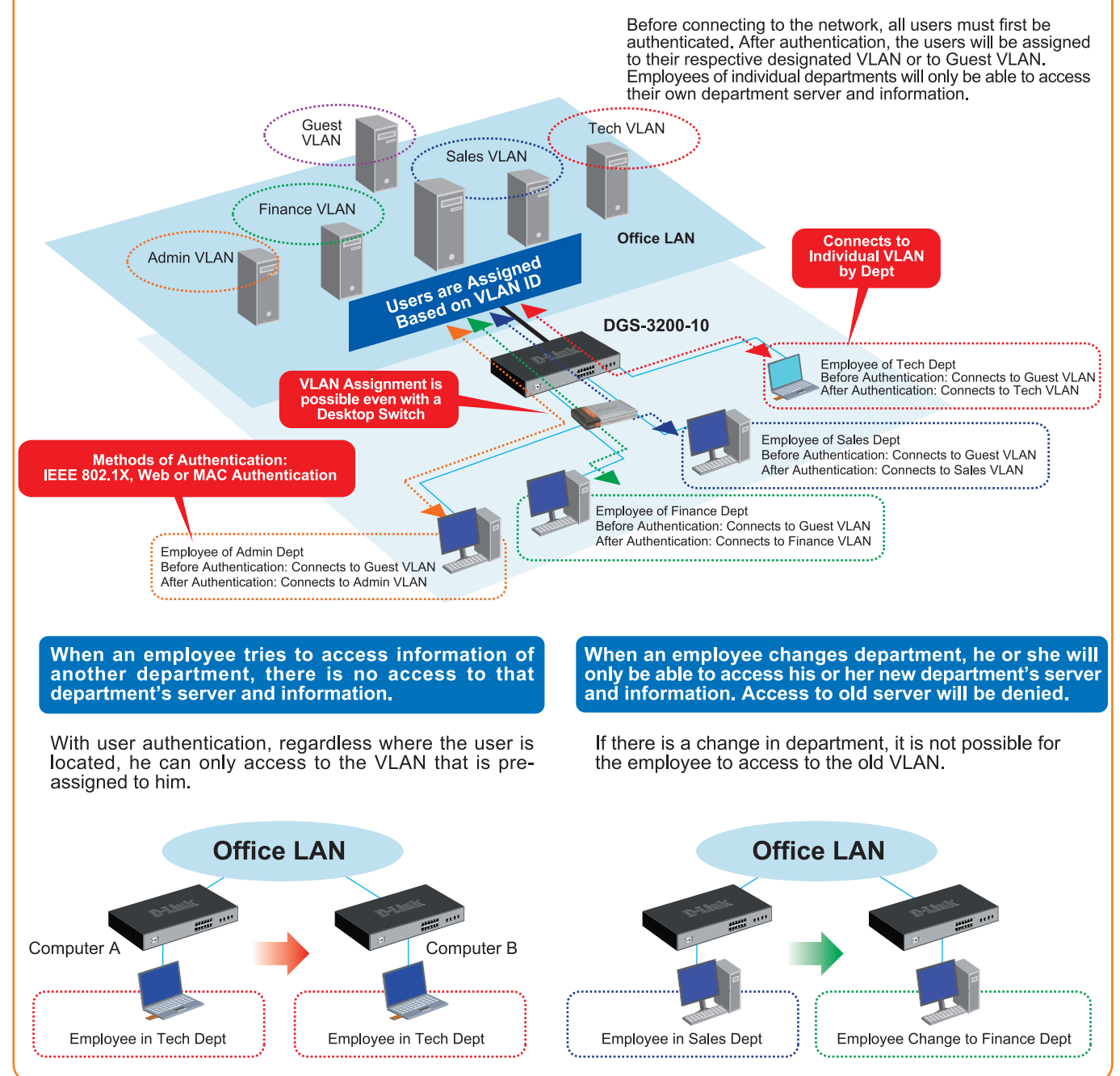
Microsoft NAP Quarantine

- DGS-3600 Series** ▶ P.26
- DGS-3400 Series** ▶ P.30
- DGS-3200 Series** ▶ P.34
- DES-3800 Series** ▶ P.28
- DES-3528/52 Series** ▶ P.32
- DES-3500 Series** ▶ P.32

Access Control via Dynamic VLAN Authentication

Access control is necessary to control the access of individual information in the enterprise. D-Link security switches support VLAN Authentication, and computers are assigned with VLAN ID in order to connect to the network. After the authentication process with quarantine server, they can then access the server in the designated network.

Access Control Model by Network and VLAN Authentication

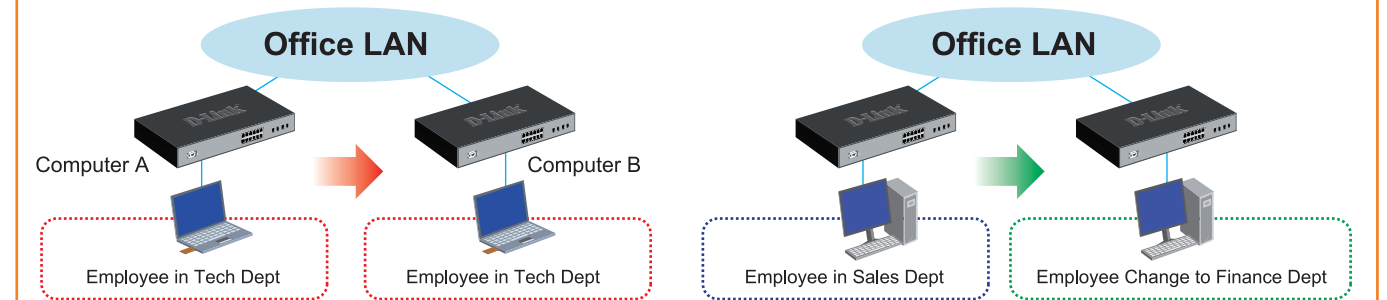


When an employee tries to access information of another department, there is no access to that department's server and information.

When an employee changes department, he or she will only be able to access his or her new department's server and information. Access to old server will be denied.

With user authentication, regardless where the user is located, he can only access to the VLAN that is pre-assigned to him.

If there is a change in department, it is not possible for the employee to access to the old VLAN.



Product Information

Dynamic VLAN Authentication () Authentication Method

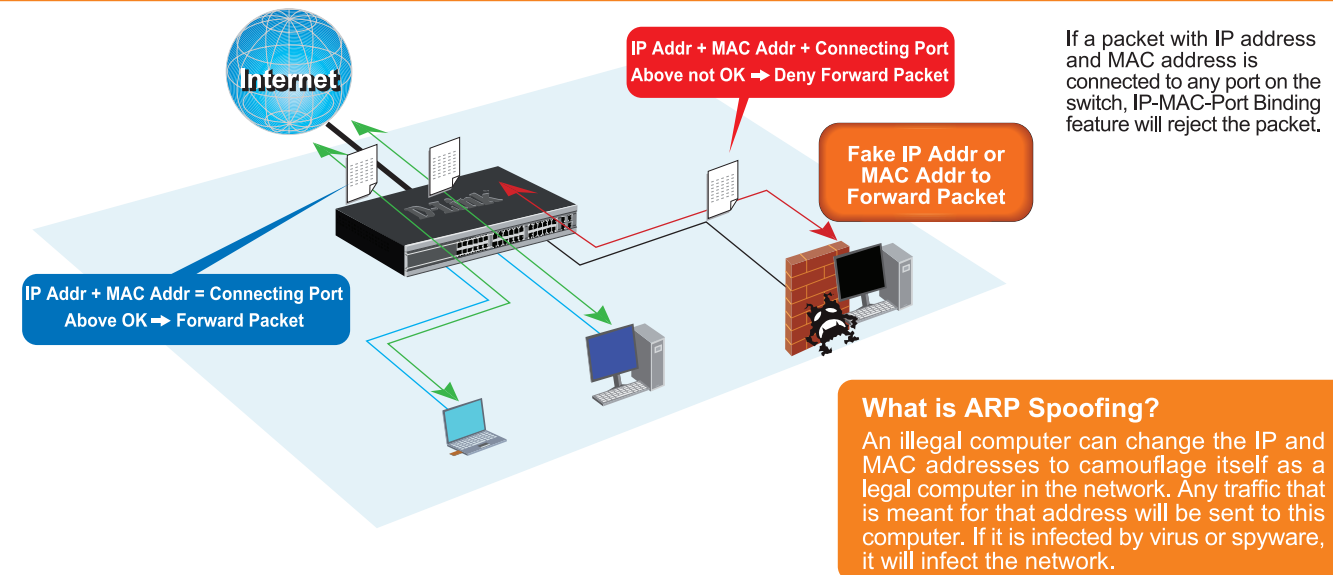
- DGS-3600 Series (Web, MAC, 802.1X)** ▶ P.26
- DGS-3400 Series (Web, MAC, 802.1X)** ▶ P.30
- DGS-3200 Series (Web, MAC, 802.1X)** ▶ P.34
- DES-3800 Series (Web, MAC, 802.1X)** ▶ P.28
- DES-3528/52 Series (Web, MAC, 802.1X)** ▶ P.32
- DES-3500 Series (802.1X)** ▶ P.32
- DES-3028/52 Series (802.1X)** ▶ P.38
- DES-3000 Series (802.1X)** ▶ P.40

Virus and Worms Prevention in LAN

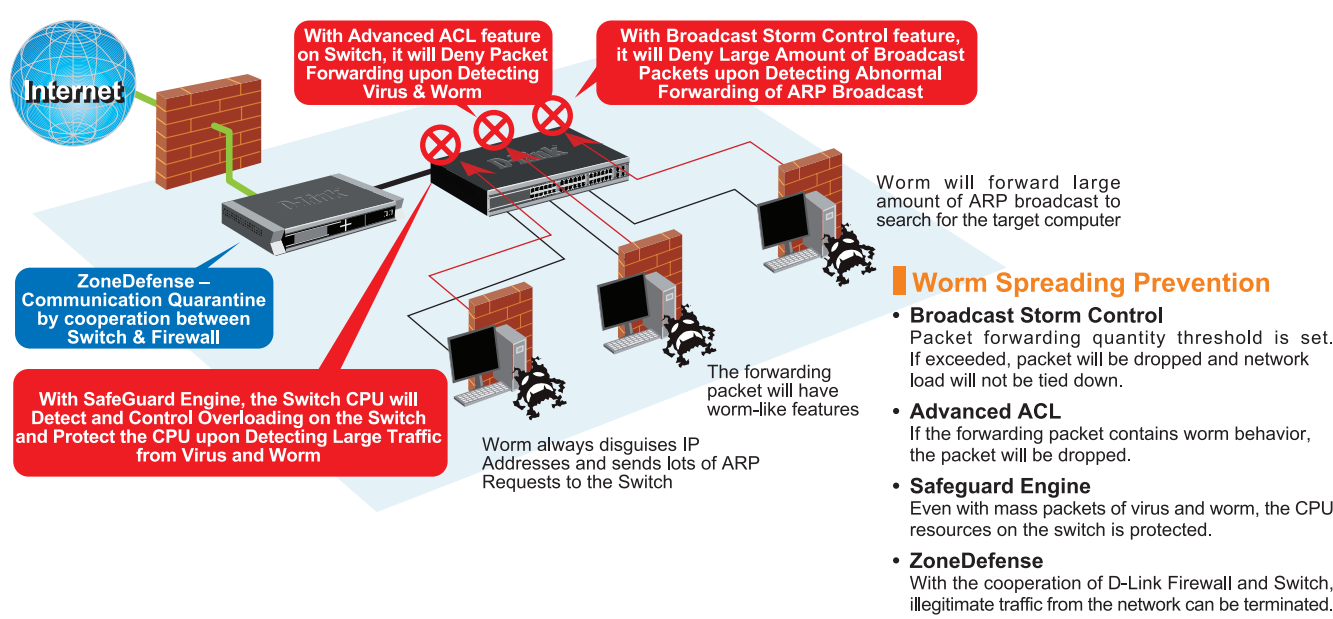
When a computer infected by virus and worm is connected to the network, there is a possibility for the virus and worm to spread inside the LAN. When a computer is installed with illegal programs, it can direct illegitimate traffics within the LAN.

Apart from raising the security level of the gateway, measures should also be taken to ensure the security of internal network is regularly checked for abnormal packet characteristics such as worms, which are commonly forwarded by endpoint computers.

ARP Spoofing Strategy



Worm Spreading Prevention



Product Information

IP-MAC-Port Binding

- DGS-3600 Series ▶ P.26
- DGS-3400 Series ▶ P.30
- DGS-3200 Series ▶ P.34
- DES-3800 Series ▶ P.28
- DES-3528/52 Series ▶ P.32

Safeguard Engine

- DES-3500 Series ▶ P.32
- DES-3028/52Series ▶ P.38
- DES-3000 Series ▶ P.40
- DGS-3600 Series ▶ P.26
- DGS-3400 Series ▶ P.30
- DGS-3200 Series ▶ P.34
- DGS-3100 Series ▶ P.36
- DES-1200 Series ▶ P.42

Broadcast Storm Control

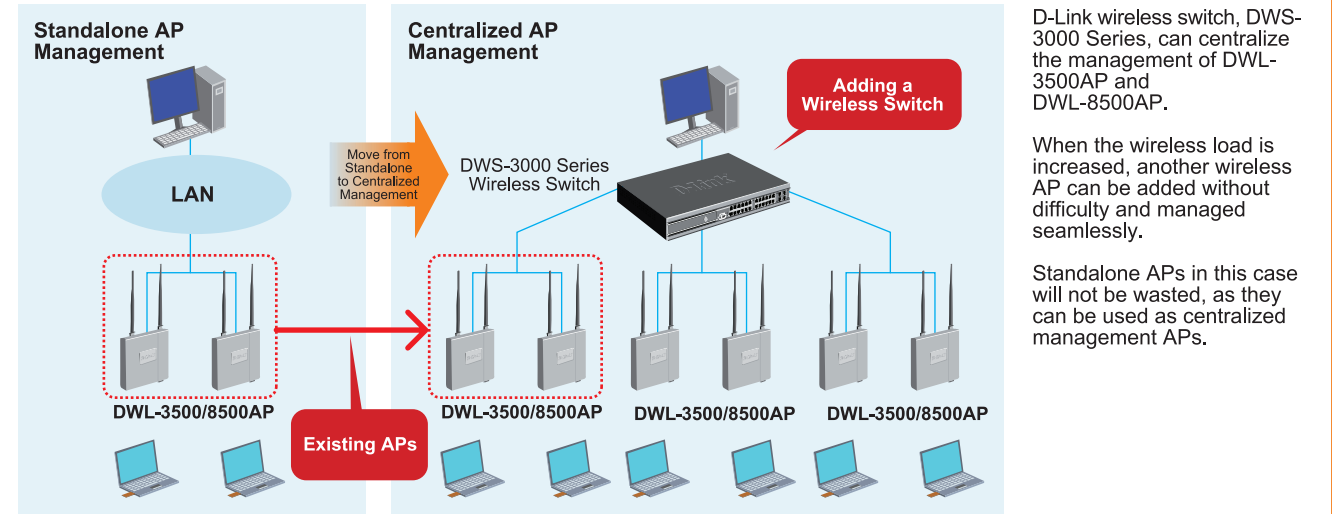
All D-Link Smart/Managed Switch, except DES-1316

Unified Wireless LAN Management Environment

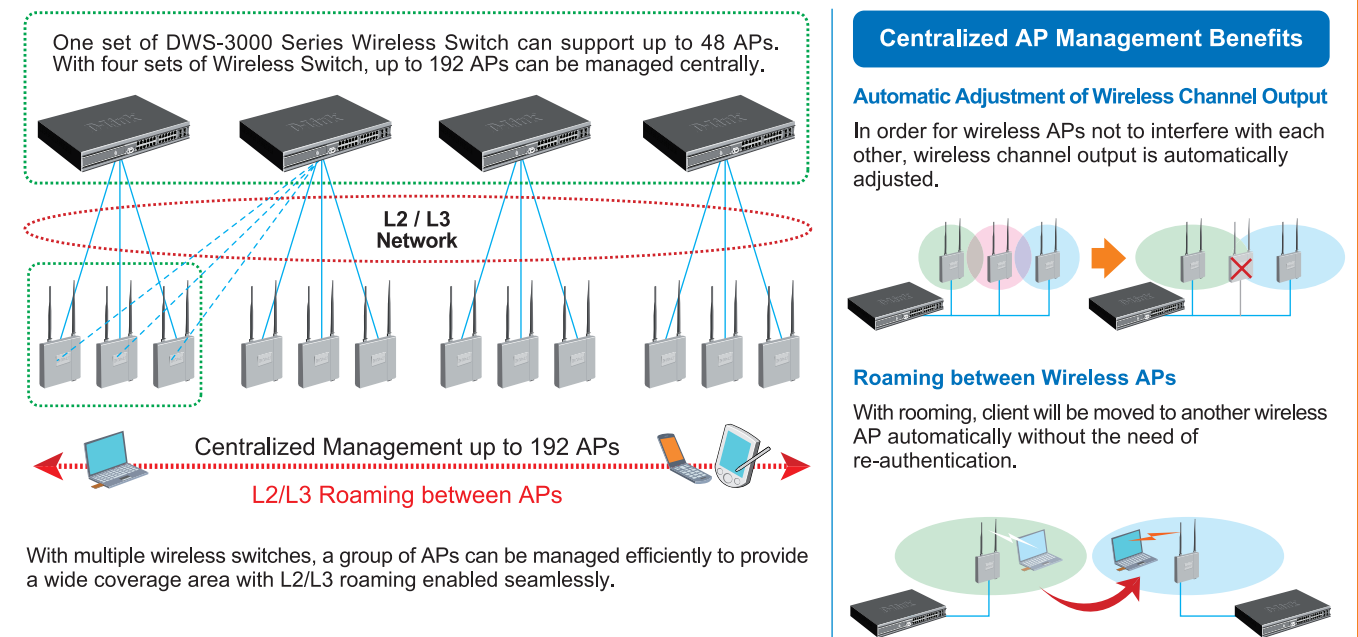
Wireless LAN is becoming a very common feature in office. Wireless AP coverage for all areas however may not be possible. As a result, deploying more than one APs may be difficult.

DWS-3000 Series wireless switch and DWL-3500AP/DWL-8500AP wireless access points when combined together can reduce the hassle of managing multiple APs and the management load to achieve wireless connectivity efficiently.

From Standalone Wireless AP to Centralized Management Model



Large Scale Wireless Deployment with Centralized Management Model using Wireless Switch



Product Information

Centralized Wireless LAN Management

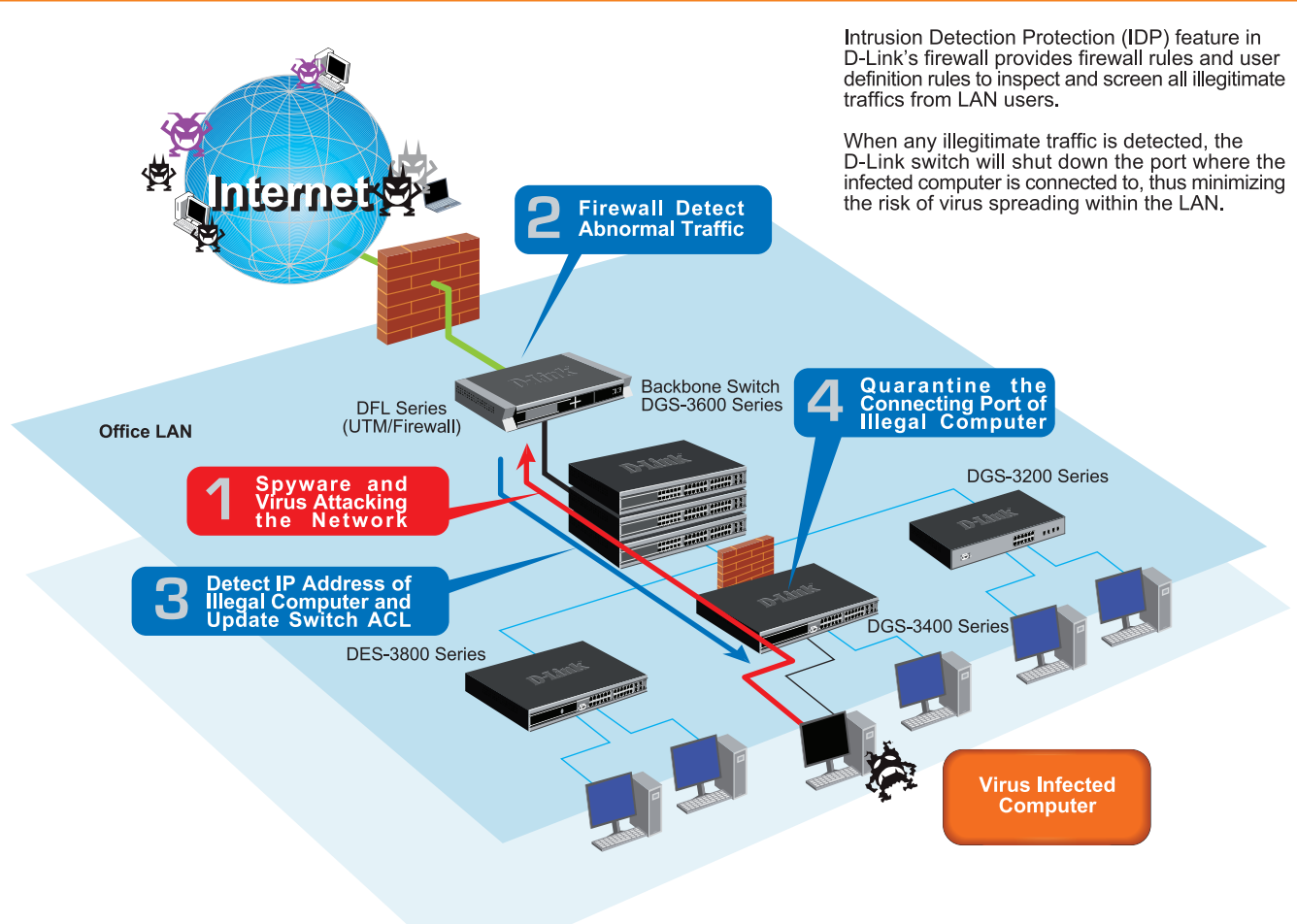
- Wireless Switch DWS-3000 Series ▶ P.56
- Wireless 11b/g AP DWL-3500AP ▶ P.56
- Wireless 11a/b/g AP DWL-8500AP ▶ P.56

Communication Quarantine with D-Link Firewall & Switches

If a computer is infected or suspected of infection by virus or spyware during authentication and quarantine checks, the firewall will terminate outside communication using the IPS and Anti-Virus features. This will make it impossible for virus to enter the network.

With D-Link firewall and security switches, the port on the connected switch can be shut down to isolate the infected user and obstruct infection of virus and worm within the LAN.

Communication Quarantine Model with D-Link Firewall & Switch (ZoneDefense)

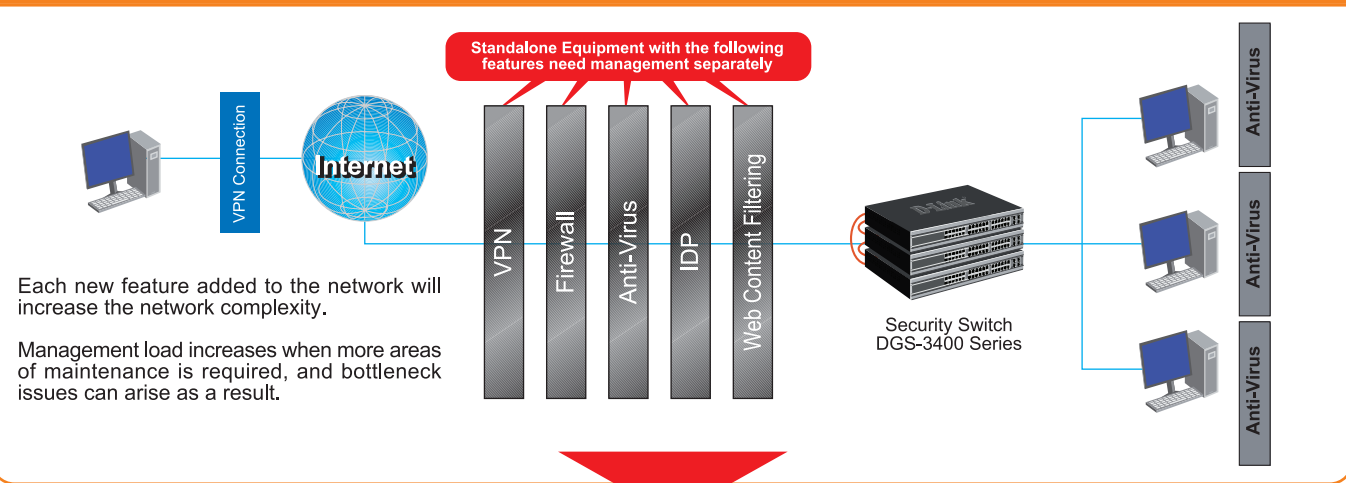


Unified UTM Network Security

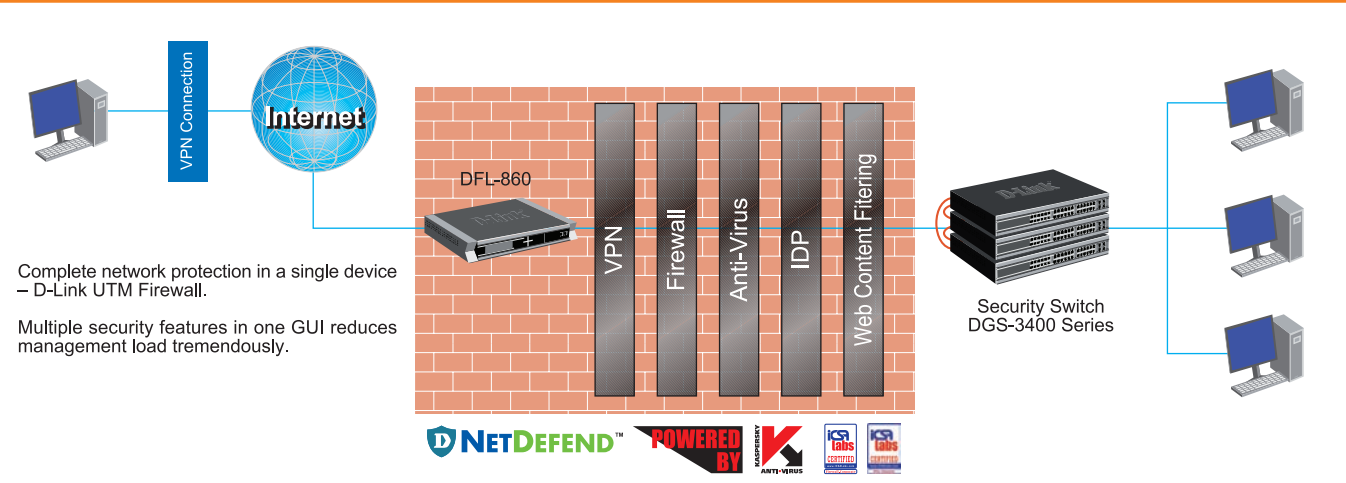
Enterprise network can be exposed to various threats, for example, new threads that can affect network load and management.

D-Link UTM firewalls, DFL-260 and DFL-860, are equipped with IDP, anti-virus and web content filtering, which will increase security protection and reduce management load.

Conventional Network Protection Model



Network Protection with UTM



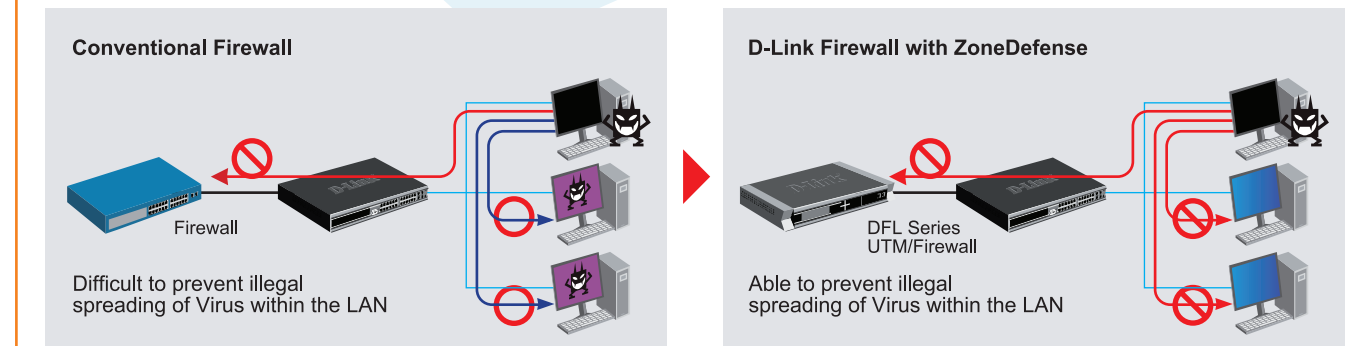
High Speed Virus Scan by Hardware

Stream based anti-virus scanning technology is used. Files with all sizes are scanned directly. This method re-constructs the data that is scanned because there is no restriction in size. It is recorded to the hardware memory and this improves inspection efficiency.

	Firewall	Anti-Virus
DFL-260	80Mbps	20Mbps
DFL-860	150Mbps	40Mbps

Over 8,000 IDP Signatures

Component based signatures recognize and protect against known and unknown attacks. The database includes attack information, data from a global attack sensor grid, and exploits collection from public sites such as National Vulnerability Database and Bugtraq.



Product Information

ZoneDefense Firewalls

- DFL-800 P.58
- DFL-2500 P.58
- DFL-860 P.60
- DFL-1600 P.58

ZoneDefense Switches

- DGS-3600 Series P.26
- DGS-3400 Series P.30
- DGS-3200 Series P.34
- DES-3800 Series P.28
- DES-3528/52 Series P.32
- DES-3500 Series P.32

Product Information

UTM Firewall Products

- DFL-260/DFL-860 Firewall, VPN, IDP, Anti-Virus, Web Content Filtering P.60

IPS Firewall Products

- DFL-210/DFL-800/DFL-1600/DFL-2500 Firewall, VPN, IDP P.58



Gigabit & Fast Ethernet Layer 3 Chassis Switches

DES-6500/DES-7200 Series

DES-6500 Layer 3 chassis switch brings configuration flexibility and unrivalled price/performance necessary for deploying a cost-effective enterprise, backbone and campus network. This chassis switch provides high density Gigabit ports, 10-Gigabit support, high switch fabric capacity, fault tolerance, Quality of Service (QoS), and network security critical for enterprise applications.

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.

DES-6500

Redundancy Power Supply

8 Optional Slots



Optional Modules

- DES-6504**
12-Port 100BASE-FX Multi-Mode Fiber (LC)
- DES-6506**
24-Port RJ-21 to RJ-45 Patch Panel
- DES-6508**
16-Port 10/100BASE-TX
- DES-6510**
24-Port 10/100BASE-TX RJ-21 Telco 50
- DES-6502**
CPU / Fabric Switching Module
- DES-6505**
8-Port 1000BASE-SX Multi-Mode Fiber (SC)
- DES-6507**
12-Port 1000BASE-T + 2-Port 1000BASE-T/SFP
- DES-6509**
12-Port Gigabit SFP
- DES-6512**
2-Port 10Gigabit XFP
- DES-6511**
Power Supply

- SNMP
- Virtual Stack (SIM)
- Trunking Across Stack
- Mirroring Across Stack
- VRRP
- Bandwidth Control
- Traffic Segmentation
- 802.1X Authentication
- Broadcast Storm Control
- Multicast Storm Control
- QoS
- ACL

DES-7206/DES-7206DC

Redundancy Power Supply

4 Optional Slots for Ports

DC Power Supply Option



Optional Modules

- 7200-24**
12-Port 1000BASE-T + 12-Port 1000BASE-T/SFP
- 7200-24G**
12-Port SFP + 12-Port 1000BASE-T /SFP
- 7200-48**
44-Port 1000BASE-T + 4-Port 1000BASE-T/SFP
- 7200-2XG**
2-Port 10Gigabit XFP
- 7200-CM1**
CPU Module with 96G Switching Capacity
- 7200-ASE1**
ASE I for NAT Support
- 7200-ASE3**
ASE III for MPLS Support
- 7200-24P**
12-Port 1000BASE-T PoE + 12-Port 1000BASE-T PoE/SFP
- 7200-24GE**
24-Port SFP
- 7200-48P**
44-Port 1000BASE-T PoE + 4-Port 1000BASE-T PoE/SFP
- 7200-4XG**
4-Port 10Gigabit XFP
- 7200-CM3**
CPU Module with 96G Switch Capacity & Support Advanced Service Engine
- 7200-ASE2**
ASE II for IPFIX Support
- 7200-ASE4**
ASE IV for Larger H/W Table Size

- SNMP
- Rapid Ether Ring Protection
- Bandwidth Control
- QoS
- ACL
- CPU Protection Policy
- IP-MAC-Port Binding
- 802.1X Authentication
- VRRP
- Jumbo Frame
- Double VLAN
- Multi-Path Route

DES-7210 / DES-7210DC

Redundancy Power Supply

8 Optional Slots for Ports

DC Power Supply Option



Optional Modules

- 7200-24**
12-Port 1000BASE-T + 12-Port 1000BASE-T/SFP
- 7200-24G**
12-Port SFP + 12-Port 1000BASE-T /SFP
- 7200-48**
44-Port 1000BASE-T + 4-Port 1000BASE-T/SFP
- 7200-2XG**
2-Port 10Gigabit XFP
- 7200-CM2**
CPU Module with 192G Switching Capacity
- 7200-ASE1**
ASE I for NAT Support
- 7200-ASE3**
ASE III for MPLS Support
- 7200-24P**
12-Port 1000BASE-T PoE + 12-Port 1000BASE-T PoE/SFP
- 7200-24GE**
24-Port SFP
- 7200-48P**
44-Port 1000BASE-T PoE + 4-Port 1000BASE-T PoE/SFP
- 7200-4XG**
4-Port 10Gigabit XFP
- 7200-CM4**
CPU Module with 192G Switch Capacity & Support Advanced Service Engine
- 7200-ASE2**
ASE II for IPFIX Support
- 7200-ASE4**
ASE IV for Larger H/W Table Size

- SNMP
- Rapid Ether Ring Protection
- Bandwidth Control
- QoS
- ACL
- CPU Protection Policy
- IP-MAC-Port Binding
- 802.1X Authentication
- VRRP
- Jumbo Frame
- Double VLAN
- Multi-Path Route

DES-6500 & DES-7200 Series Gigabit & Fast Ethernet Layer 3 Chassis Switches

Model	DES-6500	DES-7206	DES-7210
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3ab 1000BASE-T; IEEE 802.3z 1000BASE-SX/LX; IEEE 802.3ae 10GBASE-SR/LR; IEEE 802.3x Flow Control; IEEE 802.1D Spanning Tree; IEEE 802.1w Rapid Spanning Tree; IEEE 802.1s Multiple Spanning Tree; IEEE 802.3ad Link Aggregation; IEEE 802.1Q VLAN Tagging; IEEE 802.1v Protocol Based VLAN; IEEE 802.1p Quality of Service; IEEE 802.1X Port Based & MAC Based Network Access Control		
Interface	Total 9 Slots: 1 CPU Slot for Management + 8 Open Slots for Port Modules		Total 10 Slots: 2 Fixed Slots for Control Modules + 8 Open Slots for Port Modules
	10/100BASE-TX Port (RJ-45) 100BASE-FX Multi-Mode (LC) 10/100/1000BASE-T Port (RJ-45) 10/100/1000BASE-T Port with PoE 1000BASE-SX Multi-Mode (SC) SFP Slot (for Gigabit Transceivers) XFP Slot (10Gigabit Transceivers) Port Module		12-Port 1000BASE-T; 12-Port 1000BASE-T/SFP 7200-24G 12-Port SFP; 12-Port 1000BASE-T/SFP 7200-24GE 24-Port SFP 7200-24P 12-Port 1000BASE-T PoE; 12-Port 1000BASE-T PoE/SFP 7200-48 44-Port 1000BASE-T; 4-Port 1000BASE-T/SFP 7200-48P 44-Port 1000BASE-T PoE; 4-Port 1000BASE-T PoE/SFP 7200-2XG 2-Port 10Gigabit XFP 7200-4XG 4-Port 10Gigabit XFP
Switching	RS-232C Port (DB-9 Pin Female) Auto Negotiation Auto MDI/MDIX Flow Control Virtual Stack (V-Link SIM) Switch Fabric Packet Forwarding Rate (64Byte) No. of MAC Addresses SDRAM CPU & Management Module		Back Pressure Flow Control 192Gbps (Based on 2 Control Modules) 143Mpps (Based on 2 Control Modules) Up to 64K MAC addresses 256MB 7200-CM1: CPU Module with 96G Switching Capacity & Support Advanced Service Engine (ASE) 7200-CM3: CPU Module with 96G Switching Capacity & Support Advanced Service Engine (ASE) 7200-CM4: CPU Module with 192G Switching Capacity & Support Advanced Service Engine (ASE) 7200-ASE1: ASE I for NAT Support 7200-ASE2: ASE II for IPFIX Support 7200-ASE3: ASE III for MPLS Support 7200-ASE4: ASE IV for Larger H/W Table Size
	DES-6504: 12-Port 100BASE-FX Multi-Mode Fiber (LC) DES-6505: 8-Port 1000BASE-SX Multi-Mode Fiber (SC) DES-6506: 24-Port RJ-21 to RJ-45 Patch Panel DES-6507: 12-Port 1000BASE-T; 2-Port 1000BASE-T/SFP DES-6508: 16-Port 10/100BASE-TX DES-6509: 12-Port SFP DES-6510: 24-Port 10/100BASE-T RJ-21 Telco 50 DES-6512: 2-Port 10Gigabit XFP		7200-24: 12-Port 1000BASE-T; 12-Port 1000BASE-T/SFP 7200-24G 12-Port SFP; 12-Port 1000BASE-T/SFP 7200-24GE 24-Port SFP 7200-24P 12-Port 1000BASE-T PoE; 12-Port 1000BASE-T PoE/SFP 7200-48 44-Port 1000BASE-T; 4-Port 1000BASE-T/SFP 7200-48P 44-Port 1000BASE-T PoE; 4-Port 1000BASE-T PoE/SFP 7200-2XG 2-Port 10Gigabit XFP 7200-4XG 4-Port 10Gigabit XFP
Power	Power Supply Power Consumption (Max.) Redundancy Power Supply		90 to 264VAC, 47 to 63Hz 295W DES-6511 7200-1200AC (1200W AC); 7200-1200DC (1200W DC); 7200-2000AC (2000W AC); 7200-2000DC (2000W DC)
Environmental	Operating Temperature Storage Temperature Humidity		0 to 40°C -25 to 55°C 5 to 95% (Non-Condensing) 90% (Non-condensing)
Chassis Dimension	W x D x H mm		440 x 294 x 356 437 x 508 x 647 437 x 448 x 956
Certification	EMI Certification		FCC Class A / CE Class A / VCCI Class A / C-Tick Class A FCC Class A / CE Class A / VCCI Class A
Package Contents	DES-6500 Chassis; Power Cord; RS-232 Console Cable; Mounting Kit; Rubber Feet x 4; CD Kit with Manual / CLI / D-View module / SNMP module		DES-7200 Series Chassis; AC/DC Power Module; Power Cord (for AC Models only); Fan Tray; Anti-Static Hand Ring; Screw Driver; CD with Documentation
L2 Features	IGMP Snooping Spanning Tree: 802.1D STP; 802.1w RSTP; 802.1s MSTP STP Loopback Detection 802.3ad Link Aggregation : Up to 32 Groups Back Pressure Flow Control Port Mirroring : One-to-One, Many-to-One Trunking / Mirroring Across Stack		ARP: Static ARP; Configurable ARP aging time Jumbo Frame up to 9216 Bytes IGMP Snooping: 1K Groups Spanning Tree: 802.1D STP; 802.1w RSTP; 802.1s MSTP; Rapid Ether Ring Protection (RERP) Support up to 16 Domains Recovering L2 Traffic in 500ms
VLAN	802.1Q Tagged VLAN; GVRP/IGARP 4K VLAN Groups 4K Static VLANs, 255 Dynamic VLANs 802.1v Protocol-Based VLAN		802.1Q Tagged VLAN; Port-Based VLAN; VLAN Group: 4K (Configurable VLAN ID: 1-4094); 802.1v Protocol-based VLAN; Super VLAN; Private VLAN; Double VLAN (Q-in-Q); Port-Based Q-in-Q; Selective Q-in-Q
L3 Features	128 IPv4 Static Routing RIP v1/v2, OSPF, VRRP Floating Static Route Number of IP Interfaces : 256 per System Multiple IP per VLAN (max. 2) IPv4 routing table: max 2K entries Multicast forwarding Table: Max 256 Entries IGMP v1/v2/v3		Max 2K IP Interface; Secondary IP; VRRP IPv6 Tunneling: Manual Tunnel, ISATAP, 6to4 IPv6 Ready Phase 2 Floating Static Routes : 1000 Static Routes : Max. 1000 Policy-Based Route Multi Path Route : ECMP ANMCP RIP v1/v2, RIPng (IPv6); OSPF; OSPF v2; OSPF v3 (IPv6)
Multicast	IGMP v2/v3; DVMRP PIM Dense Mode; PIM Sparse Mode		PIM-DM; PIM-DM v6*; PIM-SM; PIM-SM v6* PIM-SSM; PIM-SSM v6*; IGMP v1/v2/v3
QoS (Quality of Service)	Bandwidth Control: per Port Granularity of 64Kbps; 802.1p Support; 8 Queues per Port; Queue Handling Methods : WRR, Strict; CoS Based on: Switch Port, MAC address, 802.1p Priority, VLAN, Protocol type, TOS, DSCP, IP v4/v6 Address, IPv6 Traffic Class, IPv6 Flow Label, TCP/UDP Port		Bandwidth Control : Egress Traffic min. Granularity 64Kbps; Ingress Traffic min. Granularity 64Kbps 802.1p Class of Service (CoS); 8 Queues; Queue Handling: Strict, Weighted Round Robin (WRR) CoS Based on: VLAN ID, 802.1p Priority, MAC Address, IP Address or IP Prefix, DSCP/IP Precedence, IP Protocol Type, TCP/UDP Port, Combination of the Above
ACL (Access Control List)	Maximum 9600 Rules, CPU interface filtering ACL Based on: Switch Port, MAC Address, VLAN, 802.1p Priority, Protocol type, TOS, DSCP, IP v4/v6 Address, IPv6 Traffic Class, IPv6 Flow Label, TCP/UDP Port, TCP/UDP Payload		Up to 2K Rules per Line Card; ACL Based on: 802.1p Priority, VLAN ID, MAC Address, IP Address or IP Prefix, DSCP/IP Precedence, IP Protocol Type, TCP/UDP Port Number, Combination of the Above; Time-based ACL
Security	RADIUS/TACACS+/TACACS+; SSHv2; SSLv1; Port Security; Traffic Segmentation 802.1X Port/MAC-Based Access Control Broadcast / Multicast Storm Control D-Link Safeguard Engine		CPU Protection Policy (CPP); SSH Port Security up to 16 MAC addresses per port Global MAC-IP Binding; Default IP Scan 802.1X Port-Based Access Control; 802.1X MAC-Based Access Control IP-MAC-Port Binding; Dynamic VLAN Assignment; RADIUS
Management	D-Link Single IP Management; Web-based GUI; CLI; Web GUI Traffic Monitoring; Web MAC Address Browsing; Telnet Server; TFTP Client; SNMP v1/v2/v3; SNMP Trap; RMON v1; BootP/DHCP Client; DHCP Auto-Configuration; DHCP Relay Option 82; System Log, Trap/Alarm/Log Severity Control; Dual Images, Dual Configurations, CPU Monitoring		Command Line Interface (CLI); Telnet Server; TFTP; XModem; SNMP v1/v2/v3; SNMP Trap; System Log; RMON v1; Support 1.2,3,9 Groups; DNS Client; Debug; NTP/SNTP; File System; Flash storage media; Multiple Firmwares; Multiple Configuration; System Status LED; System Alert
MIBs	MIB-II (RFC1213); Bridge MIB (RFC1493); RMON MIB (RFC1757); 802.1p Priority Queues (RFC2674); IGMP MIB (RFC2833); IP MIB (RFC2233); Ethernet-like MIB (RFC1643); RIP MIB (RFC1724); OSPF MIB (RFC1850); CDR MIB (RFC2096); IPv4 Multicast Routing MIB (RFC2932); PIM MIB from IPv4 (RFC2934); VRRP MIB (RFC 2787); D-Link Enterprise MIB		MIB-II (RFC1213); Bridge MIB (RFC1493); SNMPv2 MIB (RFC1901,1907); SNMP MIB (RFC1157, 2571-2576); RMON MIB (RFC1271,2819); PIM-SSM MIB (RFC3569); D-Link Private MIB; PIM-SM MIB (RFC2362); VRRP (RFC2338,787); DVMRP (RFC1075); DiffServ (RFC2474-2475); 802.1p (RFC2674); RADIUS (RFC2138-2139,2665-2666); OSPF (RFC1370,1587,1765,2328,2370); BGP (RFC1771,1997,2439,2842,2918); DHCP (RFC1542,2131,3046); Super VLAN (RFC3069); SNMP (RFC3411-3417); UDP (RFC768); IP (RFC791); TCP (RFC793); Telnet (RFC854); NTP (RFC1305); TFTP (RFC1350); SNTP (RFC1769)

* Feature Available in Future Firmware Upgrade



Gigabit xStack Layer 3 Core Switches

DGS-3600 Series



The xStack DGS-3600 series consists of Layer 3 Gigabit switches that deliver performance, flexibility, security, multi-layer QoS and access, with redundancy 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.

With high Gigabit port densities, SFP support, 10-Gigabit uplink options and advanced software functions, the DGS-3600 Series switches can act as departmental core switches to form a multi-level network structure with high-speed backbone and centralized servers.



DGS-3612

Redundancy Power Supply

10/100/1000BASE-T x 12
SFP Combo Slot x 4



- Virtual Stack (SIM)
- SNMP
- OSPF
- VRRP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- sFlow
- L4 ACL
- LLDP

DGS-3612G

Redundancy Power Supply

SFP Slot x 12
10/100/1000BASE-T Combo Port x 4



- Virtual Stack (SIM)
- SNMP
- OSPF
- VRRP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- sFlow
- L4 ACL
- LLDP

DGS-3627

Redundancy Power Supply

Physical Stack

10G Expansion

10/100/1000BASE-T x 24
SFP Combo Slot x 4
10G Expansion Slot x 3



- Virtual Stack (SIM)
- SNMP
- OSPF
- VRRP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- sFlow
- L4 ACL
- LLDP

Optional
DEM-410X (10G Expansion Module)
DEM-410CX (10G Expansion Module)

DGS-3627G

Redundancy Power Supply

Physical Stack

10G Expansion

SFP Slot x 24
10/100/1000BASE-T Combo Port x 4
10G Expansion Slot x 3



- Virtual Stack (SIM)
- SNMP
- OSPF
- VRRP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- sFlow
- L4 ACL
- LLDP

Optional
DEM-410X (10G Expansion Module)
DEM-410CX (10G Expansion Module)

DGS-3650

Redundancy Power Supply

Physical Stack

10G Expansion

10/100/1000BASE-T x 48
SFP Combo Slot x 4
10G Expansion Slot x 2



- Virtual Stack (SIM)
- SNMP
- OSPF
- VRRP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- sFlow
- L4 ACL
- LLDP

Optional
DEM-410X (10G Expansion Module)
DEM-410CX (10G Expansion Module)

DGS-3600 Series Gigabit xStack Layer 3 Core Switches

Model	DGS-3612	DGS-3612G	DGS-3627	DGS-3627G	DGS-3650
Standard	IEEE 802.3ae 10GBASE-SR/LR; IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.1ab 1000BASE-T; IEEE 802.3z 1000BASE-SX/LX; IEEE 802.3v Flow Control; IEEE 802.3ad Link Aggregation; IEEE 802.1v Protocol Based VLAN; IEEE 802.1Q VLAN Tagging; IEEE 802.1D Spanning Tree (STP compatible); IEEE 802.1w Rapid Spanning Tree; IEEE 802.1s Multiple Spanning Tree; IEEE 802.1p Class of Services, Priority, Protocol; IEEE 802.1X Port Based Network Access Control				
Interface	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45) SFP Slot	4 (Combo with 4 1000BASE-T Ports)	4 (Combo with 4 1000BASE-T Ports)	4 (Combo with 4 SFP Ports)	48 (Combo with 4 1000BASE-T Ports)
10 Gigabit Uplink Expansion Slot	-	12	3	3	2
RS-232C Port (DB-9 Pin Female)	-	-	1	-	-
Auto Negotiation	-	-	✓	-	-
Auto MDI/MDIX	-	-	✓	-	-
Flow Control	IEEE 802.3 Flow Control (Full Duplex) Back Pressure (Half Duplex) Head-of-Line (HOL) Blocking Prevention	IEEE 802.3 Flow Control (Full Duplex)	IEEE 802.3 Flow Control (Full Duplex) Back Pressure (Half Duplex) Head-of-Line (HOL) Blocking Prevention	IEEE 802.3 Flow Control (Full Duplex)	IEEE 802.3 Flow Control (Full Duplex) Back Pressure (Half Duplex) Head-of-Line (HOL) Blocking Prevention
10 Gigabit Uplink (optional)	XFP Expansion Module CX4 Expansion Module 10GBASE-SR (DEM-421X) 300m Multi-Mode Fiber 10GBASE-LR (DEM-422XT) 10km Single-Mode Fiber 10GBASE-ER (DEM-423XT) 40km Single-Mode Fiber	- - - - - - -	- - - - - - -	DEM-410X DEM-410CX	- - - - - - -
Cable	10BASE-T 100BASE-TX 1000BASE-T Console Port	Category 3 and above, UTP/STP Cable (within 100 meter) Category 5 and above, UTP/STP Cable (within 100 meter) Enhanced Category 5 and above, UTP/STP Cable (within 100 meter) RS-232C Straight Cable (DB-9 Pin Female)			
Stacking	Virtual Stack (D-Link SIM) Physical Stack Bandwidth (Maximum)	- -	- -	32 40Gbps	12 40Gbps
Switch Features	Switch Fabric Packet Forwarding Rate (64Byte) Packet Buffer No. of MAC Addresses SDRAM Flash Memory	24Gbps 17.86Mpps - - -	24Gbps 17.86Mpps - - -	108Gbps 80.36Mpps 2MByte 16K Static MAC Address Table : 256	136Gbps 101.19Mpps 2MByte 16K Static MAC Address Table : 256
Power	Power Supply Power Consumption (Max.) Redundancy Power Supply	60.0W -	60.0W -	72.3W DPS-500	77.0W DPS-500
Environmental	Operating Temperature Storage Temperature Operating Humidity Storage Humidity	0 to 40 °C -10 to 70 °C 10 to 90% (Non-Condensing) 5 to 95% (Non-Condensing)			
Dimension	W x D x H mm	441 x 369 x 44 mm; 19-inch Standard Rackmount; 1U Height			
Certification	EMI Certification	CE Class A / FCC Class A / VCCI Class A / C-Tick Class A			
Package Contents	DGS-3600 Series Switch; Power Cord; Console Cable; Mounting Kit; CD with Manual / CLI / D-View Module				
L2 Features	Jumbo Frame : 9,216Byte (Maximum) IGMP Snooping : v1, v2, v3 Snooping Group : 1K; Static Multicast Address : 64 MLD Snooping : v1, v2* Snooping Group : 1K; Static Multicast Address : 64 Spanning Tree : IEEE 802.1D STP; IEEE 802.1w RSTP; IEEE 802.1s MSTP STP Loopback Detection; BPDU Filtering per Port and per Device IEEE 802.3ad Link Aggregation : 32 Groups per Device; 8 Ports or 2 10-Gigabit Ports per Group Port Mirroring : One-to-One Mode; Many-to-One Mode; ACL Mode* Trunking/Mirroring across Stack* Loopback Detection 4.0				
VLAN	IEEE 802.1Q Tag VLAN; Port-Based VLAN; IEEE 802.1v Protocol Based VLAN VLAN Groups : Total 4K Static VLAN Groups : Max. 4K; Dynamic VLAN Groups : Max. 255 VLAN ID : 1-4094 Guest VLAN; Double VLAN*				
L3 Features	GVRP Routing Entries : 12K Static Entries : IPv4 : 256 / IPv6 : 128 Dynamic Entries : IPv4 : 12K / IPv6 : 6K L3 Forwarding Entries : 8K (IPv4) / 8K (IPv6) / 4K Floating Static Route; Policy-Based Routing RIP v1, v2; Secondary Default Route; OSPF v2 / OSPF Passive Interface / OSPF NSSA / OSPF Equal Cost Route* Multi Path Routing supporting Equal Cost (EC) and Weighted Cost (WC); VRRP; IP interface : 256; RIPng (IPv6)*; Multiple IP Interface in each VLAN : 256 IPv6 Ready Phase 1*				
Multicast	Multicast Groups : 1K Static Multicast : 64 / Dynamic Multicast : 1K IGMP v1/v2/v3; DVMRP v3; PIM DM (IPv4); PIM SM (IPv4)*; Per port Limit IP Multicast Address Range for Control Packet Multicast Duplication : Up to 32 VLAN per Port				
QoS (Quality of Service)	Per Port Bandwidth Control (Granularity 64Kbps); Per Flow Bandwidth Control (Granularity 64Kbps) IEEE 802.1p Priority Queues; 8 Queues per Port Queue Handling : WRR (Weighted Round Robin) and Strict Modes CoS Based On : Switch Port; VLAN ID; 802.1p Priority Queues; MAC Address; DSCP; TOS; Protocol Type; IPv4/IPv6 Address; IPv6 Traffic Class; IPv6 Flow Label; TCP/UDP Port; User-Defined Packet Content Committed Information Rate (CIR) : 1Kbps				
ACL (Access Control List)	Up to 8 Profiles; Up to 1792 Access Rules (Each Rule can Set Its Own Port Range); ACL Based On : Switch Port; VLAN ID; 802.1p Priority Queues; MAC Address; Protocol Type; DSCP; IPv4/IPv6 Address; IPv6 Traffic Class; IPv6 Flow Label; TCP/UDP Port; User-Defined Packet Content; Time (Time-Based ACL) CPU Interface Filtering				
Security	RADIUS/TACACS+; SSH v2/SSL v3; Port Security : Up to 16 MAC Addresses per Port IEEE 802.1X Port Based; MAC Based Access Control; 16 MAC Addresses per Port Web Based Authentication; MAC Address Authentication; Traffic Segmentation; Broadcast/Multicast Storm Control IP-MAC Binding : Up to 500 Entries per Device IP-MAC-Port Binding : Up to 500 Entries per Device Supporting ARP and ACL Modes D-Link Safeguard Engine				
Management	D-Link Single IP Management (SIM); Web-Based GUI (with Traffic Monitoring); CLI Telnet Server; Telnet Client*; TFTP Client; SNMP v1/v2/v3; SNMP Trap on MAC Notification; RMON v1 (4 Groups) RMON v2 (ProtocConfig Group); BootP/DHCP Client; DHCP Auto-Configuration; DHCP Relay Option 82; DHCP Server; System Log; CPU Monitoring; IP Multicast; sFlow; LLDP; Trap; Alarm; Log Level Setup; RPS Fan Log; Show Config Command; Multiple Image; Multiple Configuration; Flash File System; Port Description; 0.0.0.0 IP Setup; Login Banner; Editable System Prompt				
MIBs	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); IEEE 802.3 MAU (RFC2658); RMON (RFC1757,2819); RMONv2 (RFC2021); Ether-Like (RFC2655); IEEE 802.1p (RFC2674); RADIUS Authentication Client (RFC2618); IF (RFC2233,2863); RADIUS Accounting Client (RFC2620); IGMP (RFC2933); RIPv2 (RFC1724); IPv4 PIM (RFC2934); OSPFv2 (RFC1850); VRRP (RFC2787); IP Forwarding Table - CIDR (RFC2096); IPv4 Multicast Routing (RFC2932); L2/L3 Specific; D-Link Private MIB				

* Feature Available in Future Firmware Upgrade



Fast Ethernet 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.

DES-3800 series can be easily stacked and configured with any switches supporting D-Link's Single IP Management, including D-Link xStack core switches, to form part of a multi-level network structures with backbone and centralized high-speed servers.

DES-3800 series provides a complete set of security features for connectivity and access control, including L2/L3/L4 Access Control List (ACL), ARP storm control and MAC address control.



DES-3828

Redundancy Power Supply

10/100BASE-TX x 24
10/100/1000BASE-T x 4
SFP Combo Slot x 2



- Virtual Stack (SIM)
- SNMP
- OSPF
- VRRP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- ZoneDefense
- L4 ACL

DES-3828DC

DC Power Supply

10/100BASE-TX x 24
10/100/1000BASE-T x 4
SFP Combo Slot x 2



- Virtual Stack (SIM)
- SNMP
- OSPF
- VRRP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- ZoneDefense
- L4 ACL

DES-3828P

Redundancy Power Supply

PoE Supply

10/100BASE-TX x 24 (PoE)
10/100/1000BASE-T x 4
SFP Combo Slot x 2



- Virtual Stack (SIM)
- SNMP
- OSPF
- VRRP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- ZoneDefense
- L4 ACL

DES-3852

Redundancy Power Supply

10/100BASE-TX x 48
10/100/1000BASE-T x 4
SFP Combo Slot x 2



- Virtual Stack (SIM)
- SNMP
- OSPF
- VRRP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- ZoneDefense
- L4 ACL

DES-3800 Series Fast Ethernet Layer 3 Core Switches

Model	DES-3828	DES-3828DC	DES-3828P	DES-3852
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.1ab 1000BASE-T; IEEE 802.3z 1000BASE-SX/LX/ZX; IEEE 802.3x Flow Control; IEEE 802.3ad Link Aggregation; IEEE 802.1Q VLAN Tagging; IEEE 802.1D Spanning Tree (STP compatible); IEEE 802.1w Rapid Spanning Tree; IEEE 802.1s Multiple Spanning Tree; IEEE 802.1p Class of Service; IEEE 802.1X Port Based Network Access Control; IEEE 802.3af Power over Ethernet (DES-3828P only)			
Interface	10BASE/100BASE-TX (PoE) Port (RJ-45) 10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45) SFP Slot	24	24 (24)	48
		4		
		4 (Combo with 4 100BASE-TX Ports)		
	RS-232C Port (DB-9 Pin Female) Auto Negotiation Auto MDI/MDIX Flow Control		1	
			✓	
			✓	
		IEEE 802.3 Flow Control (Full Duplex); Back Pressure (Half Duplex); Head-of-Line (HOL) Blocking Prevention		
Cable	10BASE-T 100BASE-TX 1000BASE-T Console Port PoE Port	Category 3 and above, UTP/STP Cable (within 100 meter) Category 5 and above, UTP/STP Cable (within 100 meter) Enhanced Category 5 and above, UTP/STP Cable (within 100 meter) RS-232C Straight Cable (DB-9 Pin Female)		Category 5 and above, UTP Cable (all 8 pins are used)
Stacking	Virtual Stack (D-Link SIM)	32		
Switch Features	Switch Fabric Packet Forwarding Rate (64Byte) Packet Buffer Size SDRAM Flash Memory	12.8Gbps 9.5Mpps	32MByte 128MByte 16MByte	15.7Gbps 11.7Mpps
Power	Power Supply Power Consumption (Max.) PoE Redundancy Power Supply	100 to 240VAC, 50/60Hz, Internal Power Supply 24W	48VDC 395.2W	100 to 240VAC, 50/60Hz, Internal Power Supply 47W PoE Format : Alternative A Max. Power Supply : 370W Per Port : 15.4W DPS-200
Environmental	Operating Temperature Storage Temperature Operating Humidity Storage Humidity	0 to 40 °C -40 to 70 °C 10 to 90% (Non-Condensing) 5 to 95% (Non-Condensing)		
Dimension	W x D x H mm	441x 389 x 44 mm; 19-inch Standard Rackmount; 1U Height	441 x 369 x 44; 19-inch Standard Rackmount; 1U Height	441 x 310 x 44; 19-inch Standard Rackmount; 1U Height
Weight		4.24kg	6.02kg	4.25kg
Certification	EMI Certification	CE Class A / FCC Class A / VCCI Class A / C-Tick Class A		
Package Contents		DES-3800 Series Switch; Power Cord; Console Cable; Mounting Kit, CD with Manual / CLI / D-View Module		
L2 Features		Jumbo Frame : 9,216Byte (Maximum) IGMP Snooping : v1, v2, v3 Static Multicast Address : 256 Spanning Tree : IEEE 802.1D STP, IEEE 802.1w RSTP; IEEE 802.1s MSTP STP Loopback Detection; BPDU Filtering Loopback Detection 4.0; MLD Snooping; IGMP Fast Leave; IEEE 802.3ad Link Aggregation : 32 Groups per Device; 8 Ports per Group Port Mirroring : One-to-One Mode; Many-to-One Mode; Per-Flow Port Mirroring MAC Address Table : Maximum 16K / Static : 256		
VLAN		Port-Based VLAN; IEEE 802.1Q Tag VLAN; IEEE 802.1v Protocol Based VLAN; Double VLAN Dynamic VLAN; GVRP; VLAN Group (Static : 4K / Dynamic : 255) VLAN ID : 1-4094		
L3 Features		IPv4 Static Route Entries : 128; 2nd Default Route; RIP v1, v2 : 2K (including Static Route) OSPF : 2K (including Static Route, share with RIP); OSPF Passive Interface; OSPF Equal Cost Multi Route; Routing Table Size : 2K (Hardware Routing) L3 Forwarding Table : 4K (Hardware Forwarding) No. of IP Interface : 64; Multiple IP per VLAN : 10; Floating Static Route (IPv4); VRRP; Route Preference; Proxy ARP		
Multicast		Multicast Table : 256; IGMP v1/v2/v3; DVMRP v3; PIM DM; PIM SM; Per Port Limit IP Multicast Address Range		
QoS (Quality of Service)		Per Port Bandwidth Control (Granularity 64kbps); IEEE 802.1p Priority Queues; 8 Queues per Port CoS Based On : Port; MAC Destination/Source Addresses; TOS; DSCP; IPv4 Destination/Source Addresses; TCP/UDP Port Weighted Random Early Detection (WRED) Congestion Control		
ACL (Access Control List)		Up to 8 Profiles; Up to 800 Rules per Device ACL Based On : Port; MAC Address; IEEE 802.1p Priority Queues; VLAN; DSCP; Protocol; IPv4/IPv6 IP Address; IPv6 Traffic Class; IPv6 Flow Label; TCP/UDP Port; TCP/UDP Payload; Time-Based ACL*; CPU Interface Filtering		
Security		RADIUS Authentication; TACACS+ Authentication; SSH 1.5/v2; SSL v2; Port Security : Up to 16 MAC Addresses per Port IEEE 802.1X Port Based Authentication; IEEE 802.1X MAC Based Authentication; Web Authentication; MAC Address Authentication; Broadcast Storm Control; Traffic Segmentation; Guest VLAN; IP-MAC Binding; IP-MAC-Port Binding (500 Entries per Device); RADIUS Accounting; D-Link Safeguard Engine; Microsoft NAP Quarantine		
Management		D-Link Single IP Management (SIM); Web-Based GUI; CLI; Telnet Server; Telnet Client; TFTP Client; SMTP Client; SNMP v1/v2c/v3; SNMP Trap on MAC Notification; RMON v1/v2; BootP / DHCP Client; DHCP Auto-Configuration; DHCP Relay Option 82; System Log; RPS Fan Log; CPU Monitoring; Login Banner; System Prompt Compilation; Trap; Alarm; Log Setup Store 2 Firmware Image; Store 2 Configuration File; Port Description; Show Config Command; 0.0.0.0 IP Setup; 3-Level User Access Right; Password Recovery		
MIBs		MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); RMON (RFC1757,2819); RMONv2 (RFC2021); Ether-Like (RFC1643,2358,2665); IEEE 802.1p (RFC2674); IF (RFC2233,2863); RADIUS Accounting Client (RFC2620); RADIUS Authentication Client (RFC2618); RIP v2 (RFC1724); OSPF v2 (RFC1850); IP Forwarding Table - CIDR (RFC2096); VRRP (RFC2787); IPv4 Multicast Routing (RFC2932); IPv4 PIM (RFC2934); IGMPv3; D-Link Private MIB		

* Feature Available in Future Firmware Upgrade



Gigabit xStack Layer 2 Edge Switches

DGS-3400 Series



The xStack DGS-3400 series consists of L2 Gigabit switches that deliver performance, flexibility, security, multi-layer QoS and redundant power supply option for SMB and enterprises.

With high Gigabit port densities for desktop connections, SFP fiber connectivity, 10-Gigabit uplink options and enhanced Layer 2 functions, these switches comprise the workgroup access-layer stack for seamless integration with L3 core switches to form part of a multi-level network structure with high-speed backbone and centralized servers.



DGS-3426

- Redundancy Power Supply
- Physical Stack
- 10G Expansion

10/100/1000BASE-T x 24
SFP Combo Slot x 4
10G Expansion Slot x 2



- Virtual Stack (SIM)
- SNMP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- ZoneDefense
- L4 ACL

Optional
DEM-410X (10G Expansion Module)
DEM-410CX (10G Expansion Module)

DGS-3426P

- Redundancy Power Supply
- Physical Stack
- 10G Expansion

PoE Supply
10/100/1000BASE-T x 24 (PoE)
SFP Combo Slot x 4
10G Expansion Slot x 2



- Virtual Stack (SIM)
- SNMP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- ZoneDefense
- L4 ACL

Optional
DEM-410X (10G Expansion Module)
DEM-410CX (10G Expansion Module)

DGS-3427

- Redundancy Power Supply
- Physical Stack
- 10G Expansion

10/100/1000BASE-T x 24
SFP Combo Slot x 4
10G Expansion Slot x 3



- Virtual Stack (SIM)
- SNMP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- ZoneDefense
- L4 ACL

Optional
DEM-410X (10G Expansion Module)
DEM-410CX (10G Expansion Module)

DGS-3450

- Redundancy Power Supply
- Physical Stack
- 10G Expansion

10/100/1000BASE-T x 48
SFP Combo Slot x 4
10G Expansion Slot x 2



- Virtual Stack (SIM)
- SNMP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- ZoneDefense
- L4 ACL

Optional
DEM-410X (10G Expansion Module)
DEM-410CX (10G Expansion Module)

DGS-3400 Series Gigabit xStack Layer 2 Edge Switches

Model	DGS-3426	DGS-3426P	DGS-3427	DGS-3450
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.1ab 1000BASE-T; IEEE 802.3z 1000BASE-LX/SX/ZX; IEEE 802.3ae 10GBASE-SR/LR; IEEE 802.3x Flow Control; IEEE 802.3ad Link Aggregation; IEEE 802.1Q VLAN Tagging; IEEE 802.1v Protocol Based VLAN; IEEE 802.1D Spanning Tree (STP compatible); IEEE 802.1w Rapid Spanning Tree; IEEE 802.1s Multiple Spanning Tree; IEEE 802.1p Class of Service; IEEE 802.1X Port Based Network Access Control; IEEE 802.3af Power Over Ethernet (DGS-3426P only)			
Interface	10BASE-T/100BASE-TX/1000BASE-T (PoE) Port (RJ-45) SFP Slot	24	24 (24)	24
	10 Gigabit Uplink Expansion Slot	4 (Combo with 4 1000BASE-T Ports)		
	RS-232C Port (DB-9 Pin Female)	2	3	2
	Auto Negotiation	✓		
	Auto MDI/MDIX	✓		
	Flow Control	IEEE 802.3 Flow Control (Full Duplex); Back Pressure (Half Duplex); Head-of-Line (HOL) Blocking Prevention		
Cable	10BASE-T	Category 3 and above, UTP/STP Cable (within 100 meter)		
	100BASE-TX	Category 5 and above, UTP/STP Cable (within 100 meter)		
	1000BASE-T	Enhanced Category 5 and above, UTP/STP Cable (within 100 meter)		
	Console Port	RS-232C Straight Cable (DB-9 Pin Female)		
	PoE Port	-	Category 5 and above, UTP Cable (all 8 pins are used)	-
Stacking	Virtual Stack (D-Link SIM)	32		
	Physical Stack / Bandwidth	12 / 40Gbps		
10 Gigabit Uplink (optional)	XFP Expansion Module	DEM-410X		
	CX4 Expansion Module	DEM-410CX		
	10GBASE-SR (DEM-421X)	✓	✓	✓
	300m Multi-Mode Fiber	✓	✓	✓
	10GBASE-LR (DEM-422XT)	✓	✓	✓
	10km Single-Mode Fiber	✓	✓	✓
	10GBASE-ER (DEM-422XT)	✓	✓	✓
	40km Single-Mode Fiber	✓	✓	✓
Switch Features	Switch Fabric	88Gbps		108Gbps
	Packet Forwarding Rate (64Byte)	65.47Mpps		80.36Mpps
	Packet Buffer	750KByte		
	SDRAM	256MByte		
	Flash Memory	16MByte		
Power	Power Supply	100 to 240VAC, 50/60Hz, Internal Power Supply		
	Power Consumption (Max.)	70.8W	433.0W	71.8W
	PoE	-	PoE Format : Alternative A Max. Power Supply : 370W Per Port : 15.4W	-
	Redundancy Power Supply	DPS-500	DPS-600	DPS-500
Environmental	Operating Temperature	0 to 40 °C		
	Storage Temperature	-10 to 70 °C		
	Operating Humidity	10 to 90% RH		
	Storage Humidity	5 to 90% RH		
Dimension	W x D x H mm	441 (W) x 389 (D) x 44 (H) mm; 19-inch Standard Rackmount Width; 1U Height		
Weight		5.42kg	5.82kg	5.51kg
Certification	EMI Certification	CE Class A / FCC Class A / VCCI Class A / C-Tick Class A		
Package Contents	DGS-3400 Series Switch; Power Cord; Console Cable; Mounting Kit; Rubber Feet x 4; CD with Manual / CLI / D-View Module			
L2 Features	Jumbo Frame : 9.216Byte (Maximum) IGMP Snooping : v1, v2, v3 Snooping Group : 1K; Static Multicast Address : 64 MLD Snooping : v1, v2* Snooping Group : 511; Static Multicast Address : 64 Spanning Tree : IEEE 802.1D STP; IEEE 802.1w RSTP; IEEE 802.1s MSTP STP Loopback Detection; BPDU Filtering IEEE 802.3ad Link Aggregation : 32 Groups per Device; 8 Ports per Group Port Mirroring : One-to-One Mode; Many-to-One Mode; ACL Mode* Trunking / Mirroring Across Stack; MAC Address Table : Maximum 8K/Static : 256 Loopback Detection 4.0 (STP Independent)*			
VLAN	Port-Based VLAN; IEEE 802.1Q Tag VLAN; IEEE 802.1v Protocol Based VLAN Dynamic VLAN; GVRP; VLAN Group (Static : 4K / Dynamic : 255) VLAN ID : 1-4094; ISM VLAN Double VLAN; MAC-Based VLAN*			
L3 Features	Routing Table Size (IPv4 : 128 / IPv6 : 128); L3 Forwarding Table (IPv4 : 2K / IPv6 : 1K) Floating Static Route (IPv4 / IPv6); IP Interface : 32; IPv6 Tunneling*; RIP*			
Multicast	Multicast Table : 1K			
QoS (Quality of Service)	Per Port Bandwidth Control (Granularity 64kbps); Per Flow Bandwidth Control (Granularity 64kbps) IEEE 802.1p Priority Queues; 8 Queues per Port Queue Handling : WRR (Weighted Round Robin) and Strict Modes CoS Based On : Switch Port; MAC Address; 802.1p Priority; VLAN; Protocol Type; TOS; DSCP; TCP/UDP; IPv4 / IPv6 Address; IPv6 Traffic Class; IPv6 Flow Label			
ACL (Access Control List)	Up to 6 Profiles; Up to 768 Rules per Device ACL Based On : Switch Port; MAC Address; IEEE 802.1p Priority Queue; VLAN; DSCP; TOS; Protocol; IPv4 / IPv6 Address; IPv6 Traffic Class; IPv6 Flow Label; TCP/UDP Port-Based; Time-Based ACL CPU Interface Filtering			
Security	RADIUS/TACACS/TACACS+ Authentication; SSH v2; SSL v3; Port Security : Up to 16 MAC Addresses per Port IEEE 802.1X Port Based Authentication; IEEE 802.1X MAC Based Authentication; Web Authentication; MAC Address Authentication Broadcast Storm Control : Minimum 1 Packet per Second; Microsoft NAP Quarantine; Traffic Segmentation; Guest VLAN; IP-MAC Binding (500 Entries per Device); IP-MAC-Port Binding (500 Entries per Device) : ARP / ACL Mode; D-Link SafeGuard Engine			
Management	D-Link Single IP Management (SIM); LLDP*; Web-Based GUI (with traffic monitoring, MAC Address Search); CLI; Telnet Server; Telnet Client*; TFTP Client; SNMP v1/v2/v3; SNMP Trap on MAC Notification; RMON v1/v2; BootP / DHCP Client; DHCP Auto-Configuration; DHCP Relay Option 82; System Log; CPU Monitoring; Login Banner; System Prompt Compilation; Trap; Alarm; Log Level Setup; Flash File System; Store 2 Firmware Images; Store 2 Configuration Files; sFlow*; Cable Diagnostic*; Port Description; Show Config Command; 0.0.0.0 IP Setup			
MIBs	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); RMON (RFC1757, 2819); RMONv2 (RFC2021); Ether-Like (RFC1643, 2358, 2665); IEEE 802.1p (RFC2674); IF (RFC2233, 2863); RADIUS Accounting Client (RFC2620); RADIUS Authentication Client (RFC2618); Ping/Traceroute (RFC2925)*; D-Link Private MIB			

* Feature Available in Future Firmware Upgrade



Fast Ethernet xStack Layer 2 Edge Switches



DES-3500 Series

The xStack DES-3500 series consists of L2 10/100Mbps switches that deliver performance, flexible expansion, robust security, multi-layer QoS and redundant power supply option.

DES-3500 series is capable of forming an Ethernet workgroup stack with flexible Gigabit uplinks. Without any barrier of cable distance, physical stacking limitations, or stacking cable, your stack can comprise units that are located anywhere on the network, thus minimizing the impact of any single point of failure.

DES-3500 series provides a complete set of security features for connectivity and access control. It also provides central management for administration access via RADIUS and TACACS+.

DES-3528/3552 Series inherits most of the features of DES-3500 Series with addition new and enhanced features such as physical stackability. Better switching capacity, security control, IPv6 MLD Snooping and multicast Support.



DES-3526

Redundancy Power Supply

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

Virtual Stack (SIM) | SNMP | VLAN
Quarantine | ZoneDefense | L4 ACL
802.1X Authentication



DES-3526DC

DC Power Supply

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

Virtual Stack (SIM) | SNMP | VLAN
Quarantine | ZoneDefense | L4 ACL
802.1X Authentication



DES-3550

Redundancy Power Supply

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

Virtual Stack (SIM) | SNMP | VLAN
Quarantine | ZoneDefense | L4 ACL
802.1X Authentication



DES-3528

Redundancy Power Supply | Physical Stack

10/100BASE-TX x 24
10/100/1000BASE-T x 4
SFP Combo Slot x 2
Gigabit Stacking Port x 2

Virtual Stack (SIM) | MLD Snooping | Web Authentication
MAC Authentication | ZoneDefense | Traffic Segmentation
D-Link Safeguard Engine | 802.1X Authentication



DES-3528DC

Redundancy Power Supply | Physical Stack | DC Power Supply

10/100BASE-TX x 24
10/100/1000BASE-T x 4
SFP Combo Slot x 2
Gigabit Stacking Port x 2

Virtual Stack (SIM) | MLD Snooping | Web Authentication
MAC Authentication | ZoneDefense | Traffic Segmentation
D-Link Safeguard Engine | 802.1X Authentication



DES-3528P

Redundancy Power Supply | Physical Stack | PoE Supply

10/100BASE-TX x 24 (PoE)
10/100/1000BASE-T x 4
SFP Combo Slot x 2
Gigabit Stacking Port x 2

Virtual Stack (SIM) | MLD Snooping | Web Authentication
MAC Authentication | ZoneDefense | Traffic Segmentation
D-Link Safeguard Engine | 802.1X Authentication



DES-3552

Redundancy Power Supply | Physical Stack

10/100BASE-TX x 48
10/100/1000BASE-T x 4
SFP Combo Slot x 2
Gigabit Stacking Port x 2

Virtual Stack (SIM) | MLD Snooping | Web Authentication
MAC Authentication | ZoneDefense | Traffic Segmentation
D-Link Safeguard Engine | 802.1X Authentication



DES-3552P

Redundancy Power Supply | Physical Stack | PoE Supply

10/100BASE-TX x 48 (PoE)
10/100/1000BASE-T x 4
SFP Combo Slot x 2
Gigabit Stacking Port x 2

Virtual Stack (SIM) | MLD Snooping | Web Authentication
MAC Authentication | ZoneDefense | Traffic Segmentation
D-Link Safeguard Engine | 802.1X Authentication



DES-3500 & DES-3528/3552 Series Fast Ethernet xStack Layer 2 Edge Switches

Model	DES-3526	DES-3526DC	DES-3550	DES-3528	DES-3528DC	DES-3528P	DES-3552	DES-3552P
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.1ab 1000BASE-T; IEEE 802.3z 1000BASE-SX/LX/ZX; IEEE 802.3x Flow Control; IEEE 802.3ad Link Aggregation; IEEE 802.1Q VLAN Tagging; IEEE 802.1D Spanning Tree (STP compatible); IEEE 802.1w Rapid Spanning Tree; IEEE 802.1s Multiple Spanning Tree; IEEE 802.1p Class of Service; IEEE 802.1X Port Based Network Access Control							
Interface	10BASE/100BASE-TX (PoE) Port (RJ-45)	24	48	24	24	48	48	48
	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	2		4				
	SFP Slot	2 (Combo with 2 100BASE-TX Ports)		2 (Combo with 2 100BASE-TX Ports)				
	RS-232C Port (DB-9 Pin Female)			1				
	Auto Negotiation			✓				
	Auto MDI/MDIX			✓				
	Flow Control	IEEE 802.3 Flow Control (Full Duplex); Back Pressure (Half Duplex); Head-of-Line (HOL) Blocking Prevention						
Cable	10BASE-T	Category 3 and above, UTP/STP Cable (within 100 meter)						
	100BASE-TX	Category 5 and above, UTP/STP Cable (within 100 meter)						
	1000BASE-T	Enhanced Category 5 and above, UTP/STP Cable (within 100 meter)						
	Console Port	RS-232C Straight Cable (DB-9 Pin Female)						
Stacking	Physical Stacking			8 Units Per Stack (Linear/Ring) *				
	Virtual Stack (D-Link SIM)			32				
Switch Features	Switch Fabric	8.8Gbps		13.6Gbps		12.8Gbps		17.6Gbps
	Packet Forwarding Rate (64Byte)	6.6Mpps		10.1Mpps		9.5Mpps		13.1Mpps
	SDRAM	64MByte		128MByte		128MByte		
	Flash Memory	8MByte		16MByte (up to 32Mbyte)				
Power	Power Supply	100 to 240VAC, 50/60Hz, Internal Power Supply	48VDC	100 to 240VAC, 50/60Hz, Internal Power Supply	48VDC	100 to 240VAC, 50/60Hz, Internal Power Supply		
	Power Consumption (Max.)	23W	23W	40W	26.8W	TBA	TBA	TBA
	Redundancy Power Supply	DPS-200	-	DPS-200	DPS-200	-	DPS-600	DPS-600
Environmental	Operating Temperature	0 to 40 °C		0 to 40 °C		0 to 45 °C		
	Storage Temperature	-40 to 70 °C		-40 to 70 °C		-40 to 70 °C		
	Operating Humidity	5 to 95% (Non-Condensing)		20 to 80% (Non-Condensing)		20 to 80% (Non-Condensing)		
	Storage Humidity	5 to 95% (Non-Condensing)		10 to 90% (Non-Condensing)		10 to 90% (Non-Condensing)		
Dimension	W x D x H mm	441 x 207 x 44; 19-inch Rackmount; 1U Height	441 x 309 x 44; 19-inch Rackmount; 1U Height	441 x 210 x 44; 19-inch Rackmount; 1U Height	441 x 310 x 44; 19-inch Rackmount; 1U Height	441 x 310 x 44; 19-inch Rackmount; 1U Height	441 x 370 x 44; 19-inch Rackmount; 1U Height	
Weight		2.56kg	2.50kg	2.51kg	TBA	TBA	TBA	TBA
Certification	EMI Certification	CE Class A / FCC Class A / VCCI Class A / C-Tick						
Package Contents		DES-3500 Series Switch; Power Cord; Console Cable; Mounting Kit; Rubber Feet x 4; CD with Manual / CLI / D-View Module			DES-3528/52 Series Switch; Power Cord; Console Cable; Mounting Kit; Rubber Feet x 4; CD with Manual / D-View Module			
L2 Features		IGMP Snooping : v1, v2 Static Multicast Address : 128 Spanning Tree : IEEE 802.1D STP; IEEE 802.1w RSTP; IEEE 802.1s MSTP BPDU Filtering IEEE 802.3ad Link Aggregation : 6 Groups per Device; 8 Ports per Group Port Mirroring; STP Loopback Detection; MAC Address Table : Maximum 8K / Static : 256 Loopback Detection 4.0 (STP Independent)			IGMP Snooping : v1, v2, v3 IGMP Snooping Group : 256; Static Multicast Address : 64 IGMP Snooping per VLAN; IGMP Snooping Fast Leave*; IGMP Proxy* MLD Snooping : v1, v2 MLD Snooping Group : 256; Static Multicast Address : 64 MLD Snooping per VLAN Spanning Tree : IEEE 802.1D STP; IEEE 802.1w RSTP BPDU Filtering IEEE 802.3ad Link Aggregation : 8 Groups per Device; 8 Ports per Group Port Mirroring : One-to-One; Many-to-One; Per Flow (ACL mode) MAC Address Table : Maximum 16K / Static : 1536 Loopback Detection 4.0 (STP Independent) LLDP; Jumbo Frame : Up to 9,216 Bytes			
VLAN		Port-Based VLAN; IEEE 802.1Q Tag VLAN; Asymmetric VLAN; VLAN Group : 255 (Total Static / Dynamic) VLAN ID : 1-4094 Dynamic VLAN; GVRP			Port-Based VLAN; IEEE 802.1Q Tag VLAN; VLAN ID : 1-4094 Asymmetric VLAN; GVRP : 4K VLAN (255 Dynamic) Groups VLAN Group : 4094 (Total); Max 4094 Static / 255 Dynamic 802.1v; Double VLAN (Q in Q); MAC-Based VLAN; ISM-VLAN : Up to 3 ISM VLANs Each member VLAN can join up to 16 Multicast group ranges Voice VLAN*			
L3 Features					IP Multicast Filtering : Up to 256 IP Multicast Groups per Port; 24 Profiles per System Static Route* : Max. 16 Static Route Entries Static ARP : Max. 255 Static Route Entries Policy Based Route (based on ACL)*; Proxy ARP*			
Multicast		Multicast Table : 128						
QoS (Quality of Service)		IEEE 802.1p Priority Queues; 4 Queues per Port Queue Handling : WRR (Weighted Round Robin) & Strict Modes CoS Based On : 802.1p Priority; DSCP; TOS; TCP/UDP Port; MAC Dest/Source Addresses (DES-3526 only); IP Address			IEEE 802.1p Priority Queues; 8 Queues per Port Queue Handling : WRR (Weighted Round Robin); Strict; WRR+Strict CoS Based On : 802.1p Priority Queue; VLAN; MAC Address; Ether Type; IP Address; DSCP; Protocol Type; TCP/UDP Port Number; IPv6 Traffic Class; IPv6 Flow Label; User Defined Packet Content Per Port Bandwidth Control (Granularity 64kbps); Per Flow Bandwidth Control (Granularity 64kbps)			
ACL (Access Control List)		Up to 800 Rules per Device			Up to 800 Rules per Device			
Security		RADIUS Authentication; TACACS+ Authentication; SSH v1/v2; SSL; Guest VLAN; Port Security IEEE 802.1X Port-Based Access Control; IEEE 802.1X MAC-Based Access Control : 16 MACs per Port; Microsoft NAP Quarantine; Traffic Segmentation; IP-MAC binding; IP-MAC-Port binding; Broadcast / Multicast Storm Control; D-Link Safeguard Engine			RADIUS Authentication; TACACS+ Authentication; SSH v2; SSL v1/v2/v3; Port Security IEEE 802.1X & MAC-Based Access Control Guest VLAN; IEEE 802.1X Port-Based Access Control; IEEE 802.1X MAC-Based Access Control : 16 MACs per Port; Microsoft NAP Quarantine; Traffic Segmentation; IP-MAC-Port Binding; Unicast / Broadcast / Multicast Storm Control; Web-Based Access Control; MAC-Based Access Control; D-Link Safeguard Engine			
Management		D-Link Single IP Management (SIM); Telnet Server; TFTP Client; BootP/DHCP Client; DHCP Auto-Configuration; SNMP v1/v2c/v3; Web-Based GUI; System Log; Store 2 Firmware Image; Port Description; CPU Monitoring; Show Config Command; SNTF; Password Recovery; Telnet Client; Trap			D-Link Single IP Management (SIM); Telnet Server; Telnet Client*; TFTP Client; BootP/DHCP Client; DHCP Auto-Configuration; DHCP Relay; DHCP Relay Option 82; SNMP v1/v2c/v3; SNMP Trap; RMON v1; RMON v2*; Web-Based GUI; CLI; System Log; Trap / Alarm / Log / Severity Control; sFlow*; Dual Image; Dual Configuration; Port Description; DNS Relay*; Editable Login Banner; Editable System Prompt; CPU Monitoring; NTP/SNTP; Virtual Interface*; 0.0.0.0 IP Setting; Password Recovery			
MIBs		MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); RMON (RFC1757.2819); Ether-Like (RFC1643.2358.2665); IEEE 802.1p (RFC2674); IF (RFC2863.2863); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); Ping & Traceroute (RFC2925); D-Link Private MIB			MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); RMON (RFC1757.2819); Ether-Like (RFC1643.2358.2665); IEEE 802.1p (RFC2674); IF (RFC2233.2863); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client MIB (RFC2620); Ping & Traceroute (RFC2925); D-Link Private MIB			

* Feature Available in Future Firmware Upgrade



Gigabit Entry-Level Switches with Security

DGS-3200 Series

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

DGS-3200 series offers a complete list of endpoint security features to add confidence and assurance towards your network. Apart from executing firm network security, it also provides user-based identity control by implementing host-based 802.1X authentication/authorization, along with clientless web-based access control (WAC), and MAC-based access control (MAC) for easy deployment.



DGS-3200-10

- Internal Power Supply
- Fanless

Microsoft NAP Quarantine Compliance
10/100/1000BASE-T x 10
SFP Combo Slot x 2



- Virtual Stack (SIM)
- SNMP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- ZoneDefense
- L4 ACL



DGS-3200-16

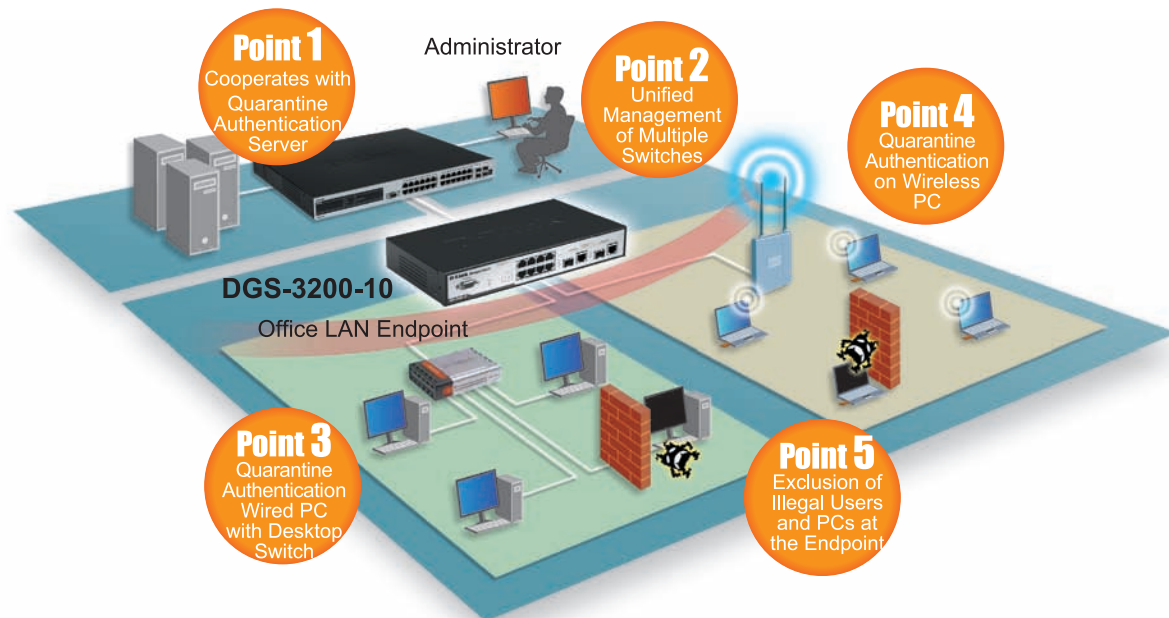
- Internal Power Supply
- Fanless

Microsoft NAP Quarantine Compliance
10/100/1000BASE-T x 16
SFP Combo Slot x 2



- Virtual Stack (SIM)
- SNMP
- 4K VLAN
- QoS
- MLD Snooping
- WEB Authentication
- 802.1X Authentication
- MAC Authentication
- VLAN Authentication
- Quarantine
- ZoneDefense
- L4 ACL

Endpoint Security Solution using DGS-3200 Series



DGS-3200 Series Gigabit Entry-Level Switches with Security

Model	DGS-3200-10	DGS-3200-16
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.1ab 1000BASE-T; IEEE 802.3z 1000BASE-LX/SX/ZX; IEEE 802.3x Flow Control; IEEE 802.3ad Link Aggregation; IEEE 802.1Q VLAN Tagging; IEEE 802.1D Spanning Tree (STP compatible); IEEE 802.1w Rapid Spanning Tree; IEEE 802.1s Multiple Spanning Tree; IEEE 802.1p Class of Service; IEEE 802.1X Port Based Network Access Control	
Interface	10BASE/100BASE-TX/1000BASE-T Port (RJ-45) SFP Slot RS-232C Port (DB-9 Pin Female) Auto Negotiation Auto MDI/MDIX Flow Control	10 2 (Combo with 2 100BASE-TX Ports) 1 ✓ ✓ IEEE 802.3 Flow Control (Full Duplex); Back Pressure (Half Duplex); Head-of-Line (HOL) Blocking Prevention
Cable	10BASE-T 100BASE-TX 1000BASE-T Console Port	Category 3 and above, UTP/STP Cable (within 100 meter) Category 5 and above, UTP/STP Cable (within 100 meter) Enhanced Category 5 and above, UTP/STP Cable (within 100 meter) RS-232C Straight Cable (DB-9 Pin Female)
Stacking	Virtual Stack (D-Link SIM)	32
Switch Features	Switch Fabric Packet Forwarding Rate (64Byte)	20Gbps 14.88Mpps
	Packet Buffer SDRAM Flash Memory	128KByte 128MByte 16MByte
Power	Power Supply Power Consumption (Max.)	100 to 240VAC, 50/60Hz, Internal Power Supply 34W
Environmental	Operating Temperature Storage Temperature Operating Humidity Storage Humidity	0 to 40 °C -40 to 70 °C 10 to 90% (Non-Condensing) 5 to 90% (Non-Condensing)
Dimension	W x D x H mm	280 x 180 x 43; 1U Height
Weight		1.53kg
Certification	EMI Certification	CE Class A / FCC Class A / VCCI Class A / C-Tick Class A
Package Contents	DGS-3200 Series Switch; Power Cord, Console Cable; Mounting Kit, Rubber Feet x 4; CD with Manual / CLI / D-View Module	
L2 Features	Jumbo Frame : 10,240Byte (Maximum) IGMP Snooping : v1, v2, v3* Snooping Group : 256; Static Multicast Address : 128 MLD Snooping : v1, v2 Snooping Group : 256 Spanning Tree : IEEE 802.1D STP; IEEE 802.1w RSTP; IEEE 802.1s MSTP STP Loopback Detection; BPDU Filtering Port Mirroring : One-to-One Mode; Many-to-One Mode; ACL Mode* IEEE 802.3ad Link Aggregation : 5 Groups per Device; 8 Ports per Group MAC Address Table : Maximum 8K / Static : 256 Loopback Detection 4.0	
VLAN	Port-Based VLAN; MAC-Based VLAN; IEEE 802.1Q Tag VLAN; IEEE 802.1v Protocol Based VLAN; Double VLAN* VLAN Group (Static : 4K / Dynamic : 255) VLAN ID : 1-4094; GVRP	
Multicast	Multicast Table : 128	
QoS (Quality of Service)	Per Port Bandwidth Control (Granularity 512kbps); Per Flow Bandwidth Control (Granularity 64kbps) IEEE 802.1p Priority Queues; 8 Queues per Port CoS Based On : Switch Port; 802.1p Priority; VLAN; MAC Address; IPv4 / IPv6 Address; IPv6 Traffic Class; IPv6 Flow Label; TOS; DSCP; TCP/UDP; Protocol Type*; User Defined Packet Content* Queue Handling : WRR (Weighted Round Robin) and Strict Modes	
ACL (Access Control List)	Up to 200 Profiles; Up to 200 Rules per Device ACL Based On : Switch Port; MAC Address; IEEE 802.1p Priority Queue; VLAN; DSCP; Protocol; Ether Type; IPv4 / IPv6 Address; IPv6 Traffic Class; IPv6 Flow Label; TCP/UDP Port; Time-Based ACL; CPU Interface Filtering	
Security	RADIUS Authentication; TACACS+ Authentication; SSH v1/v2; SSL v3; Port Security : Up to 16 MAC Addresses per Port IEEE 802.1X Port Based Authentication; IEEE 802.1X MAC-Based Authentication; Web Authentication; MAC Address Authentication; EAP Pass Through; Broadcast / Multicast Storm Control; Traffic Segmentation; Guest VLAN : Port-Based / MAC-Based; Microsoft NAP Quarantine; IP-MAC-Port binding : ARP / ACL Mode; D-Link SafeGuard Engine	
Management	D-Link Single IP Management (SIM); Web-Based GUI; CLI; Telnet Server; Telnet Client; TFTP Client; SMTP Client; SNMP v1/v2/v3; SNMP Trap; RMON v1, v2*; BootP / DHCP Client; DHCP Auto-Configuration; DHCP Relay Option 82; System Log; CPU Monitoring; Trap; Alarm; Log Level Setup; Store 2 Firmware Image; SNTP; Password Recovery; Port Description; Trust Host; IPv6 Management*; 0.0.0.0 IP Setup	
MIBs	MIB-II (RFC 1213); Bridge (RFC 1493); SNMPv2 (RFC 1907); RMON (RFC1757,2819); RMONv2 (RFC 2021)*; Ether-Like (RFC1643,2358,2665); IEEE 802.1p (RFC2674); IF (RFC 2233,2863); RADIUS Accounting Client (RFC 2620)*; RADIUS Authentication Client (RFC 2618); Ping; Traceroute (RFC2925)*; D-Link Private MIB	

* Feature Available in Future Firmware Upgrade



Gigabit Entry-Level 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. It comes with 24 or 48 port 10/100/1000Mbps that provides up to 20Gbps physical stacking, with or without 802.3af Power over Ethernet (PoE) support. Outstanding features include scalable expansion, 4 combo SFP fiber links, comprehensive network security, granular bandwidth control, and extensive network management.

DGS-3100 series is an ideal, flexible, advanced, yet affordable solution for setting up Gigabit connections to the desktops or for building up a company-wide network backbone.



DGS-3100-24

Redundancy Power Supply Physical Stack

10/100/1000BASE-T x 24
SFP Combo Slot x 4



- SNMP
- VLAN
- 802.1X Authentication
- MAC Authentication
- L4 ACL
- QoS

DGS-3100-24P

Redundancy Power Supply Physical Stack PoE Supply

10/100/1000BASE-T x 24 (PoE)
SFP Combo Slot x 4



- SNMP
- VLAN
- 802.1X Authentication
- MAC Authentication
- L4 ACL
- QoS

DGS-3100-24TG

Redundancy Power Supply Physical Stack

10/100/1000BASE-T x 8
SFP Slot x 16



- SNMP
- VLAN
- 802.1X Authentication
- MAC Authentication
- L4 ACL
- QoS

DGS-3100-48

Redundancy Power Supply Physical Stack

10/100/1000BASE-T x 48
SFP Combo Slot x 4



- SNMP
- VLAN
- 802.1X Authentication
- MAC Authentication
- L4 ACL
- QoS

DGS-3100-48P

Redundancy Power Supply Physical Stack PoE Supply

10/100/1000BASE-T x 48 (PoE)
SFP Combo Slot x 4



- SNMP
- VLAN
- 802.1X Authentication
- MAC Authentication
- L4 ACL
- QoS

DGS-3100 Series Gigabit Entry-Level Switches

Model	DGS-3100-24	DGS-3100-24P	DGS-3100-24TG	DGS-3100-48	DGS-3100-48P	
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.1ab 1000BASE-T; IEEE 802.3z 1000BASE-SX/LX/ZX; IEEE 802.3x Flow Control; IEEE 802.3ad Link Aggregation; IEEE 802.1Q VLAN Tagging; IEEE 802.1D Spanning Tree (STP compatible); IEEE 802.1w Rapid Spanning Tree; IEEE 802.1s Multiple Spanning Tree; IEEE 802.1p Class of Service; IEEE 802.1X Port Based Network Access Control; IEEE 802.3af Power Over Ethernet (DGS-3100-24P & DGS-3100-48P only)					
Interface	10BASE-T/100BASE-TX/1000BASE-T (PoE) Port (RJ-45)	24	24 (24)	8	48 (48)	
	SFP Slot	4 (Combo with 4 100BASE-TX Ports)		16	4 (Combo with 4 100BASE-TX Ports)	
	RS-232C Port (DB-9 Pin Female)	1				
	HDMI Port (for Stacking)	2				
	Auto Negotiation	✓				
	Auto MDI/MDIX	✓				
Flow Control	IEEE 802.3 Flow Control (Full Duplex); Back Pressure (Half Duplex); Head-of-Line (HOL) Blocking Prevention					
Cable	10BASE-T	Category 3 and above, UTP/STP Cable (within 100 meter)				
	100BASE-TX	Category 5 and above, UTP/STP Cable (within 100 meter)				
	1000BASE-T	Enhanced Category 5 and above, UTP/STP Cable (within 100 meter)				
	Console Port	RS-232C Straight Cable (DB-9 Pin Female)				
PoE Port	-	Category 5 and above, UTP Cable (all 8 cables are used)	-	-	Category 5 and above, UTP Cable (all 8 cables are used)	
Stacking	Physical Stack	6				
	Stacking Bandwidth (Max.)	10Gbps Half Duplex Linear Stacking; 20Gbps Full-Duplex Ring Stacking				
Switch Features	Switch Fabric	68Gbps			116Gbps	
	Packet Forwarding Rate (64Byte)	50.6Mpps			86.31Mpps	
	Packet Buffer	768KByte			1.5MByte	
	SDRAM	64MByte				
	Flash Memory	16MByte				
Power	Power Supply	100 to 240VAC, 50/60Hz, Internal Power Supply				
	Power Consumption (Max.)	49.4W	55.5W	38.3W	102.6W	619.3W
	PoE	-	PoE Format : Alternative A Max. Power Supply : 370W Per Port : 15.4W	-	-	PoE Format : Alternative A Max. Power Supply : 370W Per Port : 15.4W
Redundancy Power Supply	DPS-200	DPS-600	DPS-200	DPS-500	DPS-600	
	Operating Temperature	0 to 40 °C				
Environmental	Storage Temperature	-10 to 70 °C				
	Operating Humidity	10 to 90% (Non-Condensing)				
	Storage Humidity	5 to 90% (Non-Condensing)				
Dimension	W x D x H mm	441 x 210 x 44; 19-inch Rackmount; 1U Height	441 x 310 x 44; 19-inch Rackmount; 1U Height	441 x 430 x 44; 19-inch Rackmount; 1U Height	441 x 310 x 44; 19-inch Rackmount; 1U Height	441 x 430 x 44; 19-inch Rackmount; 1U Height
Weight		3.04kg	5.58kg	2.95kg	5.50kg	7.43kg
Certification	EMI Certification	CE Class A / FCC Class A / VCCI Class A / C-Tick Class A				
Package Contents	DGS-3100 Series Switch; Power Cord; Mounting Kit; Rubber Feet x 4; Quick Installation Guide; CD with Manual; CD with D-View 5.1 Demo					
L2 Features	Jumbo Frame : 10,240Byte (Maximum) IGMP Snooping : v1, v2 Snooping Group : 256; Static Multicast Address : 64 IGMP Snooping Fast Leave MLD Snooping : v1*, v2* Spanning Tree : IEEE 802.1D STP; IEEE 802.1w RSTP; IEEE 802.1s MSTP STP Loopback Detection; BPDU Filtering Port Mirroring : One-to-One Mode; Many-to-One Mode IEEE 802.3ad Link Aggregation : 32 Groups per Device; 8 Ports per Group MAC Address Table : Maximum 8K / Static : 256					
VLAN	Port-Based VLAN; IEEE 802.1Q Tag VLAN; Dynamic VLAN; GVRP; VLAN Group (Static : 256 / Dynamic : 255) VLAN ID 4K : 1-4094; Asymmetric VLAN*					
QoS (Quality of Service)	Per Port Bandwidth Control (Granularity 64kbps); Per Flow Bandwidth Control (Granularity 64kbps) IEEE 802.1p Priority Queues; 4 Queues per Port CoS Based On : 802.1p Priority; VLAN; MAC Address; Ether Type, TOS IPv4 Address, DSCP, TCP/UDP; Protocol Type Queue Handling : WRR (Weighted Round Robin) and Strict Modes					
ACL (Access Control List)	Up to 15 Profiles; Up to 240 Rules per Device ACL Based On : MAC Address; 802.1p Priority; VLAN; Ether Type; DSCP; Protocol; IPv4 Address; TCP/UDP Port; Time-Based ACL*; CPU Interface Filtering					
Security	RADIUS Authentication; TACACS+ Authentication; SSH v1/v2; SSL v3; Port Security : Up to 16 MAC Addresses per Port; IEEE 802.1X Port Based Authentication; IEEE 802.1X MAC Based Authentication; MAC Address Authentication Broadcast Storm Control; Traffic Segmentation; D-Link SafeGuard Engine					
Management	Web-Based GUI; CLI, Telnet Server; Telnet Client; TFTP Client; SNMP v1/v2c/v3; SNMP Trap; RMON v1; BootP / DHCP Client; DHCP Auto-Configuration; SNTPT; System Log; CPU Monitoring; Traffic Monitoring; Login Banner; System Prompt Compilation; Trap; 2-Level User Authentication; Port Description; Trap; Alarm; Log Level Setup					
MIBs	MIB-II (RFC 1213); Bridge (RFC 1493); SNMPv2 (RFC 1907); RMON (RFC 1757,2819); Ether-Like (RFC1643,2358,2665); IEEE 802.1p (RFC2674); IF (RFC2233,2863)*; RADIUS Accounting Client (RFC 2620); RADIUS Authentication Client (RFC 2618); D-Link Private MIB					

* Feature Available in Future Firmware Upgrade



Fast Ethernet Entry-Level Switches

DES-3028/3052 Series

DES-3028/DES-3052 series consists of managed Layer 2 Ethernet switches designed as premium devices in the entry-level network management category. These switches offer rich functionalities to enable SMBs and enterprises set up a secure and effective departmental network at affordable price.

DES-3028/DES-3052 series provides choices of 24 and 48 Ethernet ports in low profile rack-mount cases, with or without Power over Ethernet. Each switch is equipped with 2 Gigabit uplinks and SFP to support both fiber Gigabit and 100BASE-FX fiber connection for specific applications.



DES-3028

Fanless

10/100BASE-TX x 24
10/100/1000BASE-T x 4
SFP Combo Slot x 2



- Virtual Stack (SIM)
- SNMP
- 4K VLAN
- QoS
- 802.1X Authentication
- VLAN Authentication
- L4 ACL

DES-3028P

PoE Supply

10/100BASE-TX x 24 (PoE)
10/100/1000BASE-T x 4
SFP Combo Slot x 2



- Virtual Stack (SIM)
- SNMP
- 4K VLAN
- QoS
- 802.1X Authentication
- VLAN Authentication
- L4 ACL

DES-3052

Fanless

10/100BASE-TX x 48
10/100/1000BASE-T x 4
SFP Combo Slot x 2



- Virtual Stack (SIM)
- SNMP
- 4K VLAN
- QoS
- 802.1X Authentication
- VLAN Authentication
- L4 ACL

DES-3052P

PoE Supply

10/100BASE-TX x 48 (PoE)
10/100/1000BASE-T x 4
SFP Combo Slot x 2



- Virtual Stack (SIM)
- SNMP
- 4K VLAN
- QoS
- 802.1X Authentication
- VLAN Authentication
- L4 ACL

DES-3028/3052 Series Fast Ethernet Entry-Level Switches

Model	DES-3028	DES-3028P	DES-3052	DES-3052P
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.1ab 1000BASE-T; IEEE 802.3z 1000BASE-SX/LX/ZX; IEEE 802.3x Flow Control; IEEE 802.3ad Link Aggregation; IEEE 802.1Q VLAN Tagging; IEEE 802.1D Spanning Tree (STP compatible); IEEE 802.1w Rapid Spanning Tree; IEEE 802.1s Multiple Spanning Tree; IEEE 802.1p Class of Service; IEEE 802.1X Port Based Network Access Control; IEEE 802.3af Power over Ethernet (DES-3028P & DES-3052P only)			
Interface	10BASE-T/100BASE-TX (PoE) Port (RJ-45) 10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45) SFP Slot	24 24 (24)	48	48 (48)
		4		
		2 (Combo with 2 100BASE-TX Ports)		
	RS-232C Port (DB-9 Pin Female)	1		
	Auto Negotiation	✓		
	Auto MDI/MDIX	✓		
	Flow Control	IEEE 802.3 Flow Control (Full Duplex); Back Pressure (Half Duplex); Head-of-Line (HOL) Blocking Prevention		
Cable	10BASE-T	Category 3 and above, UTP/STP Cable (within 100 meter)		
	100BASE-TX	Category 5 and above, UTP/STP Cable (within 100 meter)		
	1000BASE-T	Enhanced Category 5 and above, UTP/STP Cable (within 100 meter)		
	Console Port	RS-232C Straight Cable (DB-9 Pin Female)		
Stacking	Virtual Stack (D-Link SIM)	32		
Switch Features	Switch Fabric	12.8Gbps		17.6Gbps
	Packet Forwarding Rate (64Byte)	9.5Mpps		13.1Mpps
	Packet Buffer	512KByte		
	SDRAM	64MByte		
	Flash Memory	8MByte		
Power	Power Supply	100 to 240VAC, 50/60Hz, Internal Power Supply		
	Power Consumption (Max.)	25W	217W	26W
	PoE	-	PoE Format : Alternative A Max. Power Supply : 370W Per Port : 15.4W	PoE Format : Alternative A Max. Power Supply : 370W Per Port : 15.4W
	Redundancy Power Supply	DPS-200	-	DPS-200
Environmental	Operating Temperature	0 to 40 °C		
	Storage Temperature	-40 to 70 °C		
	Operating Humidity	5 to 95% (Non-Condensing)		
	Storage Humidity	0 to 95% (Non-Condensing)		
Dimension	W x D x H mm	441 x 207 x 44; 19-inch Standard Rackmount; 1U Height	441 x 309 x 44; 19-inch Standard Rackmount; 1U Height	
Weight		2.36kg	4.50kg	3.85kg
				5.70kg
Certification	EMI Certification	CE Class A / FCC Class A / VCCI Class A / C-Tick Class A		
Package Contents		DES-3028/52 Series Switch; Power Cord; Console Cable; Mounting Kit; Rubber Feet x 4; CD with Manual		
L2 Features		Jumbo Frame : Tagged Frame (2048byte); Untag Frame (2044byte); IGMP Snooping : v1, v2 Spanning Tree : IEEE 802.1D STP; IEEE 802.1w RSTP; IEEE 802.1s MSTP STP Lookback Detection; Loopback Detection (Without STP)*; IEEE 802.3ad Link Aggregation : 6 Groups per Device; 8 Ports per Group Port Mirroring One-to-One Mode; Many-to-One Mode MAC Address Table : Maximum 8K / Static : 256 BPDU Filtering		
VLAN		Port-Based VLAN; IEEE 802.1Q Tag VLAN; Dynamic VLAN; GVRP; VLAN Group : (Static : 4K / Dynamic : 200) VLAN ID : 1-4094		
Multicast		Multicast Table : 64		
QoS (Quality of Service)		Per Port Bandwidth Control (Granularity 64kbps) IEEE 802.1p Priority Queues; 4 Queues per Port CoS Based On : Port, MAC Destination/Source Addresses; TOS; DSCP; TCP/UDP Port; VLAN ID; Protocol Type; IPv4 Address; User Defined Packet Content		
ACL (Access Control List)		Up to 256 Profiles; Up to 256 Rules per Device ACL Based On : Port, MAC Address; 802.1p Priority; VLAN ID, DSCP, Protocol; IPv4 Address; TCP/UDP Port; Time-Based ACL; CPU Interface Filtering		
Security		SSH v1/v2; SSL v1/v2/v3 IEEE 802.1X Port-Based Authentication; IEEE 802.1X MAC-Based Authentication; Broadcast Storm Control; Traffic Segmentation Guest VLAN; Port Security; Bandwidth Control D-Link Safeguard Engine		
Management		D-Link Single IP Management (SIM); Web-Based GUI; CLI Telnet Server; TFTP Client; SNMP v1/v2c/v3; SNMP Trap; RMON v1/v2; SMTP / BOOTP / DHCP Client; DHCP Auto-Configuration; DHCP Relay Option 82; System Log; CPU Monitoring; Login Banner; System Prompt Compilation; Alarm, Log Level Setup; Store 2 Firmware Image; Store 2 Configuration File; Port Description; 0.0.0.0 IP Setup; 2-Level User Authentication		
MIBs		MIB-II (RFC1213); Bridge (RFC1493); SNMP v2 (RFC1907); RMON (RFC1757-2819); RMONv2 (RFC2021); Ether-Like (RFC1643,2358,2665); IEEE 802.1p (RFC2674); IF (RFC2863); RADIUS Accounting Client (RFC2620); RADIUS Authentication Client (RFC2618); Ping; Traceroute (RFC2925); D-Link Private MIB		

* Feature Available in Future Firmware Upgrade



Fast Ethernet Entry-Level Switches

DES-3000 Series

DES-3000 series consists of managed Layer 2 Ethernet switches designed to provide entry-level managed solution for new SMB setup or for established businesses looking into bringing managed solution to desktops. An ideal solution for workgroups and departments, these switches provide fiber uplinks for connection of small groups of users over large distances, such as within a campus between indoor departments and school classrooms.



DES-3010F

Fanless

10/100BASE-TX x 8
10/100/1000BASE-T x 1
100BASE-FX x 1
(Multi-Mode Fiber)



- Virtual Stack (SIM)
- SNMP
- VLAN
- QoS
- 802.1X Authentication
- VLAN Authentication

DES-3010FL

Fanless

10/100BASE-TX x 8
10/100/1000BASE-T x 1
100BASE-FX x 1
(Single-Mode Fiber)



- Virtual Stack (SIM)
- SNMP
- VLAN
- QoS
- 802.1X Authentication
- VLAN Authentication

DES-3010G

Fanless

10/100BASE-TX x 8
10/100/1000BASE-T x 1
SFP x 1



- Virtual Stack (SIM)
- SNMP
- VLAN
- QoS
- 802.1X Authentication
- VLAN Authentication

DES-3026

Fanless

Expansion Slot

Optional

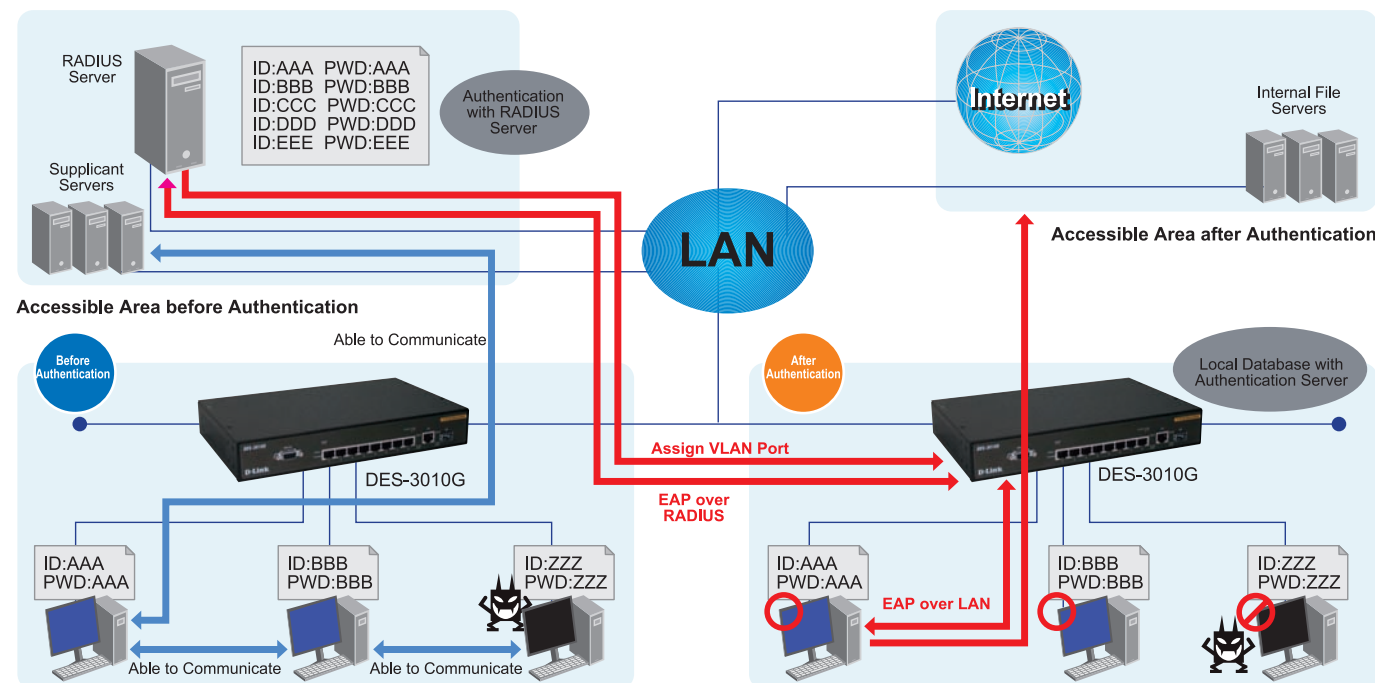
10/100BASE-TX x 24
Expansion Slot x 2



- DEM-201F (100BASE-FX-Multi-Mode Fiber Expansion Module)
- DEM-201FL (100BASE-FX-Single-Mode Fiber Expansion Module)
- DEM-301G (SFP Expansion Module)
- DEM-301T (1000BASE-T Expansion Module)

- Virtual Stack (SIM)
- SNMP
- VLAN
- QoS
- 802.1X Authentication
- VLAN Authentication

Using DES-3000 Series with 802.1X Authentication and Guest VLAN



DES-3000 Series Fast Ethernet Entry-Level Switches

Model	DES-3010F	DES-3010FL	DES-3010G	DES-3026
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3z 100BASE-FX; IEEE 802.1ab 1000BASE-T; IEEE 802.3z 1000BASE-SX/LX; IEEE 802.3x Flow Control; IEEE 802.3ad Link Aggregation; IEEE 802.1Q VLAN Tagging; IEEE 802.1D Spanning Tree (STP compatible); IEEE 802.1w Rapid Spanning Tree; IEEE 802.1p Class of Service, Priority, Protocol; IEEE 802.1X Port Based Network Access Control			
Interface	10BASE/100BASE-TX Port (RJ-45) 10BASE-FX	8 1 (Multi-Mode Fiber)	1 (Single-Mode Fiber)	24 2 (via DEM-201F / DEM-201FL)
	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)		1	2 (via DEM-201T)
	SFP Slot		1	2 (via DEM-301G)
	Module Slot			2
	RS-232C Port (DB-9 Pin Female)		1	
	Auto Negotiation		✓	
	Auto MDI/MDIX		✓	
	Flow Control	IEEE 802.3 Flow Control (Full Duplex); Back Pressure (Half Duplex); Head-of-Line (HOL) Blocking Prevention		
Cable	10BASE-T	Category 3 and above, UTP/STP Cable (within 100 meter)		
	100BASE-TX	Category 5 and above, UTP/STP Cable (within 100 meter)		
	1000BASE-T	Enhanced Category 5 and above, UTP/STP Cable (within 100 meter)		
	Console Port	RS-232C Straight Cable (DB-9 Pin Female)		
Stacking	Virtual Stack (D-Link SIM)	32		
Switch Features	Switch Fabric	3.8Gbps	5.6Gbps	8.8Gbps
	Packet Forwarding Rate (64Byte)	2.8Mpps	4.2Mpps	6.6Mpps
	Packet Buffer	256KByte		
	SDRAM	32MByte		
	Flash Memory	4MByte		
Power	Power Supply	100 to 240VAC, 50/60Hz, Internal Power Supply		
	Power Consumption (Max.)	9.9W		11.6W
Environmental	Operating Temperature	0 to 40 °C		
	Storage Temperature	-40 to 70 °C		
	Operating Humidity	5 to 95% (Non-Condensing)		
	Storage Humidity	0 to 95% (Non-Condensing)		
Dimension	W x D x H mm	280 x 180 x 44; 1U Height		441 x 207 x 44(H) mm; 19-inch Standard Rackmount; 1U Height
Weight		1.5kg		
Certification	EMI Certification	CE Class A / FCC Class A / VCCI Class A / C-Tick Class A		
Package Contents		DES-3000 Series Switch; Power Cord; Console Cable; Mounting Kit; Rubber Feet x 4; CD with Manual / CLI / D-View Module / SNMP Module		
L2 Features		IGMP Snooping : v1, v2; IGMP Fast Leave; Multicast Group : 256; Static Multicast Address : 64 Spanning Tree : IEEE 802.1D STP; IEEE 802.1w RSTP IEEE 802.3ad Link Aggregation : 2(FE)+1(GE) Groups per Device; 4 Ports per Group Port Mirroring One-to-One Mode; Many-to-One Mode STP Loopback Detection; BPDU Filtering Loopback Detection (no STP)		
VLAN		IEEE 802.1Q Tag VLAN; Static VLAN Group : 255 Configurable VLAN : 255 VLAN ID 4K : 1-4094		
QoS (Quality of Service)		Bandwidth Control IEEE 802.1p Priority Queues; 4 Queues per Port Port based CoS : MAC Destination/Source Addresses; TOS; DSCP		
Security		IEEE 802.1X Port Based Authentication; IEEE 802.1X MAC Based Authentication; Traffic Segmentation; Broadcast Storm Control; CPU Interface Filtering; Guest VLAN; IP-MAC-Port Binding; Port Security D-Link Safeguard Engine		
Management		D-Link Single IP Management (SIM); Web-Based GUI (Traffic Monitor, MAC Address Search); CLI Telnet Server; TFTP Client; SNMP v1/v2c; RMON v1; BOOTP/DHCP Client; DHCP Auto-Configuration; System Log; Trap / Alarm / Log Level Setup Port Description; SNTp; Show Config Command; SMTP Client / Expansion Log RADIUS Authentication; IP Interface Description; MAC Notification; Trusted Host; Password Recovery		
MIBs		MIB-II (RFC1213); Bridge (RFC1493); RMON (RFC1757;2829); IF (RFC2233;2863); IEEE 802.1p (RFC2674); Ether-Like (RFC1843;2358;2665); D-Link Private MIB		



Gigabit & Fast Ethernet Web Smart Switches DGS-1200 & DES-1200 Series

DGS-1200/DES-1200/DES-1300 series consists of Web Smart switches that come with plug-and-play simplicity, designed to provide performance and reliability for small and medium-size business (SMB) network.

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



DGS-1216T

Power Saving

10/100/1000BASE-T x 16
SFP Combo Slot x 2



- SNMP
- VLAN
- QoS
- 802.1X Authentication

DES-1228

Fanless

10/100BASE-TX x 24
10/100/1000BASE-T x 4
SFP Combo Slot x 2



- SNMP
- VLAN
- QoS
- 802.1X Authentication

DGS-1224T

Power Saving

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



- SNMP
- VLAN
- QoS
- 802.1X Authentication

DES-1228P

PoE Supply

10/100BASE-TX x 24
10/100/1000BASE-T x 4
SFP Combo Slot x 2



- SNMP
- VLAN
- QoS
- 802.1X Authentication

DGS-1248T

Power Saving

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



- SNMP
- VLAN
- QoS
- 802.1X Authentication

DES-1252

Fanless

10/100BASE-TX x 48
10/100/1000BASE-T x 4
SFP Combo Slot x 2



- SNMP
- VLAN
- QoS
- 802.1X Authentication

DGS-1200 Series Gigabit Web Smart Switches

Model	DGS-1216T	DGS-1224T	DGS-1248T
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.1ab 1000BASE-T; IEEE 802.3z 1000BASE-SX/LX; IEEE 802.3x Flow Control; IEEE 802.1Q VLAN Tagging; IEEE 802.1D Spanning Tree; IEEE 802.1p Class of Service, Priority, Protocol; IEEE 802.1X Port Based Network Access Control;		
Interface	10BASE/100BASE-TX/ 1000BASE-T Port (RJ-45)	16	24
	SFP Slot	2 (Combo with 2 100BASE-TX Ports)	
	Auto Negotiation Auto MDI/MDIX Flow Control	✓ ✓ IEEE 802.3 Flow Control (Full Duplex); Back Pressure (Half Duplex); Head-of-Line (HOL) Blocking Prevention	
Cable	10BASE-T	Category 3 and above, UTP/STP Cable (within 100 meter)	
	100BASE-TX 1000BASE-T	Category 5 and above, UTP/STP Cable (within 100 meter) Enhanced Category 5 and above, UTP/STP Cable (within 100 meter)	
Switch Features	Switch Fabric	32Gbps	48Gbps
	Packet Forwarding Rate	14,881pps (10M) 148,809pps (100M) 1,488,095pps (1000M)	
	Packet Buffer SDRAM	512KByte 8MByte	
Power	Power Supply	100 to 240VAC, 50/60Hz, Internal Power Supply	
	Power Consumption (Max.)	30.3W	35.1W
Environmental	Operating Temperature	0 to 40 °C	
	Storage Temperature	-10 to 70 °C	
	Operating Humidity	10 to 90% (Non-Condensing)	
	Storage Humidity	5 to 90% (Non-Condensing)	
Dimension	W x D x H mm 440 x 210 x 44; 19-inch Standard Rackmount; 1U Height		440 x 310 x 44; 19-inch Standard Rackmount; 1U Height
Weight	2.72kg	2.80kg	4.46kg
Certification	EMI Certification	CE Class A / FCC Class A / VCCI Class A	
Package Contents	DGS-1200 Series Switch; Power Cord; Mounting Kit; Rubber Feet x 4; Quick Installation Guide; CD with Manual and SmartConsole Utility		
L2 Features	Jumbo Frame : 10,240Byte (DGS-1216T / DGS-1224T); 9,216Bytes (DGS-1248T) IGMP Snooping : v1, v2, v3 : 64 Multicast Group; Spanning Tree : IEEE 802.1D STP BPDU Filtering Port Trunking : 6 Groups per Device; 8 Ports per Group Port Mirroring : One-to-One Mode; Many-to-One Mode		
VLAN	IEEE 802.1Q Tag VLAN; VLAN ID : 1-4094 VLAN Group : 255 (Static : 256)		
QoS (Quality of Service)	IEEE 802.1p Priority Queues; 4 Queues per Port Queue Handling : WRR (Weighted Round Robin) Port Based QoS		
Security	IEEE 802.1X Port-Based Authentication; Broadcast Storm Control; D-Link Safeguard Engine;		
Management	Web-Based GUI (Monitor / Configuration / Firmware Upgrade) Smart Console Utility (Monitor / Configuration / Firmware Upgrade) SNMPv1/SNMP Trap, SNMP Client		
MIBs	MIB-II (RFC1213); D-Link Private MIB		

DES-1200 Series Fast Ethernet Web Smart Switches

Model	DES-1228	DES-1228P	DES-1252
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.1ab 1000BASE-T; IEEE 802.3z 1000BASE-SX/LX; IEEE 802.3x Flow Control; IEEE 802.1Q VLAN Tagging; IEEE 802.1D Spanning Tree ; IEEE 802.1p Class of Service; IEEE 802.1X Port Based Network Access Control		
Interface	10BASE-T/100BASE-TX (PoE)	24	24 (24)
	10BASE-T/100BASE-TX/ SFP Slot	2 (Combo with 2 100BASE-TX Ports)	
Switch Features	Switch Fabric	12.8Gbps	
	Packet Forwarding Rate	14,881pps (10M) 148,809pps (100M)	
	Packet Buffer SDRAM Flash Memory	128KByte 8MByte 2MByte	
Power	Power Supply	100 to 240VAC, 50/60Hz, Internal Power Supply	
	Power Consumption (Max.) PoE	18.4W -	222.0W PoE Format : Alternative A Max. Power Supply : 170W Per Port : 15.4W
Environmental	Operating / Storage Temperature	0 to 40 °C / -10 to 70 °C	
	Operating / Storage Humidity	10 to 90% / 5 to 90% (Non-Condensing)	
Dimension	W x D x H mm 440 x 140 x 44		440 x 310 x 44
Weight	2.09kg	3.20kg	3.72kg
Certification	EMI Certification	CE Class A / FCC Class A / VCCI Class A / C-Tick Class A	
Package Contents	DES-1200 Series Switch; Power Cord; Mounting Kit; Rubber Feet x 4; Quick Installation Guide; CD with Manual and SmartConsole Utility		
L2 Features	IGMP Snooping : v1, v2, v3* Spanning Tree : IEEE 802.1D STP* Port Mirroring : One-to-One Mode; Many-to-One Mode Link Aggregation MAC Address Table (Maximum/Static) : 8K / 256		
VLAN	Port-Based VLAN; IEEE 802.1Q Tag VLAN; VLAN Group : 256; VLAN ID : 1-4094		
QoS (Quality of Service)	IEEE 802.1p Priority Queues : 4 Queues Queue Handling : WRR (Weighted Round Robin)		
Security	IEEE 802.1X Port-Based Authentication*; Broadcast Storm Control* ; D-Link Safeguard Engine*;		
Management	Web-Based GUI SNMPv1/SNMP Trap; DHCP Client*		
MIBs	MIB-II (RFC1213); D-Link Private MIB		

* Feature Available in Future Firmware Upgrade

Gigabit & Fast Ethernet Unmanaged Switches

DGS-1000/DES-1000 Series

DGS-1000/DES-1000 series consists of managed Gigabit and 10/100Mbps switches designed for cost-effective SOHO and workgroup connection. DGS-1000 series offers 5/8/16/24 Gigabit ports. DES-1000 series offers 5/8/16/24/48 10/100Mbps ports with Gigabit expansion.



DGS-1008TL

- Internal Power Supply
- Fanless
- 19" Rackmount

10/100/1000BASE-T x 8



- Flow Control
- QoS
- Jumbo Frame

DES-1005D

- External Power Supply
- Fanless
- Plastic Casting

10/100BASE-TX x 5



- Flow Control

DGS-1005D

- External Power Supply
- Fanless
- Plastic Casting
- Power Saving

10/100/1000BASE-T x 5



- Flow Control
- QoS
- Jumbo Frame

DES-1008D

- External Power Supply
- Fanless
- Plastic Casting

10/100BASE-TX x 8



- Flow Control

DGS-1008D

- External Power Supply
- Fanless
- Plastic Casting
- Power Saving

10/100/1000BASE-T x 8



- Flow Control
- QoS
- Jumbo Frame

DES-1016D

- Internal Power Supply
- Fanless
- 19" Rackmount

10/100BASE-TX x 16



- Flow Control

DGS-1016D

- Internal Power Supply
- 19" Rackmount
- Power Saving

10/100/1000BASE-T x 16



- Flow Control
- QoS
- Jumbo Frame

DES-1024D

- Internal Power Supply
- Fanless
- 19" Rackmount

10/100BASE-TX x 24



- Flow Control

DGS-1024D

- Internal Power Supply
- 19" Rackmount
- Power Saving

10/100/1000BASE-T x 24



- Flow Control
- QoS
- Jumbo Frame

DES-1050G

- Internal Power Supply
- Fanless
- 19" Rackmount

10/100BASE-TX x 48
10/100/1000BASE-T x 2



- Flow Control

DGS-1000 Series Gigabit Unmanaged Switches

Model	DGS-1005D	DGS-1008D	DGS-1008TL	DGS-1016D	DGS-1024D
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3ab 1000BASE-T; IEEE 802.3 Flow Control (Full Duplex); IEEE 802.1p Class of Service				
Interface	10/100/1000BASE-T (RJ-45)	5	8	8	16
Switch Feature	Packet Forwarding Rate			14,881pps (10M) 148,809pps (100M) 1,488,090pps (1000M)	24
	RAM Buffer	106KB	144KB	128KB	340KB
	MAC Address Table	1K		8K	
	Jumbo Frame	9,000KB	9,600KB	9,126KB	9,600KB
	EAP Pass Through	✓	✓	-	-
Power	Power Supply	Through External Power Adapter			
	Max. Power Consumption	3.0W	6.0W	10.3W	21.0W
Environment	Operating / Storage Temperature	0 to 40°C / -10 to 70°C			
	Operating / Storage Humidity	5 to 90% / 5 to 95% (Non-Condensing)	10 to 90% / 5 to 90% (Non-Condensing)		5 to 90% / 5 to 95% (Non-Condensing)
Dimension	W x D x H mm	142 x 108 x 31	192 x 118 x 32	280 x 180 x 44	280 x 180 x 44
Weight	Device Only	0.22kg	0.305kg	1.52kg	1.79kg
Certification	EMI Certification	CE Class B / FCC Class B / VCCI Class B		CE Class A / FCC Class A / VCCI Class A	
Package Contents		DGS-1005D/DGS-1008D Switch; AC Adapter; Mounting Kit; Rubber Feet x 4; Manual		DGS-1008TL Switch; Power Cord; Mounting Kit; Rubber Feet x 4; Manual; QIG	DGS-1016D/DGS-1024D Switch; Power Cord; Mounting Kit; Rubber Feet x 4; Manual

DES-1000 Series Fast Ethernet Unmanaged Switches

Model	DES-1005D	DES-1008D	DES-1016D	DES-1024D	DES-1050G
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3ab 1000BASE-T (DES-1050G); IEEE 802.3 Flow Control (Full Duplex)				
Interface	10/100BASE-TX (RJ-45)	5	8	16	24
	10/100/1000BASE-T (RJ-45)	-	-	-	2
Switch Feature	Packet Forwarding Rate			14,881pps (10M) 148,809pps (100M)	14,881pps (10M) 148,809pps (100M) 1,488,090pps (1000M)
	RAM Buffer	64KB	64KB	160KB	160KB
	MAC Address Table	1K	1K	8K	8K
Power	Power Supply	Through External Power Adapter			
	Max. Power Consumption	4.8W	6.0W	6.8W	7.9W
Environment	Operating / Storage Temperature	0 to 40°C / -10 to 70°C			
	Operating / Storage Humidity	10 to 95% / 5 to 95% (Non-Condensing)			10 to 90% / 0 to 95% (Non-Condensing)
Dimension	W x D x H mm	142 x 115 x 31	192.5 x 118.5 x 32	280 x 180 x 44	280 x 180 x 44
Weight	Device Only	0.22kg	0.24kg	1.45kg	1.56kg
Certification	EMI Certification	CE Class B / FCC Class B / VCCI Class B			CE Class A / FCC Class A / VCCI Class A
Package Contents		DES-1000 Series Switch; AC Adapter (DES-1005D/DES-1008D); Power Cord (DES-1016D/DES-1024D/DES-1050G); Mounting Kit; Rubber Feet x 4; Quick Installation Guide; CD with Manual			

RPS Chassis

DPS-900/800

- DPS-900**
8 Slots
Support DPS-200, DPS-500
19" Rackmount
- DPS-800**
2 Slots
Support DPS-200, DPS-500, DPS-500DC
19" Rackmount



Redundancy Power Supplies (RPS Series)

DPS-600/500/500DC/200

- DPS-600**
Supplied Power: 500W
Input Power: 100-240VAC
Frequency: 50/60Hz
Max. Current: 10A
19" Rackmount
- DPS-500**
Supplied Power: 140W
Input Power: 100-240VAC
Frequency: 50/60Hz
Max. Current: 4A
- DPS-500DC**
Supplied Power: 140W
Input Power: -36-72VDC
Max. Current: 3-6ADC
Inrush Current: 20-40A
- DPS-200**
Supplied Power: 60W
Input Power: 100-240VAC
Frequency: 50/60Hz
Max. Current: 1.6A



Series	Switch Model	DPS-600 (500Watts)	DPS-500 (140Watts)	DPS-500DC (140Watts)	DPS-200 (60Watts)
Gigabit xStack L3 Core Switches	DGS-3612		✓	✓	
	DGS-3612G		✓	✓	
	DGS-3627		✓	✓	
	DGS-3627G		✓	✓	
	DGS-3650		✓	✓	
Fast Ethernet xStack Core Switches	DES-3828				✓
	DES-3828P	✓			
	DES-3852				✓
Gigabit xStack L2 Edge Switches	DGS-3426		✓	✓	
	DGS-3426P	✓			
	DGS-3427		✓	✓	
	DGS-3450		✓	✓	
Fast Ethernet xStack L2 Edge Switches	DES-3528				✓
	DES-3528P	✓			
	DES-3552				✓
	DES-3552P	✓			
	DES-3526				✓
	DES-3550				✓
Gigabit Entry-Level Switches	DGS-3100-24				✓
	DGS-3100-24P	✓			
	DGS-3100-48		✓	✓	
	DGS-3100-48P	✓			

DEM series consists of SFP/XFP modules that can achieve long distance data transmission and high speed communication with single-mode and multi-mode fiber. These modules can be installed into switches and media converters.

The DEM series¹ product line includes 100M / 1G / 10G and 1 core / 2 core choices.

SFP / XFP Transceivers (Hot-Swappable)

Type	Model	Description
XFP (10GE)	DEM-421XT	• Standard : IEEE 802.3ae 10GBASE-SR, MSA • Connector : LC • Wavelength : 850nm • Fiber Cable Type : 2 Core Multi-Mode : 50/125µm, 62.5µm • Transmission Distance ² : 300m 10GBASE-SR 300m 2 Core MMF
	DEM-422XT	• Standard : IEEE 802.3ae 10GBASE-LR, MSA • Connector : LC • Wavelength : 1310nm • Fiber Cable Type : 2 Core Single-Mode : 9/125µm • Transmission Distance ² : 10km 10GBASE-LR 10km 2 Core SMF
	DEM-423XT	• Standard : IEEE 802.3ae 10GBASE-ER, MSA • Connector : LC • Wavelength : 1550nm • Fiber Cable Type : 2 Core Single-Mode : 9/125µm • Transmission Distance ² : 40km 10GBASE-ER 40km 2 Core SMF
WDM Bi-Directional 1 Core SFP (1GE)	DEM-330T ¹	• Standard : IEEE 802.3z 1000BASE-LX, MSA • Connector : LC • Wavelength : TX 1550nm, RX 1310nm • Fiber Cable Type : 1 Core Single-Mode : 9/125µm • Transmission Distance ² : 10km 1000BASE-LX 10km 1 Core SMF
	DEM-330R ¹	• Standard : IEEE 802.3z 1000BASE-LX, MSA • Connector : LC • Wavelength : TX 1310nm, RX 1550nm • Fiber Cable Type : 1 Core Single-Mode : 9/125µm • Transmission Distance ² : 10km 1000BASE-LX 10km 1 Core SMF
	DEM-331T ¹	• Standard : IEEE 802.3z 1000BASE-LX, MSA • Connector : LC • Wavelength : TX 1550nm, RX 1310nm • Fiber Cable Type : 1 Core Single-Mode : 9/125µm • Transmission Distance ² : 40km 1000BASE-LX 40km 1 Core SMF
	DEM-331R ¹	• Standard : IEEE 802.3z 1000BASE-LX, MSA • Connector : LC • Wavelength : TX 1310nm, RX 1550nm • Fiber Cable Type : 1 Core Single-Mode : 9/125µm • Transmission Distance ² : 40km 1000BASE-LX 40km 1 Core SMF
2 Core SFP (1GE)	DEM-310GT	• Standard : IEEE 802.3z 1000BASE-LX, MSA • Connector : LC • Wavelength : 1310nm • Fiber Cable Type : 2 Core Single-Mode : 9/125µm • Transmission Distance ² : 10km 1000BASE-LX 10km 2 Core SMF
	DEM-311GT	• Standard : IEEE 802.3z 1000BASE-SX, MSA • Connector : LC • Wavelength : 850nm • Fiber Cable Type : 2 Core Multi-Mode : 50/125µm, 62.5/125µm • Transmission Distance ² : 550m 1000BASE-SX 550m 2 Core MMF
	DEM-312GT2	• Standard : IEEE 802.3z 1000BASE-SX2, MSA • Connector : LC • Wavelength : 1310nm • Fiber Cable Type : 2 Core Multi-Mode : 62.5/125µm • Transmission Distance ² : 2km 1000BASE-SX2 2km 2 Core MMF
	DEM-314GT	• Standard : IEEE 802.3z 1000BASE-LH, MSA • Connector : LC • Wavelength : 1550nm • Fiber Cable Type : 2 Core Single-Mode : 9/125µm • Transmission Distance ² : 50km 1000BASE-LH 50km 2 Core SMF
	DEM-315GT	• Standard : IEEE 802.3z 1000BASE-ZX, MSA • Connector : LC • Wavelength : 1550nm • Fiber Cable Type : 2 Core Single-Mode : 9/125µm • Transmission Distance ² : 80km 1000BASE-ZX 80km 2 Core SMF
2 Core SFP (100M)	DEM-210	• Standard : IEEE 802.3u 100BASE-FX, MSA • Connector : LC • Wavelength : 1310nm • Fiber Cable Type : 2 Core Single-Mode : 9/125µm • Transmission Distance ² : 15km 100BASE-FX 15km 2 Core SMF
	DEM-211	• Standard : IEEE 802.3u 100BASE-FX, MSA • Connector : LC • Wavelength : 1310nm • Fiber Cable Type : 2 Core Multi-Mode : 62.5/125µm • Transmission Distance ² : 2km 100BASE-FX 2km 2 Core MMF

¹ DEM-330T & DEM-330R are used as a pair. DEM-331T & DEM-331R are used as a pair.
² There is loss dispersion when the cable length is different.

Expansion Modules

Type	Model	Description
1 Port 100FX Module	DEM-201F	• Standard : IEEE 802.3u 100BASE-FX • Connector : SC
1 Port SFP Module	DEM-301G	• Standard : IEEE 802.3u 1000BASE-X; IEEE802.3x Flow Control • Connector : SFP (Mini-GBIC)
1 Port 1000M Module	DEM-301T	• Standard : IEEE 802.3ab 1000BASE-T; IEEE 802.3u 100BASE-TX; IEEE802.3 10BASE-T; IEEE 802.3x Flow Control • Connector : RJ-45
1 Port 10GE Module	DEM-410X	• Standard : IEEE 802.3ae 10Gigabit Ethernet • Connector : XFP
	DEM-410CX	• Standard : IEEE 802.3ak 10Gigabit Ethernet • Connector : CX4 Special 1M Cable Attached • DEM-CB300CX (use on DEM-410CX) • 3m

SFP / XFP Transceivers

Module	Switch Model	10G XFP			1G SFP						
		DEM-421XT	DEM-422XT	DEM-423XT	DEM-330T/R	DEM-331T/R	DEM-310GT	DEM-311GT	DEM-312GT2	DEM-314GT	DEM-315GT
Switch Series		Multi-Mode SR 300m	Single-Mode LR 10km	Single-Mode ER 40km	WDM 1 Core LX 10km	WDM 1 Core LX 40km	Single-Mode LX 10km	Multi-Mode SX 550m	Multi-Mode SX 2km	Single-Mode LH 50km	Single-Mode ZX 80km
Fast Ethernet Web Smart Switches	DES-1228 DES-1228P DES-1252				✓	✓	✓	✓	✓	✓	✓
Gigabit Web Smart Switches	DGS-1216T DGS-1224T DGS-1248T				✓	✓	✓	✓	✓	✓	✓
Fast Ethernet Entry-Level Switches	DES-3010G DES-3026 DES-3028 DES-3028P DES-3052 DES-3052P				✓ ⁺¹	✓ ⁺¹	✓ ⁺¹	✓ ⁺¹	✓ ⁺¹	✓ ⁺¹	✓ ⁺¹
Gigabit Entry-Level Switches	DGS-3100-24 DGS-3100-24P DGS-3100-24TG DGS-3100-48 DGS-3100-48P				✓	✓	✓	✓	✓	✓	✓
Gigabit Entry-Level Switches with Security	DGS-3200-10 DGS-3200-16				✓	✓	✓	✓	✓	✓	✓
Fast Ethernet xStack L2 Edge Switches	DES-3528 DES-3528P DES-3552 DES-3552P DES-3526 DES-3526DC DES-3550				✓	✓	✓	✓	✓	✓	✓
Gigabit xStack L2 Edge Switches	DGS-3426 DGS-3426P DGS-3427 DGS-3450	✓ ⁺²	✓ ⁺²	✓ ⁺²	✓	✓	✓	✓	✓	✓	✓
Fast Ethernet xStack L3 Core Switches	DES-3828 DES-3828DC DES-3828P DES-3852				✓	✓	✓	✓	✓	✓	✓
Gigabit xStack L3 Core Switches	DGS-3612 DGS-3612G DGS-3627 DGS-3627G DGS-3650	✓ ⁺²	✓ ⁺²	✓ ⁺²	✓	✓	✓	✓	✓	✓	✓
Gigabit & Fast Ethernet L3 Chassis Switches	DES-6500 DES-7206 DES-7210	✓ ⁺³	✓ ⁺³	✓ ⁺³	✓ ⁺⁵	✓ ⁺⁵	✓ ⁺⁵	✓ ⁺⁵	✓ ⁺⁵	✓ ⁺⁵	✓ ⁺⁵
Unified L3 Switches	DWS-3024 DWS-3026	✓ ⁺²	✓ ⁺²	✓ ⁺²	✓	✓	✓	✓	✓	✓	✓

⁺¹ Must use with DEM-301G Module
⁺² Must use with DEM-410X Module
⁺³ Must use with DES-6512 Module
⁺⁴ Must use with 7200-2XG or 7200-4XG Module
⁺⁵ Must use with DES-6507 or DES-6509 Module
⁺⁶ Must use with 7200-24, 7200-24G, 7200-24P, 7200-48, 7200-48P Module

Module	Switch Model	100FX SFP		Expansion Module				
		DEM-210	DEM-211	DEM-201F	DEM-301G	DEM-301T	DEM-410X	DEM-410CX
Switch Series		Single-Mode 15km	Multi-Mode 2km	100FX Multi-Mode SC 2km	SFP Slot	10/100/1000 BASE-T	XFP Slot	CX4 Slot
Fast Ethernet Web Smart Switches	DES-1228 DES-1228P DES-1252	✓	✓					
Fast Ethernet Entry-Level Switches	DES-3026 DES-3028 DES-3028P DES-3052 DES-3052P	✓	✓	✓	✓	✓		
Fast Ethernet xStack L2 Edge Switches	DES-3528 DES-3528P DES-3552 DES-3552P	✓	✓					
Gigabit Entry-Level Switches	DGS-3100-24 DGS-3100-24P DGS-3100-24TG DGS-3100-48 DGS-3100-48P	✓	✓					
Gigabit Entry-Level Switches with Security	DGS-3200-10 DGS-3200-16	✓	✓					
Gigabit xStack L2 Edge Switches	DGS-3426 DGS-3426P DGS-3427 DGS-3450						✓	✓
Gigabit xStack L3 Core Switches	DGS-3627 DGS-3627G DGS-3650						✓	✓
Unified L3 Switches	DWS-3026						✓	✓

DMC series consists of media converters that convert UTP cable to fiber optic cable for designated FTTH or optional fiber network. It can easily receive transmission over long distance with minimal noise influence.

Multiple media converters can be loaded using 19" rackmount chassis. The management module DMC-1002 uses web browser and console connection for management, which can be purchased separately. The media converters come in choices of 100Mbps or Gigabit.



100M Media Converters

DMC-300SC

- 2 Core 100FX MMF
- 2km
- Auto MDI/MDI-X
- SC Connector

10/100BASE-TX ↔ 100BASE-FX



DMC-300SC

- 2 Core 100FX MMF
- 2km
- Auto MDI/MDI-X
- SC Connector

10/100BASE-TX ↔ 100BASE-FX



DMC-515SC

- 2 Core 100FX SMF
- 15km
- Auto MDI/MDI-X
- SC Connector

10/100BASE-TX ↔ 100BASE-FX



DMC-530SC

- 2 Core 100FX SMF
- 30km
- Auto MDI/MDI-X
- SC Connector

10/100BASE-TX ↔ 100BASE-FX



DMC-560SC

- 2 Core 100FX SMF
- 60km
- Auto MDI/MDI-X
- SC Connector

10/100BASE-TX ↔ 100BASE-FX



DMC-615SC

- 2 Core 100FX MMF
- 2 Core 100FX SMF
- 15km
- SC Connector

100BASE-FX ↔ 100BASE-FX



DMC-1530SC

- 2 Core 100FX SMF
- 30km
- Auto MDI/MDI-X
- SC Connector
- Link Pass Through

10/100BASE-TX ↔ 100BASE-FX



DMC-1580SC

- 2 Core 100FX SMF
- 80km
- Auto MDI/MDI-X
- SC Connector
- Link Pass Through

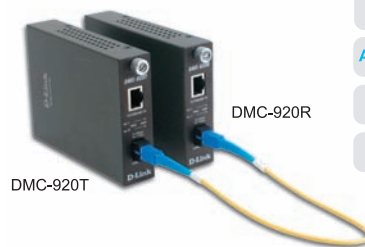
10/100BASE-TX ↔ 100BASE-FX



DMC-920T/DMC-920R

- 1 Core 100FX SMF
- WDM Bi-Directional
- 20km
- Auto MDI/MDI-X
- SC Connector
- Link Pass Through

10/100BASE-TX ↔ 100BASE-FX



100M Media Converters

Model	DMC-300SC	DMC-300M	DMC-515SC	DMC-530SC	DMC-560SC
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3u 100BASE-FX; IEEE 802.3x Flow Control				
Interface	10/100BASE-TX 100BASE-FX		1 (RJ-45)		
Fiber Optic Media	2 Core Multi-Mode (MMF)		2 Core Single-Mode (SMF)		
Coverage Distance	2km		15km	30km	60km
Wavelength	1310nm				
Hot-Swappable	✓				
Power	Power Supply	7.5VDC, 1.5A; Through External Power Adapter			
	Max. Power Consumption	7.2W			
Environment	Operating / Storage Temperature	0 to 40°C / -25 to 70°C			
	Operating / Storage Humidity	10 to 90% / 5 to 90%			
Certification	EMI Certification	CE Class B / FCC Class B / VCCI Class B			
Dimension	W x D x H mm	120 x 88 x 25			
Weight	Device Only	305g			
Management	Link Pass Through (LLR Valid/Invalid) / Management Module (DMC-1002)				

Model	DMC-615SC	DMC-1530SC	DMC-1580SC	DMC-920T/R *
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3u 100BASE-FX; IEEE 802.3x Flow Control			
Interface	10/100BASE-TX 100BASE-FX	-	1 (RJ-45)	
Fiber Optic Media	2 Core Multi-Mode (MMF) & 2 Core Single-Mode (SMF)		2 Core Single-Mode (SMF)	1 Core Single-Mode (SMF)
Coverage Distance	15km	30km	80km	20km
Wavelength	1310nm	1310nm	1550nm	DMC-920R : TX : 1310nm; RX : 1550nm DMC-920T : TX : 1550nm; RX : 1310nm
Hot-Swappable	✓			
Power	Power Supply	7.5VDC, 1.5A; Through External Power Adapter		
	Max. Power Consumption	7.2W		
Environment	Operating / Storage Temperature	0 to 40°C / -25 to 70°C		
	Operating / Storage Humidity	10 to 90% / 5 to 90%		
Certification	EMI Certification	CE Class B / FCC Class B / VCCI Class B		
Dimension	W x D x H mm	120 x 88 x 25		
Weight	Device Only	305g		
Management	Link Pass Through (LLR Valid/Invalid) / Management Module (DMC-1002)			

* T/R are use as a pair

1000M Media Converters

DMC-700SC

- 2 Core 1000MMF
- 550m
- 1000BASE-T ↔ 1000BASE-SX
- Auto MDI/MDI-X
- SC Connector
- Link Pass Through



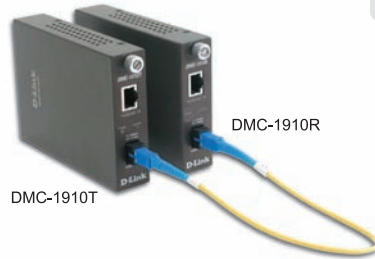
DMC-810SC

- 2 Core 1000SMF
- 10km
- 1000BASE-T ↔ 1000BASE-LX
- Auto MDI/MDI-X
- SC Connector
- Link Pass Through



DMC-1910T/DMC-1910R

- 1 Core 1000SMF
- WDM Bi-Directional
- 10km
- 1000BASE-T ↔ 1000BASE-LX
- Auto MDI/MDI-X
- Link Pass Through



DMC-805G

- SFP Slot
- Auto MDI/MDI-X
- 1000BASE-T ↔ 1000BASE (SFP)
- Link Pass Through



Optional Transceivers

- 2 Core SFP Transceivers
DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT
- WDM Bi-Directional SFP Transceivers
DEM-330T, DEM-330R, DEM-331T, DEM-331R

Media Converter Chassis / Management Module

DMC-1000

- Internal Power Supply
- DMC Series Media Converter Slot x 16



DMC-1001

DMC-1000 Redundancy Power Supply



DMC-1002

- DMC-1000 Management Module
- SNMP



1000M Media Converters

Model	DMC-700SC	DMC-810SC	DMC-1910T/R ^{*2}	DMC-805G
Standard	IEEE 802.3ab 1000BASE-T IEEE 802.3z 1000BASE-SX	IEEE 802.3ab 1000BASE-T IEEE 802.3z 1000BASE-LX	IEEE 802.3ab 1000BASE-T IEEE 802.3z 1000BASE-LX	IEEE 802.3ab 1000BASE-T IEEE 802.3z 1000BASE-LX/SX
Interface	1000BASE-T 1000BASE-SX 1000BASE-LX	1 (SC)	1 (RJ-45)	1 (SFP)
Fiber Optic Media	2 Core Multi-Mode (MMF)	2 Core Single-Mode (SMF)	1 Core Single-Mode (SMF)	Multi-Mode (MMF) / Single-Mode (SMF) ^{*1}
Coverage Distance	550m	10km		- ^{*1}
Wavelength	850nm	1310nm	DMC-1910R : TX : 1310nm; RX : 1550nm DMC-1910T : TX : 1550nm; RX : 1310nm	- ^{*1}
Hot-Swappable			✓	
Power	Power Supply	7VDC, 1A; Through External Power Adapter	7.5VDC, 1.5A; Through External Power Adapter	7VDC, 1.5A; Through External Power Adapter
	Max. Power Consumption	2.47W	2.66W	5.5W
Environment	Operating / Storage Temperature	0 to 40°C / -20 to 70°C		
	Operating / Storage Humidity	10 to 90% / 5 to 90%		
Certification	EMI Certification	CE Class B / FCC Class B / VCCI Class B		
Dimension	W x D x H mm	120 x 88 x 25		
Weight	Device Only	305g		
Rackmount		To DMC-1000		
Management		Link Pass Through (LLR Valid/Invalid) / Management Module (DMC-1002)		

^{*1} It differs depending on the SFP module used

^{*2} T/R are use as a pair

Media Converter Chassis & Management Module

Model	DMC-1000	DMC-1001	DMC-1002
Standard			IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX
Interface	10/100BASE-TX RS-232C (DB-9 Male)	-	1 1
Hot-Swappable			✓
Power	Power Supply	100 to 240VAC, 50/60 Hz	
	Max. Power consumption	150W	
Environment	Operating / Storage Temperature	0 to 40°C / -10 to 50°C	
	Operating / Storage Humidity	10 to 90% / 10 to 90%	10 to 90% / 5 to 90%
Certification	EMI Certification	CE Class A / FCC Class A / VCC Class A	
Dimension	W x D x H mm	415 x 390 x 89	120 x 88 25
Weight	Device Only	7kg	110g
Package Contents			DMC-1002: Manual
Rackmount			To DMC-1000
Management			SNMPv1: Console Connection; Web Browser; Firmware Upgrade by Web Browser

Media Converter Summary

Model	Media Type	Core	CoverageDistance	Transmission Speed	Connector Type
DMC-300M	RJ-45 ↔ Multi-Mode Fiber	2	2 km	100 Mbps	MT-RJ
DMC-300SC	RJ-45 ↔ Multi-Mode Fiber	2	2 km	100 Mbps	SC
DMC-515SC	RJ-45 ↔ Single-Mode Fiber	2	15 km	100 Mbps	SC
DMC-530SC	RJ-45 ↔ Single-Mode Fiber	2	30 km	100 Mbps	SC
DMC-560SC	RJ-45 ↔ Single-Mode Fiber	2	60km	100 Mbps	SC
DMC-615SC	Multi-Mode Fiber ↔ Single-Mode Fiber	2	15 km	100 Mbps	SC
DMC-700SC	RJ-45 ↔ Multi-Mode Fiber	2	550 m	1 Gbps	SC
DMC-805G	RJ-45 ↔ Optical Fiber	1 or 2	-	1 Gbps	SFP Slot
DMC-810SC	RJ-45 ↔ Single-Mode Fiber	2	10 km	1 Gbps	SC
DMC-920T/R	RJ-45 ↔ Single-Mode Fiber	1	20 km	100 Mbps	SC
DMC-1530SC	RJ-45 ↔ Single-Mode Fiber	2	30 km	100 Mbps	SC
DMC-1580SC	RJ-45 ↔ Single-Mode Fiber	2	80 km	100 Mbps	SC
DMC-1910T/R	RJ-45 ↔ Single-Mode Fiber	1	10 km	1 Gbps	SC

DAP-1353 (Indoor AP)



- External Power Supply
- 10/100BASE-TX x 1
- 802.11n (draft)
- WPA2
- MAC Filtering
- 802.11b/g
- Disable SSID Broadcast
- Multiple SSID

DWL-2100AP (Indoor AP)



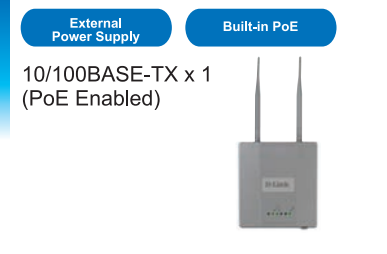
- External Power Supply
- Optional PoE Adapters DWL-P200 DWL-P50
- 10/100BASE-TX x 1
- 802.11b/g
- WPA2
- 802.1X
- 802.11e (WMM)
- MAC Filtering
- Disable SSID Broadcast

DWL-3140AP (Indoor AP)



- External Power Supply
- Built-in PoE
- 10/100BASE-TX x 1 (PoE Enabled)
- 802.11b/g
- WPA2
- Managed by DES-1228P
- MAC Filtering
- Disable SSID Broadcast
- Web Smart Thin AP

DWL-3200AP (Indoor AP)



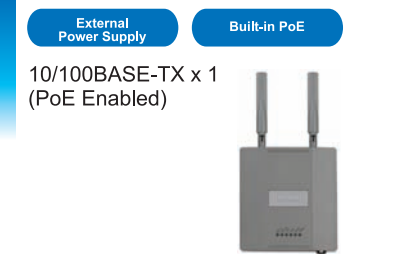
- External Power Supply
- Built-in PoE
- 10/100BASE-TX x 1 (PoE Enabled)
- 802.11b/g
- WPA2
- 802.1X
- 802.11e (WMM)
- MAC Filtering
- Disable SSID Broadcast

DWL-3260AP (Indoor AP)



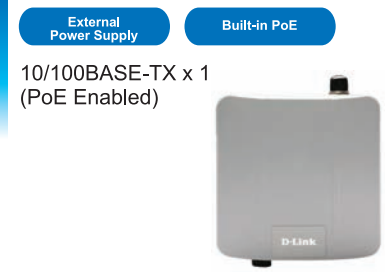
- External Power Supply
- Built-in PoE
- 10/100BASE-TX x 1 (PoE Enabled)
- 802.11b/g
- WPA2
- 802.1X
- 802.11e (WMM)
- MAC Filtering
- Disable SSID Broadcast

DWL-8200AP (Indoor AP)



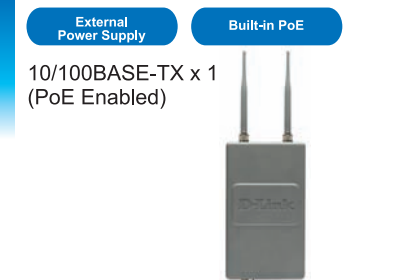
- External Power Supply
- Built-in PoE
- 10/100BASE-TX x 1 (PoE Enabled)
- 802.11a/b/g
- WPA2
- 802.1X
- MAC Filtering
- Disable SSID Broadcast
- Multiple SSID

DAP-3220 (Outdoor AP)



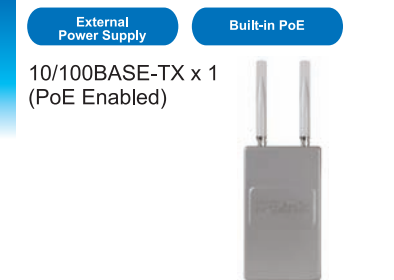
- External Power Supply
- Built-in PoE
- 10/100BASE-TX x 1 (PoE Enabled)
- 802.11b/g
- WPA2
- MAC Filtering
- Disable SSID Broadcast
- Multiple SSID
- 802.1Q VLAN

DWL-2700AP (Outdoor AP)



- External Power Supply
- Built-in PoE
- 10/100BASE-TX x 1 (PoE Enabled)
- 802.11b/g
- WPA2
- MAC Filtering
- Disable SSID Broadcast
- Multiple SSID
- 802.1Q VLAN

DWL-7700AP (Outdoor AP)



- External Power Supply
- Built-in PoE
- 10/100BASE-TX x 1 (PoE Enabled)
- 802.11a/b/g
- WPA2
- MAC Filtering
- Disable SSID Broadcast
- Multiple SSID
- 802.1Q VLAN

DIR-130 (VPN Router)



- External Power Supply
- LAN 10/100BASE-TX x 8
- WAN 10/100 BASE-TX x 1
- USB x 1
- Stateful Inspection
- PPPoE
- VPN

DIR-330 (VPN Router)



- External Power Supply
- LAN 10/100BASE-TX x 4
- WAN 10/100 BASE-TX x 1
- USB x 1
- 802.11b/g
- Stateful Inspection
- PPPoE
- VPN

Indoor Access Points

Model	DAP-1353	DWL-2100AP	DWL-3140AP	DWL-3200AP	DWL-3260AP	DWL-8200AP
Wireless LAN Standard	Standalone Fat AP		Web Smart Thin AP		Standalone Fat AP	
Operating Frequency	IEEE 802.11b; IEEE 802.11g; IEEE 802.11n (Draft) (DAP-1353)		IEEE 802.11b; IEEE 802.11g; IEEE 802.11n (Draft) (DAP-1353)		IEEE 802.11a; IEEE 802.11b; IEEE 802.11g; IEEE 802.11n (Draft) (DAP-1353)	
Operating Channels	13		13		802.11a: 19; 802.11b/g/n: 13	
Modulation Scheme	802.11a: - 802.11b: DSSS: DBPSK, DQPSK, CCK 802.11g: OFDM: BPSK, QPSK, 16QAM, 64QAM 802.11n (draft): OFDM: BPSK, QPSK, 16QAM, 64QAM		802.11a: 5.15 to 5.85GHz (DAP-1353) 802.11b/g: 2.4 to 2.4835 GHz (All Models) 802.11n (draft): 2.4 to 2.4835 GHz (DAP-1353)		802.11a: 19; 802.11b/g/n: 13	
Media Access Control Method	CSMA/CA with ACK		CSMA/CA		CSMA/CA with ACK	
Transmission Speed *	802.11a: - 802.11b: 11 / 5.5 / 2 / 1 Mbps 802.11g: 108 (Not Supported on DAP-1353) / 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6 Mbps 802.11n (draft): 300 / 270 / 240 / 180 / 120 / 90 / 60 / 30 Mbps		11 / 5.5 / 2 / 1 Mbps		108 / 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6 Mbps	
Wi-Fi Certified	-		-		-	
Operating Mode	Access Point Mode: WDS with AP Mode (DWL-3140AP not supported); WDS Mode (DWL-3140AP not supported); AP Client Mode (DWL-3140AP, DWL-3200AP, DWL-8200AP not supported); AP Repeater Mode (DWL-3140AP, DWL-3200AP, DWL-8200AP not supported)					
Antenna	Three 3dBi Detectable Dipole Antennas	One 2dBi Detectable Dipole Antenna	Internal Omni-Directional Antenna	Two 2dBi Gain Detectable Dipole Antenna	1dBi Gain Embedded Antenna	Two Detachable Dipole Antennas (2.5dBi for 2.4GHz; 5.5 dBi for 5GHz)
Wired LAN Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3x Flow Control; IEEE 802.3af Power over Ethernet (DAP-1353, DWL-2100AP not supported)					
Interface	10/100BASE-TX (PoE)		1 (1)		1 (1)	
Switch Feature	SDRAM/Flash		8MB/2MB		32MB / 8MB	
Power	Power Supply: 5VDC, 3A; Through External AC Adapter	Power Supply: 5VDC, 2A; Through External AC Adapter	Power Supply: 5VDC, 1.2A; Through External AC Adapter	Power Supply: 48VDC, 0.4A; Through External AC Adapter	Power Supply: 48VDC, 0.4A; Through External AC Adapter	Power Supply: 48VDC, 0.4A; Through External AC Adapter
Power Consumption (Max.)	9W	5W	5W (with PoE)	7W (with PoE 8.5W)	6.24W (with PoE 8.5W)	9W
Environment	Operating / Storage Temperature: 0 to 40°C / -20 to 65°C Operating / Storage Humidity: 10 to 90% / 5 to 95%	Operating / Storage Temperature: 0 to 40°C / -20 to 65°C Operating / Storage Humidity: 10 to 90% / 5 to 95%	Operating / Storage Temperature: 0 to 40°C / -20 to 65°C Operating / Storage Humidity: 5 to 95% / 5 to 95%	Operating / Storage Temperature: 0 to 40°C / -20 to 65°C Operating / Storage Humidity: Max. 95% / Max. 95%	Operating / Storage Temperature: 0 to 40°C / -20 to 65°C Operating / Storage Humidity: 10 to 90% / 5 to 95%	Operating / Storage Temperature: 0 to 40°C / -20 to 65°C Operating / Storage Humidity: 10 to 90% / 5 to 95%
Certification	EMI Certification: CE / FCC Class B / IC / C-Tick	EMI Certification: CE Class B / FCC Class B / VCCI Class B	EMI Certification: FCC Class B	EMI Certification: CE Class B / FCC Class B / VCCI Class B	EMI Certification: FCC Class B, CE	EMI Certification: CE Class B
Dimension	W x D x H mm: 198 x 120 x 32	W x D x H mm: 108.8 x 142 x 31	W x D x H mm: 118 x 118 x 35	W x D x H mm: 164.6 x 164.7 x 31.75	W x D x H mm: 171.97 x 171.97 x 48.16	W x D x H mm: 164.66 x 164.59 x 31.75
Weight	325g	195g	120g	790g	284g	603.28g
Packaging Contents	Indoor Access Point, AC Adapter, Power over Ethernet Base Unit (for DWL-3200AP, DWL-3260AP, DWL-8200AP only); Ethernet Cable; Mounting Plate; Quick Installation Guide; CD with Manual					
Security	64/128/152-bit WEP; TKIP/AES; WPA-PSK/EAP; WPA2-PSK/EAP; MAC Address Filtering; SSID Broadcast Disable; Multiple SSID (DWL-3140AP not supported); IEEE802.1Q VLAN (DWL-3140AP not supported)					
Management	Web GUI; SNMP v3; Private MIB; Telnet; Windows-based AP Manager II Utility; SSH	Web GUI; SNMP v1, v3; MIB-I, MIB-II; Telnet; Windows-based AP Manager Utility; SSL/SSH	Web GUI; SNMP v3; D-Link Smart VLAN Manager (with DES-1228P)	Web GUI; SNMP v3; Private MIB; Telnet; Windows-based AP Manager II Utility; SSH	Web GUI; SNMP v3; Private MIB; Telnet; Windows-based AP Manager II Utility; SSH	Web GUI; SNMP v3; Private MIB; Telnet; Windows-based AP Manager II Utility; SSH

* Environment Factors may Adversely Affect Operating Range

Outdoor Access Points

Model	DAP-3220	DWL-2700AP	DWL-7700AP
Wireless LAN Standard	IEEE 802.11b; IEEE 802.11g		802.11a; 802.11b/g
Operating Frequency	802.11b/g: 2.4 to 2.4835 GHz		802.11b/g: 2.4 to 2.5GHz; 802.11a: 5.15 to 5.85GHz
Operating Channels	13		802.11a: 19; 802.11b/g: 13
Modulation Scheme	802.11a: OFDM: BPSK, QPSK, 16QAM, 64QAM 802.11b: DSSS: DBPSK, DQPSK, CCK 802.11g: OFDM: BPSK, QPSK, 16QAM, 64QAM		802.11a: OFDM: BPSK, QPSK, 16QAM, 64QAM 802.11b/g: DSSS: DBPSK, DQPSK, CCK
Media Access Control Method	CSMA/CA with ACK		
Transmission Speed *	802.11a: 11, 5.5, 2, and 1Mbps 802.11b: 108, 54, 48, 36, 24, 18, 12, 9 and 6Mbps 802.11g: 45 m (54Mbps); 105 m (6Mbps)		802.11a: 11, 5.5, 2, and 1Mbps 802.11b/g: 54, 48, 36, 24, 18, 12, 9, and 6Mbps 30 m (54Mbps); 99 m (6Mbps)
Coverage Distance *	Indoor: 45 m (54Mbps); 105 m (6Mbps) Outdoor: 60 m (54Mbps); 340 m (6Mbps)		Indoor: 30 m (54Mbps); 99 m (6Mbps) Outdoor: 112 m (54Mbps); 500 m (6Mbps)
Wi-Fi Certified	-		
Operating Mode	Access Point Mode: WDS with AP Mode; WDS mode; AP Client Mode (DAP-3220 only)		
Antenna	Embedded 9dBi Patch Antenna RP-N type Connector for optional antenna	Dual 5dBi Detectable Dipole antennas	Dual Detachable Dipole Antennas (4.5dBi for 2.4GHz; 7 dBi for 5GHz)
Wired LAN Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3x Flow Control; IEEE 802.3af Power over Ethernet		
Interface	10/100BASE-TX (PoE)		1 (1)
Switch Feature	SDRAM/Flash		32MB / 8MB
Power	Power Supply: 13.5 W (with PoE & Heater ON)	Power Supply: 48VDC, 1.1A**; Through External AC Adapter	Power Supply: 48VDC, 1.1A**; Through External AC Adapter
Power Consumption (Max.)	13.5 W (with PoE & Heater ON)	48VDC, 1.1A**; Through External AC Adapter	48VDC, 1.1A**; Through External AC Adapter
Environment	Operating / Storage Temperature: -20 to 60°C / -20 to 65°C	Operating / Storage Temperature: -20 to 60°C / -20 to 65°C	Operating / Storage Temperature: -20 to 60°C / -20 to 65°C
Certification	EMI Certification: FCC Class B; CE Class B; C-Tick	EMI Certification: FCC Class B; CE Class B; C-Tick	EMI Certification: FCC Class B; CE Class B
Dimension	W x D x H mm: 160 x 190 x 55	W x D x H mm: 155 x 277.7 x 45	W x D x H mm: 155 x 297.7 x 62
Weight	649g	1820g	1820g
Packaging Contents	DAP-3220 Outdoor Access Point, AC Adapter; Power Cord; Power over Ethernet Base Unit; Ethernet Cable; Mounting Plate; Quick Installation Guide; CD with Manual	DWL-2700AP/DWL-7700AP Outdoor Access Point, AC Adapter; Power Cord; Power over Ethernet Base Unit; Console Cable; 30m Ethernet Cable; Wall Mounting Kit; Pole Mounting Kit; 3 Ground Wires and Surge Arrestor; 1m RF Jumper Cable; 8 Screws and Rubber Ring; Quick Installation Guide; CD with Manual	DWL-2700AP/DWL-7700AP Outdoor Access Point, AC Adapter; Power Cord; Power over Ethernet Base Unit; Console Cable; 30m Ethernet Cable; Wall Mounting Kit; Pole Mounting Kit; 3 Ground Wires and Surge Arrestor; 1m RF Jumper Cable; 8 Screws and Rubber Ring; Quick Installation Guide; CD with Manual
Security	64/128/152-bit WEP; TKIP/AES; WPA-PSK/EAP; WPA2-PSK/EAP; MAC Address Filtering; SSID Broadcast Disable; Multiple SSID; IEEE 802.1Q VLAN; WLAN STA Partitioning		
Management	Web Browser Interface: HTTP, HTTPS AP Manager II SNMP Support: D-View module, Private MIB Command Line Interface: Telnet, SSH	Web Browser Interface: HTTP, HTTPS AP Manager II SNMP support: D-View module, Private MIB Command Line Interface: Telnet, Secure (SSH)	Web Browser Interface: HTTP, HTTPS AP Manager II SNMP support: D-View module, Private MIB Command Line Interface: Telnet, Secure (SSH)

* Environment Factors may Adversely Affect Operating Range

**For Australia, the power adapter is 48VDC, 0.875A

VPN Routers

Model	DIR-130	DIR-330
Standard	IEEE 802.3; IEEE 802.3u	
Interface	10/100BASE-TX x 4; WAN x 1	
Antenna	2dBi Dipole Antenna	
Firewall Mode	Layer 3 Mode: Router Mode; NAT mode; Port Forwarding; Network Address Translation (NAT); Port Address Translation (PAT)	
VPN	VPN Tunnel: 8 (IPSec: PPTP; L2TP); IPSec NAT Traversal; IPSec LAN-to-LAN; Site-to-Site IPSec VPN VPN Server/Client: Encryption (DES; 3DES; AES); IPSec/PPTP/L2TP Pass-Through; XAUTH IPSec Authentication	
Firewall Feature	Stateful Packet Inspection (SPI); Local User Database (150 Users)	
Network	Static IP Address; PPPoE; DHCP Client DHCP Server; Static Route	Static IP Address; PPPoE; Static Route; DHCP Server/Client
Device Management Environment	Internet Explorer 6 and above (with Java)	
LED	Power; LAN; Status; WAN	
Certification	CE, FCC, C-Tick, VCCI, IC	
Power Consumption	4.36W	
Environment	Operating Temperature: 0 to 55 °C Operating Humidity: 5 to 90%	
Dimension	W x D x H mm: 120 x 191 x 31	
Weight	321g	

The following are optional antennas that can be deployed in different environment conditions.

Indoor Antennas

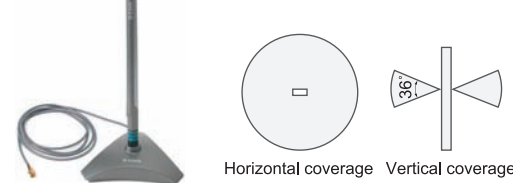
ANT24-0401 (for 2.4GHz)

Transmission Distance (1/11/54M) : 250/100/40m
Gain : 3.5dBi



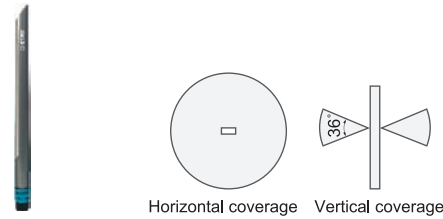
ANT24-0501 (for 2.4GHz)

Transmission Distance (1/11/54M) : 500/200/50m
Gain : 5dBi



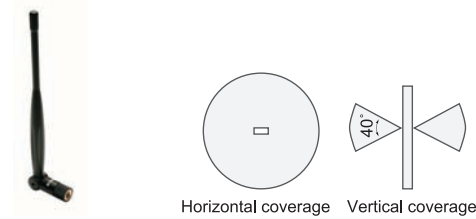
ANT24-0501C (for 2.4GHz)

Transmission Distance (1/11/54M) : 550/250/60m
Gain : 5dBi



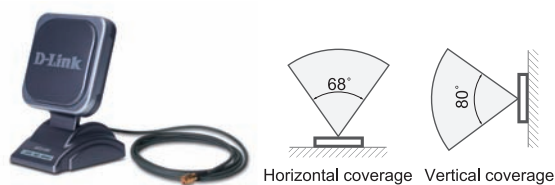
ANT24-0502

Transmission Distance (1/11/54M) : 500/200/60m
Gain : 5dBi



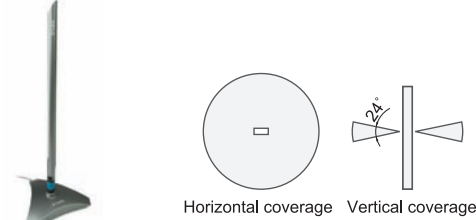
ANT24-0600 (for 2.4GHz)

Transmission Distance (1/11/54M) : 600/350/80m
Gain : 6dBi



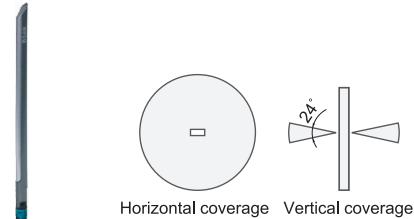
ANT24-0700 (for 2.4GHz)

Transmission Distance (1/11/54M) : 550/250/60m
Gain : 7dBi



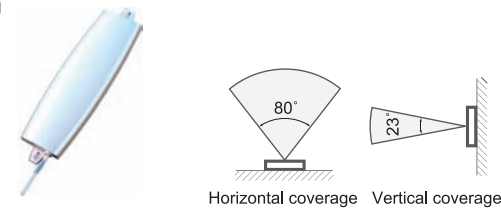
ANT24-0700C (for 2.4GHz)

Transmission Distance (1/11/54M) : 600/300/70m
Gain : 7dBi



ANT24-1200 (for 2.4GHz)

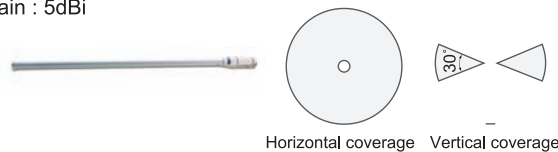
Transmission Distance (1/11/54M) : 1500/1200/500m
Gain : 12dBi



Indoor/Outdoor Antennas

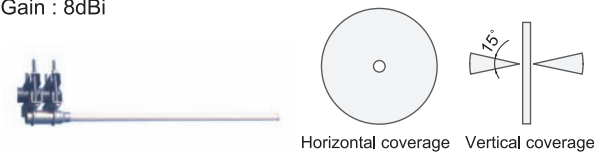
ANT24-0500 (for 2.4GHz)

Indoor Transmission Distance (1/11/54M) : 500/250/60m
Outdoor Transmission Distance (1/11/54M) : 1500/1300/200m
Gain : 5dBi



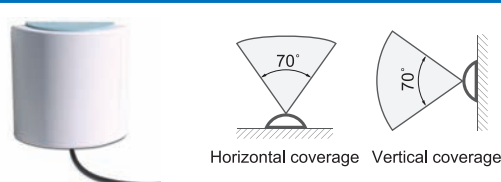
ANT24-0800 (for 2.4GHz)

Indoor Transmission Distance (1/11/54M) : 700/350/100m
Outdoor Transmission Distance (1/11/54M) : 2000/1000/400m
Gain : 8dBi



ANT24-0801 (for 2.4GHz)

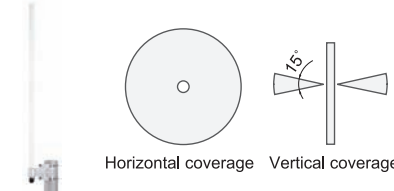
Indoor Transmission Distance (1/11/54M) : 800/500/150m
Outdoor Transmission Distance (1/11/54M) : 2500/1500/600m
Gain : 8.5dBi



Indoor / Outdoor Antennas

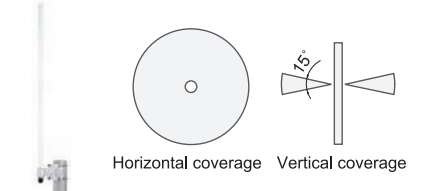
ANT70-0800 (for 2.4GHz & 5GHz)

2.4GHz Indoor Transmission Distance (1/11/54M) : 700/350/100m
5GHz Indoor Transmission Distance (1/11/54M) : 1000/500/200m
2.4GHz Outdoor Transmission Distance (1/11/54M) : 800/450/150m
5GHz Outdoor Transmission Distance (1/11/54M) : 1000/500/200m
2.4GHz Gain : 8dBi / 5GHz Gain : 8dBi



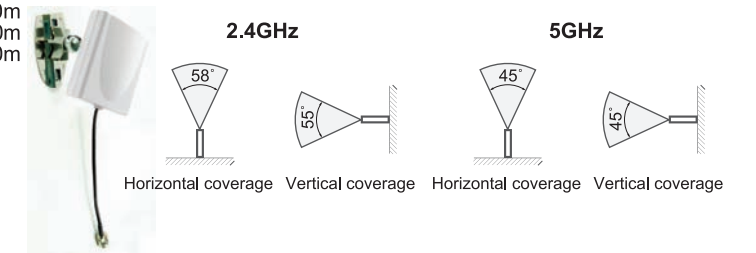
ANT70-0801 (for 2.4GHz & 5GHz)

2.4GHz Indoor Transmission Distance (1/11/54M) : 700/350/100m
5GHz Indoor Transmission Distance (1/11/54M) : 1000/500/200m
2.4GHz Outdoor Transmission Distance (1/11/54M) : 800/450/150m
5GHz Outdoor Transmission Distance (1/11/54M) : 1000/500/200m
2.4GHz Gain : 8dBi / 5GHz Gain : 8dBi



ANT70-1000 (for 2.4GHz & 5GHz)

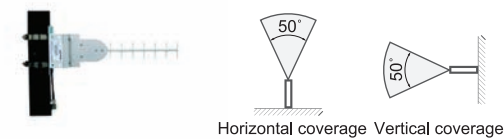
2.4GHz Indoor Transmission Distance (1/11/54M) : 800/400/150m
5GHz Indoor Transmission Distance (1/11/54M) : 1200/600/250m
2.4GHz Outdoor Transmission Distance (1/11/54M) : 1000/500/200m
5GHz Outdoor Transmission Distance (1/11/54M) : 1500/700/300m
2.4GHz Gain : 8dBi / 5GHz Gain : 10dBi



Outdoor Antennas

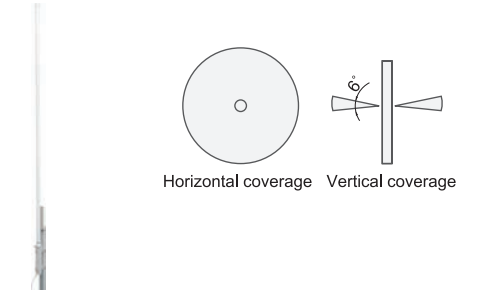
ANT24-1201 (for 2.4GHz)

Transmission Distance (1/11/54M) : 3000/2500/1000m
Gain : 12dBi



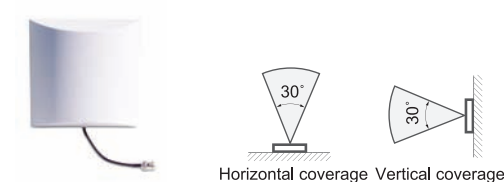
ANT24-1202

Transmission Distance (1/11/54M) : 3000/1800/450m
Gain : 12dBi



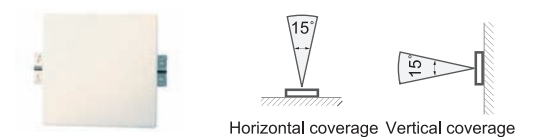
ANT24-1400 (for 2.4GHz)

Transmission Distance (1/11/54M) : 6000/4500/1000m
Gain : 14dBi



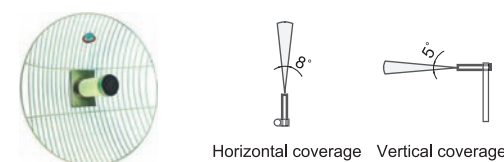
ANT24-1800 (for 2.4GHz)

Transmission Distance (1/11/54M) : 8000/6000/1500m
Gain : 18dBi



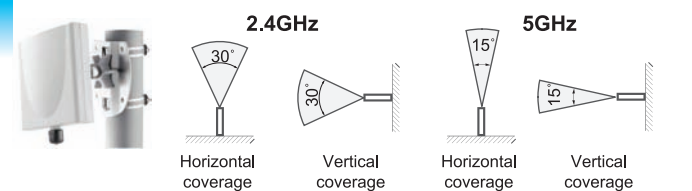
ANT24-2100 (for 2.4GHz)

Transmission Distance (1/11/54M) : 12000/9000/2500m
Gain : 21dBi



ANT70-1800 (for 2.4GHz & 5GHz)

2.4GHz Outdoor Transmission Distance (1/11/54M) : 6000/4500/1000m
5GHz Outdoor Transmission Distance (1/11/54M) : 8000/5000/1500m
2.4GHz Gain : 14dBi / 5GHz Gain : 18dBi



D-Link Unified Wired/Wireless Switching solution consists of DWS-3000 series wireless switches that function as the managing devices for DWL-3500AP and DWL-8500AP wireless access points, which serve as the outlying units series.

The centralized management function greatly simplifies wireless deployment, and significantly enhance access security, wireless throughput and network convergence.



DWS-3024

- Redundancy Power Supply
- PoE Support
- Support Up To 48APs

10/100/1000BASE-T x 24 (PoE)
SFP Combo Slot x 4



- Centralized AP Management
- Auto Wireless Channel Output
- Rogue AP Detection
- Advanced Ad Hoc Client Detection
- Automatic AP Detection
- Site Survey
- AP Client Authentication
- L2/L3 Roaming
- SNMP
- VLAN
- QoS
- VRRP

DWS-3024L

- Redundancy Power Supply
- PoE Support
- Support Up To 24APs

10/100/1000BASE-T x 24 (PoE)
SFP Combo Slot x 4



- Centralized AP Management
- Auto Wireless Channel Output
- Rogue AP Detection
- Advanced Ad Hoc Client Detection
- Automatic AP Detection
- Site Survey
- AP Client Authentication
- L2/L3 Roaming
- SNMP
- VLAN
- QoS
- VRRP

DWS-3026

- Redundancy Power Supply
- PoE Support
- 10G Expansion
- Support Up To 48APs

10/100/1000BASE-T x 24 (PoE)
SFP Combo Slot x 4
10G Expansion Slot x 2



- Centralized AP Management
- Auto Wireless Channel Output
- Rogue AP Detection
- Advanced Ad Hoc Client Detection
- Automatic AP Detection
- Site Survey
- AP Client Authentication
- L2/L3 Roaming
- SNMP
- VLAN
- QoS
- VRRP

Optional
DEM-410X (10G Expansion Module)
DEM-410CX (10G Expansion Module)

DWL-3500AP

- External Power Supply
- Built-in PoE

10/100BASE-TX x 1 (PoE Enabled)



- 802.11b/g
- Centralized Mgt by DWS Series
- WPA2
- 802.1X
- 802.11e (WMM)
- Virtual AP / Thin AP
- VLAN
- MAC Filtering

DWL-8500AP

- External Power Supply
- Built-in PoE

10/100BASE-TX x 1 (PoE Enabled)



- 802.11b/g
- Centralized Mgt by DWS Series
- WPA2
- 802.1X
- 802.11e (WMM)
- Virtual AP / Thin AP
- VLAN
- MAC Filtering
- 802.11a (W52 / W53)

DWS-3000 Series Unified Switches

Model	DWS-3024 / DWS-3024L	DWS-3026
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3ab 1000BASE-T; IEEE 802.3z 1000BASE-SX/LX; IEEE 802.3x Flow Control; IEEE 802.3ad Link Aggregation; IEEE 802.1Q VLAN Tagging; IEEE 802.1D Spanning Tree; IEEE 802.1w Rapid Spanning Tree; IEEE 802.1s Multiple Spanning Tree; IEEE 802.1p Class of Service; IEEE 802.1X Port Based Access Control; IEEE 802.3af Power over Ethernet	
Interface	10BASE/100BASE-TX; 1000BASE-T Port (PoE); SFP Slot	24 (24) 4 (Combo with 1000BASE-T)
10 Gigabit Uplink (optional)	XFP Expansion Module; CX4 Expansion Module	DEM-410X; DEM-410CX
Cable	10BASE-T; 100BASE-TX; 1000BASE-T	Category 3 and above, UTP/STP Cable (within 100 meter); Category 5 and above, UTP/STP Cable (within 100 meter); Enhanced Category 5 and above, UTP/STP Cable (within 100 meter)
Switch Features	Switch Fabric; Packet Forwarding Rate (64Byte)	480Gbps; 35.71Mpps
Power	Power Supply; Power Consumption (Max.) with PoE Ports in Operation	100 to 120VAC, 200 to 240VAC, 50/60Hz, Internal Power Supply; 450W; Max. Power Supply: 370W, Per Port: 15.4W
Environmental	Operating Temperature; Storage Temperature; Operating Humidity; Storage Humidity	DPS-500; -10 to 70°C; 0 to 40°C; 5 to 95% (Non-Condensing); 10 to 90% (Non-Condensing)
Dimension	W x D x H mm	440 x 389 x 44, 19-inch Standard Rackmount, 1U Height
Weight	Device Only	6kg
Certification	EMC Certification	CE Class A / FCC Class A / VCCI Class A
Package Contents	DWS-3000 Series Wireless Switch; Power Cord; Console Cable; Ethernet Cable; Mounting Kit; Rubber Feet x 4; CD with Manual	
Wireless Management Capacity	Up to 48 APs (24 APs for DWS-3024L) (Directly Connected and Indirectly Connected Through LAN Switch)	
Roaming	Fast Roaming; Intra-Switch/Inter-Switch Roaming; Intra-Subnet/Inter-Subnet Roaming	
Access Control & Bandwidth Management	Up to 16 SSID per AP (8 SSID per RF Frequency Band); AP Load Balancing	
AP Management	AP Auto-Discovery; Remote AP Reboot; AP Monitoring; List Managed AP; Rogue AP; Authentication Failed AP; Client Monitoring; List Clients Associated with Each Managed AP; Ad-Hoc Clients Monitoring; AP Authentication Supporting Local Database and External RADIUS Server; Centralized RF/Security Policy Management; Automatic AP RF Channel Adjustment; Automatic AP Transmit Output Power Adjustment	
Wireless Security	WEP 64/128/152bit; WPA-Personal/Enterprise; WPA2-Personal/Enterprise; Wireless Station and AP Monitoring on RF Channel; MAC Address, SSID, Time; Rogue and Valid AP Classification Based on MAC Address	
L2 Features	Jumbo Frame: 9216Byte (Maximum); IGMP Snooping: v1, v2; IGMP Fast Leave; IGMP on VLAN; Spanning Tree: IEEE 802.1D STP; IEEE 802.1w RSTP; IEEE 802.1s MSTP; IEEE 802.3ad Link Aggregation: 32 Groups per Device, 8 Ports per Group; Port Mirroring: One-to-One Mode; Many-to-One Mode; IEEE 802.1ab LLDP; Path MTU	
Multicast	Multicast Entry: 1K	
VLAN	IEEE 802.1Q VLAN Tagging; IEEE 802.1v Protocol Based VLAN; IP Subnet Based VLAN; MAC Based VLAN; Double VLAN; GVRP; VLAN Group: Up to 3965; VLAN ID: 1-3965	
Layer 3 Features	IPv4 Static Route: Up to 128 Entries; Floating Static Route (IPv4); VRRP; Proxy ARP	
ACL (Access Control List)	100 Profiles; 8 Rules/Profile; 768 Rules; ACL Based On: Switch Port, VLAN, MAC Address; EtherType; 802.1p Priority Queues; Protocol Type; DSCP; IP Address (IPv4); TCP/UDP Port; WAN Isolation*	
LAN Security	RADIUS Authentication; TACACS+ Authentication; SSH v1/v2; SSL v3; Port Security: 20 MAC Addresses per Port; IEEE 802.1X Port-Based Authentication; DoS Attack Prevention; MAC Filtering; Captive Portal (WEB Based Authentication)*; Guest VLAN*; Dynamic VLAN*; Broadcast Storm Control	
QoS (Quality of Service)	802.1p Priority Queues (Up to 8 Queues per Port); CoS Based On: Switch Port, VLAN ID, DSCP, TOS, TCP/UDP Port; Destination/Source MAC Addresses; Destination/Source IP Addresses; IEEE 802.1p Priority Queue	
MIB	MIB-II (RFC1213); Bridge MIB (RFC1493); SNMPv2 (RFC1907); RMON (RFC1757, 2819); EtherLike (RFC1433, 2358, 2865); IEEE 802.1p (RFC2674); RADIUS Authentication (RFC2618); RADIUS Accounting Client MIB (RFC2620); IF MIB (RFC2233, 2863); RIPv2 (RFC1724); OSPFv2 (RFC1851); VRRP (RFC2787)	
Management	Web Based GUI; CLI; Telnet Server: Up to 5 Sessions; Telnet Client; TFTP Client; SNMP v1/v2c/v3; RMON v1; Firmware Upgrade/Download; BOOTP/DHCP Client; DHCP Server	

* Available in Future Firmware Release

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

Model	DWL-3500AP	DWL-8500AP
Wireless LAN Standard	IEEE 802.11b; IEEE 802.11g	IEEE 802.11a; IEEE 802.11b; IEEE 802.11g
Operating Frequency	802.11a: - 802.11b: 2.4GHz (2.400 to 2.497MHz) 802.11g: 2.4GHz (2.400 to 2.483.5MHz)	5GHz (5.150 to 5.350MHz)
Operating Channels	802.11a: - 802.11b/g: 13	8
Radio & Modulation Type	802.11a: - 802.11b: DSSS: DBPSK@1Mbps; DQPSK@2Mbps; CCK@5.5/11Mbps 802.11g: DSSS: DBPSK@1Mbps; DQPSK@2Mbps; CCK@5.5/11Mbps	DSSS: DBPSK@1Mbps; DQPSK@2Mbps; OFDM: BPSK@6/9Mbps; QPSK@12/18Mbps; 16QAM@24/36Mbps; 64QAM@48/54Mbps
Media Access Control Method	CSMA/CA + ACK	
Transmission Speed *	802.11a: - 802.11b: 1 / 2 / 5.5 / 11 Mbps 802.11g: 6 / 9 / 12 / 18 / 24 / 36 / 48 / 54 Mbps	6/9/12/18/24/36/48/54Mbps
Coverage Distance *	Indoor: 15m (54Mbps); 30m (36Mbps); 85m (6Mbps) Outdoor: 45m (54Mbps); 70m (36Mbps); 275m (6Mbps)	15m (54Mbps); 20m (36Mbps); 85m (6Mbps); 45m (54Mbps); 70m (36Mbps); 270m (6Mbps)
Wi-Fi Certified	✓	
Antenna	Dual 5dBi Gain Detachable Dipole Antenna	2 Dualband Detachable Dipole Antenna (5.5dBi for 5GHz; 2.5dBi for 2.4GHz)
Wired LAN Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3x Flow Control; IEEE 802.3af Power over Ethernet	
Interface	10BASE-T/100BASE-TX	RJ-45 x 1
Cable	10BASE-T; 100BASE-TX	Category 3 and above, UTP/STP Cable (within 100 meter); Category 5 and above, UTP/STP Cable (within 100 meter)
Power	Power Supply; Power Consumption (Max.)	48VDC, 0.4A; Through External Power Adapter; 7W (with PoE 8.5W); 7W (with PoE 9W)
Environment	Operating Temperature; Storage Temperature; Operating Humidity; Storage Humidity	-20 to 65°C; 0 to 40°C; 5 to 95% (Non-Condensing); 10 to 90% (Non-Condensing)
Dimension	W x D x H mm	278 x 155 x 45
Weight	Device Only	800g
Certification	EMC Certification	CE Class B / FCC Class B / VCCI Class B
Package Contents	DWL-3500AP/DWL-8500AP; AC Adapter; Power Cord; Power over Ethernet Base Unit; Ethernet Cable; Mounting Plate	
Network Configuration	DHCP Client; Fixed IP; Gateway Setup	
Security	WEP 64/128/152bit; WPA-Personal/Enterprise; WPA2-Personal/Enterprise; WPA Encryption: TKIP/AES; IEEE 802.1X User Authentication; RADIUS Client: EAP-MD5; EAP-TLS; EAP-TTLS; EAP-PEAP; EAP-FAST; EAP-SM; PEAP-GTC; PEAP-MS-CHAPv2; MAC Address Filtering; Access Control; SSID Broadcast Setup; Multiple SSID (DWL-8500AP: max.16; DWL-3500AP: max.8); Rogue AP Detection; IEEE 802.11i Standard; IEEE 802.1Q VLAN	
Wireless Configuration	Channel Configuration; Transmission Restriction; Operating Mode: Access Point Mode	
Management	WLAN Management Switch (Centralized management from DWS-3026); Single Management Feature **; Telnet; SSH; MIB; MIB II; SNMP v1/v2c/v3; Firmware Upgrade by Management Switch; Backup/Restore Configuration; TFTP Client; System Log; Status Report; WLAN Client Partition Configuration	

D-Link Unified Endpoint Security consists of DFL.

DFL series NetDefend firewalls protect the environment from threats such as illegal access and virus infection. UTM firewalls are loaded with anti-virus and web content filtering features.



DFL-210

External Power Supply

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



- Stateful Inspection
- IDP
- PPPoE
- VPN
- Bandwidth Management
- URL Filtering
- P2P Blocking
- Transparent Mode

DFL-800

External Power Supply

19" Rackmount

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



- Stateful Inspection
- IDP
- PPPoE
- Zone Defense
- VPN
- Bandwidth Management
- URL Filtering
- P2P Blocking
- Load Balancing
- Transparent Mode

DFL-1600

19" Rackmount

10/100/1000BASE-T x 6
(WAN / DMZ / LAN Configurable)



- Stateful Inspection
- IDP
- PPPoE
- Zone Defense
- VPN
- Bandwidth Management
- URL Filtering
- P2P Blocking
- Load Balancing
- Transparent Mode
- HA

DFL-2500

19" Rackmount

10/100/1000BASE-T x 8
(WAN / DMZ / LAN Configurable)



- Stateful Inspection
- IDP
- PPPoE
- Zone Defense
- VPN
- Bandwidth Management
- URL Filtering
- P2P Blocking
- Load Balancing
- Transparent Mode
- HA

DFL Series NetDefend IPS Firewall License (1 Year)

IPS Signature License of 90 days is shipped with the equipment. Please register at <http://security.dlink-intl.com>

License Description	Firewall Model	License Model
IPS Signature License	DFL-210	DFL-260-IPS-12
IPS Signature License	DFL-800	DFL-260-IPS-12
IPS Signature License	DFL-1600	DFL-1600-IPS-12
IPS Signature License	DFL-2500	DFL-2500-IPS-12

DFL-210 / DFL-800 / DFL-1600 / DFL-2500 NetDefend IPS Firewalls

Model	DFL-210	DFL-800	DFL-1600	DFL-2500	
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3x Flow Control; IEEE 802.1Q VLAN Tagging				
Interface	10BASE-T/100BASE-TX Port (RJ-45) 10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45) RS-232C Port (DB-9 Female) LCM Module Auto Negotiation/ Auto MDI/MDIX Flow Control	WAN x 1; DMZ x 1; LAN x 4	WAN x 2; DMZ x 1; LAN x 7	-	
Cable	10BASE-T 100BASE-TX 1000BASE-T	Category 3 and above, UTP/STP Cable (within 100 meter) Category 5 and above, UTP/STP Cable (within 100 meter) Enhanced Category 5 and above, UTP/STP Cable (within 100 meter)			
Power	Power Supply Power Consumption (Max.)	Through External Power Adapter 15W	20W	100 to 240VAC, 50/60 Hz; Internal Power Supply 200W 250W	
Environment	Operating Temperature Storage Temperature Operating Humidity Storage Humidity	0 to 40°C -20 to 70°C 10 to 95% (Non-Condensing) 5 to 95% (Non-Condensing)			
Dimension	W x D x H mm	235 x 162 x 36	280 x 254 x 44; 19-inch Standard Rackmount	440 x 254 x 44; 1U; 19-inch Standard Rackmount 440 x 254 x 44; 1U; 19-inch Standard Rackmount	
Weight	Device Only	960g	2.24kg	4.65kg 7.66kg	
Certification	EMI Certification	CE / FCC VCCI Class A	CE / FCC VCCI Class B	CE / FCC VCCI Class A CE / FCC VCCI Class A	
Package Contents	DFL Series Firewall; AC Adapter; Power Cord (except DFL-210); Console Cable; Straight Ethernet Cable; Cross Over Ethernet Cable; Rackmount Bracket (except DFL-210); Manual & QIG on CD				
System Feature	Firewall Throughput VPN Throughput Concurrent Sessions New Sessions per seconds Policies No. of Users VPN Tunnels	80Mbps 25Mbps 12,000 2,000 500 100	150Mbps 60Mbps 25,000 4,000 1,000 300	320Mbps 120Mbps 400,000 10,000 2,500 1,200	600Mbps 300Mbps 1,000,000 15,000 4,000 2,500
Firewall Mode	L3 Mode : Route/NAT L2 Mode : Transparent Mode NAT, PAT; Policy-Based NAT; Port Forwarding; ZoneDefense (not supported by DFL-210); Time Schedule Policy Configuration				
VPN	IPSec Protocol : EAP IPSec Mode : Tunnel; Transport Encryption Mode : DES/3DES/AES/Twofish/Blowfish/CAST-128/NULL Authentication Algorithm : MD5, SHA-1 PFS (DH Group) : Group 1, 2, 5 PPTP/L2TP/IPSec VPN Server; PPTP Server (MPPE Encryption Mode Support); Site VPN; Remote Access VPN (IPSec) IKE Mode : Main / Aggressive Key Management : Pre-Share / X.509 v3/Manual* IKEv2*; IPSec NAT Traversal VPN Policy Option : Routing/Policy-based Routing Dead Peer Detection; Replay Attack Prevention; VPN Tunnel Keep Alive; VPN Gateway Redundancy; VPN Hub & Spoke; VPN Client				
IP / Routing	Static IP Address; PPPoE / PPTP (xDSL); DHCP Client (WAN) DHCP : DHCP Server / DHCP Relay/DHCP over IPSec IP Alias; Static Route; OSPF Dynamic Routing; Policy-Based Routing				
Network	Multi-WAN Link IEEE 802.1Q VLAN : 8 (DFL-210) / 16 (DFL-800) / 128 (DFL-1600) / 1024 (DFL-2500) Policy-Based 802.1Q VLAN IP Interface : 8 (DFL-210) / 16 (DFL-800) / 128 (DFL-1600) / 1024 (DFL-2500) IP Multicast : IGMP v3* DDNS : DynDNS.org/TZO.com/dhs.org/Peanut.Hull(orange.net); H.323 NAT Traversal ALG : HTTP/FTP/H.323/SMP/SIP* (HTTP; HTTPS)				
System Management	Installation Wizard; Console Interface Web Interface : HTTP; HTTPS Command Line Interface (CLI); SSH; CPU / Memory Protection; SNMP				
User & Device Management	Multiple Administrator; Multiple Level User Rights Control; Management Account for Read / Write Firmware Renewal; Configuration Backup / Recovery; Web-Based Interface / TFTP Remote Management with Trusted Host				
User Authentication	Internal User Database : 150 (DFL-210) / 500 (DFL-800) / 1,500 (DFL-1600) / 5,000 (DFL-2500) External Database : RADIUS / LDAP (IPSec only) / Microsoft IAS Runtime Authentication (Internal / External User Database); User Group Based Authentication; Multiple Authentication Server (Concurrent) : 3 XAUTH for IPSec Authentication				
Logging & Monitoring	Internal Log : 500 (DFL-210/800) / 800 (DFL-1600) / 1600 (DFL-2500) Log Viewer; Email Notification; External Log; Log Receiver : Syslog Server; Log Export Type : CSV Real Time Performance Monitor; Event Log / Alarm; Log Sort*/Filter*/Search* SNMP : SNMP v1/v2c; SNMP Trap; MIB II / Custom MIB* VPN Tunnel Monitor				
Bandwidth Management	Guaranteed Bandwidth; Maximum Bandwidth; Priority Bandwidth; Policy-Based Traffic Shaping; Schedule Feature; Bandwidth Management in VPN Tunnel				
High Availability (HA)	WAN Failover : (DFL-210*/DFL-800/DFL-1600/DFL-2500) HA Mode : Active/Passive Mode (DFL-1600 / DFL-2500) Device Failure Detection (DFL-1600 / DFL-2500) Session Sync: Setup; Firewall/VPN Session Average Failover Time : < 800ms Failure Network Notification				
Intrusion Detection System (IDS)	IDS Automatic Pattern Update; DoS/DDoS Protection; Nimba/CodeRed Detection IP Blacklist : 128IP/Subnet (DFL-210 / DFL-800); 256IP/Subnet (DFL-1600); 512IP/Subnet (DFL-2500) Attack Alarm via Email				
Content Filtering	HTTP Type : URL Script Type : Java Applet / JavaScript / Cookie / ActiveX / VB Script Email Type : Blacklist (SMTP Only) IM/P2P Application Prevention : 2 Find MP3/Almini/AOL Instant Messenger/Ants P2P/Ares P2P/Bit Torrent/ Direct Connect/eDonkey Gnutella/KaZaA/KCeasy/WinMX/iTunes/IRC/MSN Messenger/Yahoo! Messenger				
Traffic Load Balance	Outbound Traffic Load Balance*; Server Load Balance (Not Supported on DFL-210) Load Balance Algorithm : Round Robin / Connect Rate / IP Address/Network Stickness Traffic Re-Direct (WAN Connection Failover)				

* WAN, DMZ, LAN User Configuration Setup

* Available in Future Firmware Release

** Available when DMZ port is Configured as WAN Port



DFL-260

External Power Supply

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



- Anti-Virus
- Stateful Inspection
- IDP
- PPPoE
- IPSec
- Bandwidth Management
- URL Filtering
- P2P Blocking
- Load Balancing
- Transparent Mode
- Web Content Filtering

DFL-860

External Power Supply

10/100BASE-TX x 10
(WAN x 1 / DMZ x 1 / LAN x 7)



- Anti-Virus
- Stateful Inspection
- IDP
- PPPoE
- IPSec
- Bandwidth Management
- URL Filtering
- P2P Blocking
- Load Balancing
- Transparent Mode
- Web Content Filtering
- ZoneDefense

DFL Series NetDefend UTM Firewall License (1 year) for DFL-260/DFL-860

IPS & Anti-Virus Signature Licenses of 1 Year and Web Content Filtering License of 90 days are shipped with the equipment. Please register at <http://security.dlink-intl.com>

License Description	Firewall Model	License Model
IPS Signature License	DFL-260	DFL-260-IPS-12
Anti-Virus Signature License	DFL-260	DFL-260-AV-12
Web Content Filtering Signature License	DFL-260	DFL-260-WCF-12
IPS Signature License	DFL-860	DFL-860-IPS-12
Anti-Virus Signature License	DFL-860	DFL-860-AV-12
Web Content Filtering Signature License	DFL-860	DFL-860-WCF-12

DFL-260 / DFL-860 NetDefend UTM Firewalls

	DFL-260	DFL-860
Model		
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3x Flow Control; IEEE 802.1Q VLAN Tagging	
Interface	10BASE-T/100BASE-TX Port (RJ-45) RS-232C Port (DB-9 Female) Auto Negotiation/ Auto MDI/MDIX Flow Control	WAN x 1; DMZ x 1; LAN x 4 1 ✓ IEEE 802.3 Flow Control (Full Duplex); Back Pressure (Half Duplex)
Cable	10BASE-T 100BASE-TX	Category 3 and above, UTP/STP Cable (within 100 meter) Category 5 and above, UTP/STP Cable (within 100 meter)
Power	Power Supply Power Consumption (Max.)	Through External Power Adapter 15W 20W
Environment	Operating Temperature Storage Temperature Operating Humidity Storage Humidity	0 to 40°C -20 to 70°C 5 to 95% (Non-Condensing) 5 to 95% (Non-Condensing)
Dimension	W x D x H mm	235 x 162 x 36 280 x 254 x 44; 19-inch Standard Rackmount
Weight	Device Only	1.0kg 2.3kg
Certification	EMI Certification	CE Class B / FCC Class B / VCCI Class B (DFL-860) / VCCI Class A (DFL-260)
Package Contents	DFL-260/DFL-860 Firewall; AC Adapter, Console Cable, Power Cord (DFL-860); Straight Through Ethernet Cable; Cross Over Ethernet Cable, Manual & QIG on CD; Rack Mount Brackets (DFL-860)	
System Feature	Firewall Throughput VPN Throughput Concurrent Sessions New Sessions per Second Policies No. of Users VPN Tunnels	80Mbps 25Mbps 12,000 2,000 500 Unlimited 100 150Mbps 60Mbps 25,000 4,000 1,000 300
Firewall Mode	L3 Mode : Route/NAT L2 Mode : Transparent Mode NAT, PAT, Policy-Based NAT; Port Forwarding; ZoneDefense (Not Supported on DFL-210); Time Schedule Policy Configuration	
VPN	IPSec Protocol : EAP IPSec Mode : Tunnel; Transport Encryption Mode : DES/3DES/AES/Twofish/Blowfish/CAST-128/NULL Authentication Algorithm : MD5; SHA-1 PFS (DH Group) : Group 1, 2, 5 PPTP/L2TP/IPSec VPN Server; PPTP Server (MPPE Encryption Mode Support); Site VPN; Remote Access VPN (IPSec) VPN Tunnel : 100 (DFL-210) / 300 (DFL-860) IKE Mode : Main / Aggressive Key Management : Pre-Share / X.509 v3/Manual* IKEv2*; IPSec NAT Traversal VPN Policy Option : Routing / Policy-based Routing Deed Peer Detection; Replay Attack Prevention; VPN Tunnel Keep Alive; VPN Gateway Redundancy; VPN Hub & Spoke; VPN Client	
IP / Routing	Static IP Address; PPPoE / PPTP (xDSL); DHCP Client (WAN) DHCP : DHCP Server / DHCP Relay / DHCP over IPSec IP Alias; Static Route; OSPF Dynamic Routing (Not Supported on DFL-260); Policy-Based Routing	
Network	Multiple WAN Link IEEE 802.1Q VLAN : 8 (DFL-260) / 16 (DFL-860) Policy-Based 802.1Q VLAN IP Interface : 8 (DFL-260) / 16 (DFL-860) IP Multicast : IGMP v3* DDNS : DynDNS.org/TZO.com/dhs.org/Peanut.Hull(oray.net); H.323 NAT Traversal H.323 NAT Traversal ALG : HTTP/FTP/H.323/SMP/SIP*	
System Management	Installation Wizard; Console Interface Web Interface : HTTP; HTTPS Command Line Interface (CLI); SSH; CPU / Memory Protection; SNMP	
User & Device Management	Multiple Administrator; Multiple Level User Rights Control; Management Account for Read / Write Firmware Renewal; Configuration Backup / Recovery; Web-Based Interface / TFTP Remote Management with Trusted Host	
User Authentication	Internal User Database : 150 (DFL-260) / 500 (DFL-860) External Database : RADIUS / LDAP (IPSec only) / Microsoft IAS Runtime Authentication (Internal / External User Database); User Group Based Authentication; Multiple Authentication Server (Concurrent) : 3 XAUTH for IPSec Authentication	
Logging & Monitoring	Internal Log : 500 Log Viewer; Email Notification; External Log; Log Receiver : Syslog Server; Log Export Type : CSV Real Time Performance Monitor; Event Log / Alarm; Log Sort/Filter/Search* SNMP : SNMP v1/v2c; SNMP Trap; MIB II / Custom MIB* VPN Tunnel Monitor	
Bandwidth Management	Guaranteed Bandwidth; Maximum Bandwidth; Priority Bandwidth; Policy-Based Traffic Shaping; Schedule Feature; Bandwidth Management in VPN Tunnel	
High Availability (HA)	WAN Failover : (DFL-260** / DFL-860)	
Intrusion Detection System (IDS)	NIDS Automatic Pattern Update; DoS/DDoS Protection, Nimba/CodeRed Detection; IP Blacklist; Attack Alarm via Email	
Content Filtering	Cooperation with external harmful URL list for Web Content Filtering HTTP Filtering : URL Script Type : Java Applet / Java Script / Cookie / ActiveX / VB Script Email Attachment File Filtering : Blacklist/Keyword IM/P2P Application Prevention : 2 Find MP3/Almini/AOL Instant Messenger/Ants P2P/Ares P2P/Bit Torrent/ Direct Connect/eDonkey Gnutella/KaZaA/KCeasy/WinMX/iTunes/IRC/MSN Messenger/Yahoo! Messenger	
Traffic Load Balance	Outbound Traffic Load Balance*; Server Load Balance Load Balance Algorithm : Round Robin (DFL-260* / DFL-860) / Connect Rate(DFL-260* / DFL-860) / IP Address (Not Support on DFL-260) Traffic Re-Direct	
Anti-virus	FTP; HTTP; SMTP; VPN Tunnel Scan; Scan all MIME type; Compressed File ZIP/GZIP	

* Available in Future Firmware Release

DCS series consists of network camera products with wired and wireless models. The features include Pan, Tilt, Optical Zoom, Digital Zoom, color CCD sensor, bidirectional audio features, built-in microphone and 3GPP mobile surveillance.

The bundled webGUI utility, IP Surveillance, is able to control up to 32 cameras concurrently. DCS series in addition, include infrared ray option for total darkness monitoring, and provides enclosures for outdoor installations.



DCS-3110

- CMOS Sensor
- Built-in-PoE
- Optional**
 - DCS-10 (IR Illuminator)
 - DCS-20 (CS Mount IR Lens)
 - DCS-25 (CS Mount IP Auto Iris Lens)
 - DCS-45/50/60 (Outdoor Enclosure)



- WEB GUI
- Motion Detection
- Monitor 32 Cameras Concurrently
- Utility CD Included
- 3GPP Mobile Surveillance
- Samba Client for NAS

DCS-3410

- CCD Sensor
- Built-in-PoE
- Optional**
 - DCS-10 (IR Illuminator)
 - DCS-20 (CS Mount IR Lens)
 - DCS-25 (CS Mount IP Auto Iris Lens)
 - DCS-45/50/60 (Outdoor Enclosure)



- WEB GUI
- Motion Detection
- Monitor 32 Cameras Concurrently
- Utility CD Included
- Night Monitoring
- 3GPP Mobile Surveillance

DCS-3415

- Sony Progressive CCD
- Built-in-PoE
- Optional**
 - DCS-45/50/60 (Outdoor Enclosure)



- WEB GUI
- Motion Detection
- Monitor 32 Cameras Concurrently
- Utility CD Included
- 3GPP Mobile Surveillance
- Samba Client for NAS

DCS-3420

- CCD Sensor
- Optional**
 - DCS-10 (IR Illuminator)
 - DCS-20 (CS Mount IR Lens)
 - DCS-25 (CS Mount IP Auto Iris Lens)
 - DCS-45/50/60 (Outdoor Enclosure)



- WEB GUI
- Motion Detection
- Monitor 32 Cameras Concurrently
- Utility CD Included
- Night Monitoring
- 3GPP Mobile Surveillance
- 802.11b/g

DCS-5220

- CMOS Sensor
- 10/100BASE-TX x 1 Pan & Tilt
- WiFi CERTIFIED**



- WEB GUI
- Motion Detection
- Monitor 32 Cameras Concurrently
- Utility CD Included
- 3GPP Mobile Surveillance
- 802.11b/g

DCS-5300 / DCS-5300G

- CCD Sensor
- 10/100BASE-TX x 1 Pan & Tilt
- Optional**
 - DCS-70 (Outdoor Enclosure) For DCS-5300 only
- WiFi CERTIFIED**



- WEB GUI
- Motion Detection
- Monitor 32 Cameras Concurrently
- Utility CD Included
- Built-in Microphone

DCS-3110 / DCS-3410 / DCS-3415 / DCS-3420 / DCS-5220 / DCS-5300 / DCS-5300G Internet Cameras

Model	DCS-3110	DCS-3410	DCS-3415	DCS-3420	DCS-5220	DCS-5300	DCS-5300G
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3af Power over Ethernet			IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX			
Wired Network	Interface (10/100BASE-TX) Switch Feature (SDRAM/Flash) Media Access Control Method			1 (RJ-45) 16MB / 4MB 32MB / 8MB 16MB / 2MB			
Wireless Network	Frequency Range			IEEE 802.11b; IEEE 802.11g			
	Operating Channels			13			
	Transmission Technology			802.11g: OFDM 802.11b: DSSS			
	Modulation Technology			802.11g: BPSK, QPSK, 16QAM, OFDM 802.11b: CCK, DBPSK, DQPSK			
	Media Access Control Method			CSMA/CA + ACK			
	Data Transfer Rate *1			802.11b: 11 / 5.5 / 2 / 1 Mbps 802.11g: 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6 Mbps			
	Transmission Distance *1			Indoor: 30m; Outdoor: 150m			
	Antenna			2 dBi Detectable Dipole Antenna			
Connector	External Microphone Connector			1			
	AV Output Connector			TV Connection / Speaker Connection			
	Input / Output Connectors			Sensor Input x 1 / Relay Output x 1			
	Reset Button			✓			
Camera Specifications	Lens			1/4-inch CMOS Sensor			
	Focal Length			4mm			
	Aperture			F2.0			
	Illumination			Min. 1 Lux (F2.0)			
	Digital Zoom			4x			
	Optical Zoom			-			
	Pan			+150° to -150°			
	Tilt			+90° to -45°			
	Auto Focus			N/A			
	Auto Contrast			✓			
	Auto White Balance			✓			
	Auto Exposure			✓			
	Back Light Compensation			✓			
	Electronic Shutter			1/5 ~ 1/15,000 sec.			
Video Feature	Color Selection			Color or Monochrome Mode			
	Image Frame Rate			1 to 30 fps			
	Video Bit Rate			20 to 4000 kbps			
	Image Compression			MPEG4 Simple Profile			
	Image Compress Levels			3 Levels			
	Still Image Compression			JPEG			
	Resolution (Pixels)			1280x1024 (MJPEG)			
Audio Feature	Audio Communication			2-Way Audio (SIP) Communication			
	Built-in Microphone			✓			
	Audio Frequency			20 to 20000 Hz			
	Sampling Rate			16 to 128kbps; GSM-AMR: 4.75 to 12.2kbps			
Power	Power Supply			12VDC, 1.25A, Through External Power Adapter			
	Max. Power consumption			4.8W			
Environment	Operating / Storage Temperature			0 to 40°C / -20 to 70°C			
	Operating / Storage Humidity			20 to 80% / 20 to 80%			
Certification	EMI Certification			CE Class B / FCC Class B / C-Tick / VCCI Class B (DCS-3420 only)			
Dimension	W x D x H mm			159.6 x 80 x 62			
Weight	Device Only			450g			
Package Contents	DCS Series IP Camera, AC Adapter, Antenna (DCS-3420, DCS-5300G only); Remote Control (DCS-5300, DCS-5300G only); Cat. 5 Ethernet Cable; AV Cable (DCS-5300, DCS-5300G only); Camera Stand, Quick Installation Guide, CD with Installation Software and Manual						
Optional Accessories*2	IR Illuminator			DCS-10			
	CS Mount IR Lens			DCS-20			
	CS Mount IR Auto Iris Lens			DCS-25			
	Enclosures			DCS-45, DCS-50, DCS-60			
Alarm Feature	Motion Detection (Activity Detection); Periodical Image Transfers through E-mail and Upload to a Server using FTP			Dynamic Motion Detection; Email Alarm Notification; Pre/Post Alarm Buffer			
Management	Web browser; FTP; Firmware Version Update via TCP/IP Network; Save Snapshot & Video Clip Directly to Hard Disk (DCS-3110/ DCS-3415 / DCS-5220 only)						

*1 Environment Factors may Adversely Affect Operating Range
*2 Optional Accessory. Not in Original Package.
*3 DCS-3110, DCS-3410, and DCS-3420 are supported by auto iris lens.

DCS-5610

- Sony Progressive CCD
- Built-in-PoE
- Optional**
DCS-70 (Outdoor Enclosure)

10/100BASE-TX x 1
2.6x Optical Zoom
(PoE Enabled)



- WEB GUI
- Motion Detection
- Monitor 32 Cameras Concurrently
- Utility CD Included
- 3GPP Mobile Surveillance
- Samba Client for NAS

DCS-6110

- Progressive CMOS Sensor
- Built-in-PoE

10/100BASE-TX x 1
Dome Type
(PoE Enabled)



- WEB GUI
- Motion Detection
- Monitor 32 Cameras Concurrently
- Utility CD Included
- 3GPP Mobile Surveillance
- Samba Client for NAS

DCS-6620

- CCD Sensor
- Optional**
DCS-70 (Outdoor Enclosure)

10/100BASE-TX x 1
10x Optical Zoom
Pan and Tile



- WEB GUI
- Motion Detection
- Monitor 32 Cameras Concurrently
- Utility CD Included
- 2-Way Audio

DCS-6620G

- CCD Sensor
- Optional**
DCS-70 (Outdoor Enclosure)

10/100BASE-TX x 1
10x Optical Zoom
Pan & Tile



- WEB GUI
- Motion Detection
- Monitor 32 Cameras Concurrently
- Utility CD Included
- 2-Way Audio
- 802.11b/g

Internet Camera Outdoor Enclosures

DCS-45



- Thermal Barrier Design
- Flip Open Top

DCS-50



- IP66 Certified
- Water Resistance
- Dust-proof
- Build-in Power Supply

DCS-60



- IP44 Certified
- Water Resistance
- Dust-proof
- Build-in Power Supply
- Heater & Blower

DCS-70



- IP66 Certified
- Water Resistance
- Dust-proof
- Build-in Power Supply
- Heater & Blower
- Dome Type

DCS-5610 / DCS-6110 / DCS-6620 / DCS-6620G Internet Cameras

Model	DCS-5610	DCS-6110	DCS-6620	DCS-6620G
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3af Power over Ethernet		IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX	
Wired Network	Interface (10/100BASE-TX) Switch Feature (SDRAM/Flash) Media Access Control Method		1 (RJ-45)	16MB / 4MB
Wireless Network	Frequency Range		2.4GHz (2.4 to 2.4835GHz)	
	Operating Channels		13	
	Transmission Technology		802.11g : OFDM 802.11b : DSSS	
	Modulation Technology		802.11g : BPSK, QPSK; 16QAM, OFDM 802.11b : CCK, DBPSK, DQPSK	
	Media Access Control Method		CSMA/CA + ACK	
	Data Transfer Rate *1		802.11b : 11 / 5.5 / 2 / 1 Mbps 802.11g : 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6 Mbps	
	Transmission Distance *1		Indoor : 30m / Outdoor : 150m	
	Antenna		2 dBi Detectable Dipole Antenna	
Connector	External Microphone Connector	1	1	
	AV Output Connector	-	TV Connection / Speaker Connection	
	Input / Output Connectors	Sensor Input x 1 / Relay Output x 1		
Camera Specifications	Lens	1/4-inch SONY Progressive Color CCD Sensor	1/4-inch Color CMOS Sensor	1/4-inch Color Sensor (Interlace Scan Mode)
	Focal Length	2.8 to 7.3mm	3.7 to 12mm	4.2 to 42mm
	Aperture	F1.9 to F200	F1.4 to F2.8	F1.8 to F2.9
	Illumination	Min. 1 Lux (F1.9)	1.5 Lux, F1.4	Min. 0.05 Lux (F1.8)
	Digital Zoom	4x	-	10x
	Optical Zoom	2.6x	-	10x
	Pan	+150° to -150°	-	+135° to -135°
	Tilt	+90° to -45°	-	+90° to 45°
	Auto Focus	-	-	✓
	Auto Iris	✓	-	✓
	Auto Contrast	-	✓	✓
	Auto White Balance	-	✓	✓
	Auto Exposure	-	✓	✓
	Back Light Compensation	-	✓	✓
	Electronic Shutter	1/60 to 1/120,000 sec	1/5 sec. to 1/15,000 sec.	1/60 to 1/120,000 sec
Video Feature	Color Selection	Color or Monochrome Mode		
	Image Frame Rate	1 to 30 fps		
	Video Bit Rate	20 to 4000 kbps	64 to 1200 kbps	
	Image Compression	Motion-JPEG; MPEG4 Simple Profile		
	Image Cmpress Level	5 Levels		
	Still Image Compression	JPEG		
	Resolution (Pixels)	640 x 480; 320 x 240; 176 x 144	176 x 120; 352 x 240; 704 x 480	
Audio Feature	Audio Communication	Full Duplex 2-Way Audio Communication	-	2-Way Audio Communication
	Built-in Microphone	✓	-	✓
	Audio Frequency	50 to 16000 Hz	-	20 to 20000 Hz
	Sampling Rate	AAC : 16 to 128kbps; GSM-AMR : 4.75 to 12.2kbps	-	8 / 24 / 32 kbps
			-	8 / 24 / 32 kbps
Power	Power Supply	12VDC, 1.5A; Through External Power Adapter	12VDC, 1.25A; Through External Power Adapter	12VDC, 1.5A; Through External Power Adapter
	Max. Power consumption	6W	3.6W	9.6W
Environment	Operating / Storage Temperature	0 to 40°C / -20 to 70°C		
	Operating / Storage Humidity	20 to 80% / 20 to 80%		
Certification	EMI Certification	CE / FCC / C-Tick		CE Class B / FCC Class B / VCCI Class B / C-Tick
Dimension	W x D x H mm	104 x 118 x 103.5	164 x 106 x 174	105 x 105 x 114 (Camera Only; Excluding Antenna)
Weight	Device Only	319g	630g	430g
				480g
Package Contents		DCS Series IP Camera; AC Adapter; Antenna x 2 (DCS-6620G only); Remote Control (DCS-6620, DCS-6620G only); Cat. 5 Ethernet Cable; A/V Cable (DCS-6620, DCS-6620G only); Camera Stand; Quick Installation Guide; CD with Installation Software and Manual		
Optional Accessories*2	Enclosures	DCS-70	-	DCS-70
Alarm Feature		Dynamic Motion Detection; Email Alarm Notification; Pre/Post Alarm Buffer		
Management		Reset Button; WebGUI; Camera Control & Monitoring by Utility Software (IP Surveillance); Firmware Upgrade by Utility Software (Installation Wizard); 3GPP (DCS-5610, DCS-6110 only); SMTP; FTP; NTP; System Log		

*1 Environment Factors may Adversely Affect Operating Range

*2 Optional Accessory. Not in Original Package.

Internet Camera Accessories

Accessories	Description	Internet Cameras					
		DCS-3110	DCS-3410	DCS-3415	DCS-3420	DCS-5300	DCS-6620
DCS-10	IR Illuminator	✓	✓		✓		
DCS-20	CS Mount IR Lens	✓	✓		✓		
DCS-25	CS Mount IR Auto Iris Lens	✓	✓		✓		
DCS-45	Outdoor Enclosure, Thermal Barrier Design to Withstand Temperature Fluctuation	✓	✓	✓			
DCS-50	Outdoor Enclosure, IP66 Certified for Water Resistance & Dust-Proof Operation with Built-in Power Supply	✓	✓	✓			
DCS-60	Outdoor Enclosure, IP44 Certified for Water resistance & Dust-Proof operation with Built-in Power Supply, Heater & Blower	✓	✓	✓			
DCS-70	Dome Type Outdoor Enclosure, IP66 Certified for Water Resistance & Dust-Proof Operation with Built-in Power Supply, Heater & Blower					✓	✓

DNS-313, DNS-323 & DNS-343 Network Attached Storage (NAS) Enclosures, when used with internal SATA drives, enable you to share documents, files and digital medias such as music, photos and video with everyone at home or an office network. Remote accessing files through the Internet is also possible with built-in FTP server. Data is kept safe by giving rights to specific users or groups.

DSN-2100, DSN-3200 & DSN-3400 series Storage Area Network (SAN) Arrays are designed to provide a reliable network data storage solution for customers at entry-level and SMB segments. Utilizing a 10Gbit iSCSI System-on-a-Chip (SoC) solution, DSN-2100 series can handle over 80,000 I/Os per second and capable of supporting 8TBs of raw capacity using 1TB hard drives, while DSN-3200 and DSN-3400 series can handle over 65,000 I/Os per second and support 11TB raw capacity using 750GB hard drives. These SAN Arrays can easily be implemented as nearline storage or as a supplement to the primary backup and recovery devices.

DNS-313

- External Power Supply
- 1-Bay

10/100/1000BASE-T x 1
USB Port to Computer x 1



- Support SATA Standard Drive
- Built-in FTP Server
- Scheduled Backup

DNS-323

- External Power Supply
- 2-Bay

10/100/1000BASE-T x 1
USB Port to Printer x 1



- Support SATA Standard Drive
- Built-in FTP Server
- Scheduled Backup
- Quota Management

DNS-343

- External Power Supply
- 4-Bay

10/100/1000BASE-T x 1
USB Port to Printer or UPS x 1



- Support SATA Standard Drive
- Built-in FTP Server
- Scheduled Backup
- Quota Management

DSN-2100-10

- Internal Power Supply
- 8 Real Trays
- RAID Support

10/100/1000BASE-T x 4



- SATA-II
- CHAP Authentication

DSN-2100-20

- Internal Power Supply
- 8 Dummy Trays
- RAID Support

10/100/1000BASE-T x 4



- SATA-II
- CHAP Authentication

DSN-3200-10

- Internal Power Supply
- 15 Real Trays
- RAID Support

10/100/1000BASE-T x 8



- SATA-II
- CHAP Authentication

DSN-3200-20

- Internal Power Supply
- 15 Dummy Trays
- RAID Support

10/100/1000BASE-T x 8



- SATA-II
- CHAP Authentication

DSN-3400-10

- Internal Power Supply
- 15 Real Trays
- RAID Support

10-Gigabit XFP x 1



- SATA-II
- CHAP Authentication

DSN-3400-20

- Internal Power Supply
- 15 Dummy Trays
- RAID Support

10-Gigabit XFP x 1



- SATA-II
- CHAP Authentication

DNS-313 / DNS-323 / DNS-343 Network Attached Storage (NAS) Enclosures

Model	DNS-313	DNS-323	DNS-343
Standard	IEEE 802.3 IEEE 802.3u IEEE 802.3ab USB 2.0	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓
Supported Hard Drive	Type No. of Bays Disk Capacity Disk Size	Serial Advanced Technology Attachment (SATA) I & II 1 Any Capacity Size 3.5-inch Internal	4
Ports	Network USB	1 x 10/100/1000 Gigabit Ethernet Port 1-Port to Server or Computer	1-Port to USB Printer or UPS
Display	Type Size	- -	OLED Display Screen 256 x 64
Operating System	Network File Protocols	Linux	
Network Client Type	FTP SMB	✓ ✓	
User Interface	Microsoft Linux Internet Explorer v6 or other Java-Enabled Browser Mozilla Firefox 1.0 & above Easy Search Utility	Windows 2000, XP, Vista ✓ ✓ ✓ ✓	
Media Type (For DLNA)	Audio Type Video Type Playlist Type Photo Type	MP3, WAV/PCM, WMA, AIF/AIFF VOB, AVI, MPEG2, MPEG4, WMV9 M3U, PLS JPG, BMP, GIF, TIF, PNG	
Drive Management	Hard Drive Mode HDD Control & Managed via PC Scan Disk Reformat Disk	Standard Standard, JBOD, RAID 0, RAID 1 ✓ ✓ ✓	Standard, JBOD, RAID 0, RAID 1, RAID 5
Device Management	Email Alerts User/Group Management Quota Management Power Management Scheduled Downloads from Web or FTP Scheduled Backups Real Time Backups	✓ No No No No No No	✓ ✓ ✓ ✓ ✓ ✓
File Sharing	Max. User Account Max. Group Max. Shared Folder Max. Concurrent Connection	10 10 45 64 (Samba) / 10 (FTP)	
Power	Power Supply Max. Power Consumption	12V/3A External Power Supply Normal Mode : 16.72W Sleep Mode : 3.52W	12V/3A or 5V/3A, External Power Supply Normal Mode : 31.14W Sleep Mode : 6.37W
Environment	Operating / Storage Temperature Operating Humidity	0 to 55°C / -20 to 70°C 5% to 90% (non-condensing)	DC 19V/7.89A, External Power Supply Normal Mode : 71.76W Sleep Mode : 21.44W
Certification	EMI Certification Safety Certification	FCC, IC, CE, C-Tick UL/cUL, LVD	FCC, IC, CE, C-Tick UL/cUL, CB, LVD
Dimension	W x D x H mm	49 x 200 x 124	104 x 198 x 132
Weight	Device Only	1.29 kg	1.225 kg
Package Contents		1-Bay Network Storage Enclosure; Power Adapter; Ethernet Cable; CD with Software & Manual	2-Bay Network Storage Enclosure; Power Adapter; Ethernet Cable; Power Cable Clip; Installation Guide; CD with Software & Manual 4-Bay Network Storage Enclosure; Power Adapter; Ethernet Cable; Quick Installation Guide; CD with Software & Manual

DSN-2100 / DSN-3200 / DSN-3400 Series SAN Storage Arrays

Model	DSN-2100-10	DSN-2100-20	DSN-3200-10	DSN-3200-20	DSN-3400-10	DSN-3400-20	
Features	Drive Bays Drive Interface Support System Memory Cache Memory Battery Backup for Cache Bandwidth Storage Capacity Operating Systems Supported	8 Real Trays SATA-II Support 256MB to 512MB (512MB standard) 256MB to 4GB (512MB standard) Up to 425Mbytes 8TB Capacity with 1TB Hard Drives Windows Vista, Windows Server 2003, Windows Server 2003 R2, Windows XP Pro, Windows 2000 Advanced Server, Fedora Core, Red Hat 7.3, Red Hat 9, Red Hat Enterprise, SuSE Pro, OS X	15 Real Trays SATA-II Support 256MB to 512MB (256MB standard) 256MB to 4GB (256MB standard) Standard (Minimum 72 Hours on Full Charge) Up to 850Mbytes Over 11TB Capacity with 750GB Hard Drives Windows 2000 SP3, Windows XP, Windows Server 2003 (future: Linux-iSCSI, Mac-OS, Solaris)	15 Dummy Trays SATA-II Support 256MB to 512MB (256MB standard) 256MB to 4GB (256MB standard) Standard (Minimum 72 Hours on Full Charge) Up to 850Mbytes Over 11TB Capacity with 750GB Hard Drives Windows 2000 SP3, Windows XP, Windows Server 2003 (future: Linux-iSCSI, Mac-OS, Solaris)	15 Real Trays SATA-II Support 256MB to 512MB (256MB standard) 256MB to 4GB (256MB standard) Standard (Minimum 72 Hours on Full Charge) Up to 850Mbytes Over 11TB Capacity with 750GB Hard Drives Windows 2000 SP3, Windows XP, Windows Server 2003 (future: Linux-iSCSI, Mac-OS, Solaris)	15 Dummy Trays SATA-II Support 256MB to 512MB (256MB standard) 256MB to 4GB (256MB standard) Standard (Minimum 72 Hours on Full Charge) Up to 850Mbytes Over 11TB Capacity with 750GB Hard Drives Windows 2000 SP3, Windows XP, Windows Server 2003 (future: Linux-iSCSI, Mac-OS, Solaris)	15 Dummy Trays SATA-II Support 256MB to 512MB (256MB standard) 256MB to 4GB (256MB standard) Standard (Minimum 72 Hours on Full Charge) Up to 850Mbytes Over 11TB Capacity with 750GB Hard Drives Windows 2000 SP3, Windows XP, Windows Server 2003 (future: Linux-iSCSI, Mac-OS, Solaris)
iSCSI Network Interface	Network Interface Host Interface Connections CHAP Authentication Access Control of Management iSCSI / TCP/IP Full HW Offload Jumbo Frames Support Link Aggregation Support VLAN Support	Four (4) 1 Gigabit Ethernet Copper iSCSI Draft 20 Compliant Initiator 1024 Hosts ✓ ✓ ✓ ✓ Up to Four (4) Groups	Eight (8) 1-Gigabit Ethernet Copper iSCSI Draft 20 Compliant Initiator 1024 Hosts ✓ ✓ ✓ ✓ Up to Eight (8) Groups	One (1) 10-Gigabit Ethernet Fiber iSCSI Draft 20 Compliant Initiator 1024 Hosts ✓ ✓ ✓ ✓ Up to Eight (8) Groups	One (1) 10-Gigabit Ethernet Fiber iSCSI Draft 20 Compliant Initiator 1024 Hosts ✓ ✓ ✓ ✓ Up to Eight (8) Groups	One (1) 10-Gigabit Ethernet Fiber iSCSI Draft 20 Compliant Initiator 1024 Hosts ✓ ✓ ✓ ✓ Up to Eight (8) Groups	
Volume and RAID support	RAID Controller RAID Support Volumes Target Nodes Online Capacity Expansion Hot Swappable Drives Instant Volume Access Free Space Defragmentation Auto-Detection Failed Drive Auto-Rebuild Spare Drive RAID Level Migration Micro Rebuilds	Single-Integrated in ASIC RAID Levels 0, 1, 1+0, 5 and JBOD (Striped Sets, Mirrored Sets, Striped Mirrored Sets, Parity Sets and JBOD) 1024 Virtual Volumes (256 Accessible per Initiator) 1024 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Single-Integrated in ASIC RAID Levels 0, 1, 1+0, 5 and JBOD (Striped Sets, Mirrored Sets, Striped Mirrored Sets, Parity Sets and JBOD) 1024 Virtual Volumes (256 Accessible per Initiator) 1024 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Single-Integrated in ASIC RAID Levels 0, 1, 1+0, 5 and JBOD (Striped Sets, Mirrored Sets, Striped Mirrored Sets, Parity Sets and JBOD) 1024 Virtual Volumes (256 Accessible per Initiator) 1024 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Single-Integrated in ASIC RAID Levels 0, 1, 1+0, 5 and JBOD (Striped Sets, Mirrored Sets, Striped Mirrored Sets, Parity Sets and JBOD) 1024 Virtual Volumes (256 Accessible per Initiator) 1024 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Single-Integrated in ASIC RAID Levels 0, 1, 1+0, 5 and JBOD (Striped Sets, Mirrored Sets, Striped Mirrored Sets, Parity Sets and JBOD) 1024 Virtual Volumes (256 Accessible per Initiator) 1024 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Single-Integrated in ASIC RAID Levels 0, 1, 1+0, 5 and JBOD (Striped Sets, Mirrored Sets, Striped Mirrored Sets, Parity Sets and JBOD) 1024 Virtual Volumes (256 Accessible per Initiator) 1024 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Storage Management	Embedded IP-Based Management GUI Firmware Field Upgradeable SMI-S Version 1.1	Create, Manage, Expand and Monitor Storage Pool, Volumes and RAID. Event Manager to View and Persist Events ✓	Create, Manage, Expand and Monitor Storage Pool, Volumes and RAID. Event Manager to View and Persist Events ✓	Create, Manage, Expand and Monitor Storage Pool, Volumes and RAID. Event Manager to View and Persist Events ✓	Create, Manage, Expand and Monitor Storage Pool, Volumes and RAID. Event Manager to View and Persist Events ✓	Create, Manage, Expand and Monitor Storage Pool, Volumes and RAID. Event Manager to View and Persist Events ✓	
Power	Power Supply Max. Power Consumption	100 to 240 VAC, 47 to 63Hz 360W	90 to 264 VAC, 47 to 63Hz (Auto-Switching) 570W	90 to 264 VAC, 47 to 63Hz (Auto-Switching) 570W	90 to 264 VAC, 47 to 63Hz (Auto-Switching) 570W	90 to 264 VAC, 47 to 63Hz (Auto-Switching) 570W	
Environment	Operating / Storage Temperature Operating / Storage Humidity	0 to 40°C / -20 to 70°C 20 to 90% / 10 to 95%	0 to 40°C / -20 to 70°C 20 to 90% / 10 to 95%	0 to 40°C / -20 to 70°C 20 to 90% / 10 to 95%	0 to 40°C / -20 to 70°C 20 to 90% / 10 to 95%	0 to 40°C / -20 to 70°C 20 to 90% / 10 to 95%	
Certification	EMI Certification Safety Certification	CE Class A / FCC Class A / C-Tick Class A / VCCI Class A CSA 60950-1, UL60950-1, IEC 60950-1, EN 60950-1	CE Class A / FCC Class A / C-Tick Class A / VCCI Class A CSA 60950-1, UL60950-1, IEC 60950-1, EN 60950-1	CE Class A / FCC Class A / C-Tick Class A / VCCI Class A CSA 60950-1, UL60950-1, IEC 60950-1, EN 60950-1	CE Class A / FCC Class A / C-Tick Class A / VCCI Class A CSA 60950-1, UL60950-1, IEC 60950-1, EN 60950-1	CE Class A / FCC Class A / C-Tick Class A / VCCI Class A CSA 60950-1, UL60950-1, IEC 60950-1, EN 60950-1	
Dimension	W x D x H mm 19" Rackmount	438 x 635 x 89 ✓ (with mounting brackets)	430 x 558 x 132 ✓	430 x 558 x 132 ✓	430 x 558 x 132 ✓	430 x 558 x 132 ✓	
Weight	Device Only	20.4 kg	33 kg	33 kg	33 kg	33 kg	
Package Contents		DSN 2000 Series Storage; Power Cable x 2; Console Cable; Rackmount Rail Kit; CD with Manual	DSN 3000 Series Storage; Key x 2; Power Cable x 3; Rack Mount Brackets; Screws; CD with Manual	DSN 3000 Series Storage; Key x 2; Power Cable x 3; Rack Mount Brackets; Screws; CD with Manual	DSN 3000 Series Storage; Key x 2; Power Cable x 3; Rack Mount Brackets; Screws; CD with Manual	DSN 3000 Series Storage; Key x 2; Power Cable x 3; Rack Mount Brackets; Screws; CD with Manual	

DSA Series (DSA-3600 and DSA-6100) is an all-in-one appliance providing integrated access management for network users. Specially designed for Small-to-Medium business (SMB) environment (DSA-3600) to enterprise business environment (DSA-6100), it offers seamless integration between the wired and wireless network. Moreover, it also provides centralized control for the network, where the authentication process can be controlled, and provides easy maintenance, and management of an entire network from a single point, thus eliminating ongoing administration costs.



DSA-3600

10/100BASE-TX x 6
(WAN x 2 / LAN x 4)



- Customized Captive Portal
- User Accounting
- Centralized AP Management
- WAN Load-Balancing
- Billing
- Rogue AP Detection
- Wireless Roaming
- MAC Access Control
- PPPoE
- DHCP

DSA-6100

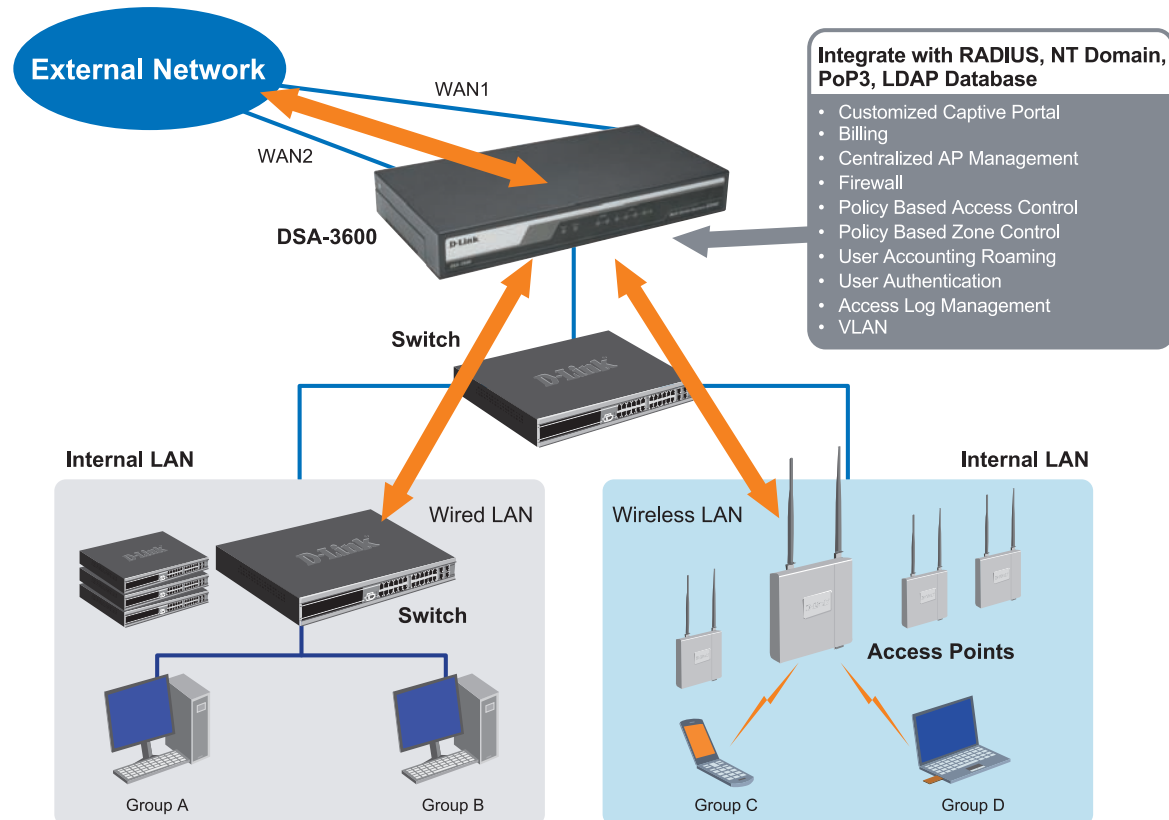
10/100/1000BASE-T x 4
(WAN x 2 / LAN x 2)



- Customized Captive Portal
- User Accounting
- Centralized AP Management*
- AP Monitoring*
- Bridge Mode
- Wireless Roaming*
- VLAN
- MAC Access Control
- PPPoE
- DHCP
- WAN Failover

* Feature available in future firmware release

Unified Security for Wired and Wireless Network



DSA-3600 / DSA-6100 User Access Management

Model	DSA-3600	DSA-6100
Standard	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3ab 1000BASE-T (DSA-6100 only)	
Interface	10/100BASE-TX 10/100/1000BASE-T Console Port RS-232C Port (DB-9 Male)	6 (WAN x 2 / LAN x 4) - 1
System Performance	Firewall Throughput VPN Throughput SDRAM/Flash	90Mbps 30Mpps 128MB / 32MB
Power	Power Supply Power Consumption (Max.)	110~220 VAC, 50/60 Hz 9W
Environment	Operating Temperature Storage Temperature Operating / Storage Humidity	0 to 45°C 0 to 65°C 10 to 85%
Dimension	W x D x H mm	300 x 156 x 45
Weight	1.4kg	6.0kg
Housing Enclosure	Metal	
Certification	EMI Certification	CE Class B / FCC Class B / VCCI Class B CE Class A / FCC Class A / VCCI Class A
Network	Mode : Routing Mode; NAT Mode Static Routing; Policy Routing; WAN1 Interface : Static IP; DHCP; PPPoE; PPTP WAN2 Interface : Static IP; DHCP; PPPoE WAN Failover; WAN Load Balancing Port-Based or Tag-Based Service Zone (VLAN) DHCP Server; DHCP Relay Dynamic DNS; IP Plug-and-Play (PnP)	Mode : Bridge; Routing; NAT; Transparent Static Routing; Policy Routing WAN1 Interface : Static IP; DHCP; PPPoE WAN2 Interface : Static IP; DHCP Link Failover / Bonding; IEEE 802.1Q VLAN; DHCP Server; DHCP Relay; HTTP Proxy; Dynamic DNS; IP Plug-and-Play (PnP); Inter-IP-Segment Roaming (Mobile IP); Cross-Subnet Login
Security and VPN	Hardware Based VPN Accelerator IPSec/PPTP VPN Tunnel between Local Client : 120 PPTP VPN Tunnel between Remote Client : 10 Site-to-Site IPSec VPN : 10 VPN Pass-Through (IPSec; PPTP) Encryption : DES; 3DES; AES NAT; NATT : IP/Port Destination Redirection; Virtual Server; DMZ Server Mapping; H.323 and SIP Pass-Through Firewall Policy (40 sets) : TCP/UDP/ICMP Protocols; Port Based; Source/Destination IP Address; Source MAC; Source/Destination Server Zone DoS Mitigation; HTTP & DNS Protection Support; User Session Limit (10, 25, 50, 100, 200, 350, 500 and unlimited sessions)	VLAN Isolation Support VPN Pass-Through (IPSec; PPTP) NAT; NATT : IP/Port Destination Redirection; Virtual Server; DMZ Server Mapping; H.323 Pass-Through MAC Address and User Identity Binding for Local Authentication Firewall Policy : TCP/UDP/ICMP Protocols; Port Based; Source/Destination IP Address; Source/Destination MAC DoS Attack Prevention; HTTP & DNS Service Protection Support User Session Limit (10, 25, 50, 100, 200, 350, 500 and Unlimited Sessions)
AP Management	No. of Managed APs : 12 Types of Managed APs : DWL-2100AP; DWL-3200AP; DWL-8200AP Centralized AP Management; AP Status Monitoring; Associated Client Monitoring; RF Monitoring; Automatic Discovery of Managed APs	No. of Managed APs : 50 Types of Managed APs : DWL-2100AP; DWL-3200AP; DWL-8200AP Centralized AP Management; AP Status Monitoring; Associated Client Monitoring; RF Monitoring; Automatic Discovery of Managed APs
Monitoring and Reporting	Online User Monitoring; IP-Based Network Device Monitoring; Syslog; WAN Connection Failure Alert Monitor IP Report/Users Log/Guest User Log/AP Status Change Report Notification by Email (DSA-3600) Event Log / Alarm; SNMP v1/v2/v3* (DSA-6100)	
User Management	Local Authentication; RADIUS Authentication; NT Domain Authentication; LDAP Authentication; POP3 Authentication Role-Based / Policy-Based Access Control User Session Management : HTTP/HTTPS Login Page; Multiple Logins with Single Account; Session Idle Time; Single Sign-On with Windows NT Domain; Firewall Policy; Specific Route Policy; Schedule Policy; QoS Policy Walled Garden (Free Surfing Zone); Domain Filtering MAC Address Pass Through : 100 IP Address Pass Through : 100 MAC Addr & User Identity Binding for Local User Authentication Assign Local User to Service Zone On-Demand User Management : 10 Billing Plans with Price Information in Each Billing Plan 3 Types of Billing Plan : Time, Traffic Volume, Cut-Off Time Background Customization for On-Demand Account Ticket External Payment Gateway (PayPal) to Automate the Payment and Account Creation	Local Authentication; RADIUS Authentication; NT Domain Authentication; LDAP Authentication; POP3 Authentication Role-Based / Policy-Based Access Control User Session Management : HTTP/HTTPS Login Page; Multiple Logins with Single Account; Session Idle Time; Single Sign-On with Windows NT Domain; Firewall Policy; Static Route Policy; Schedule Policy; Bandwidth Limitation Walled Garden (Free Surfing Zone) MAC Address Pass Through : 100 IP Address Pass Through : 100 MAC Access Control List; User Black List MAC Addr & User Identity Binding for Local User Authentication Built-in Billing Profiles for On-Demand Accounts Session Expiration Control for On-Demand Accounts by Time (Hour) and Data Volume (MB) Traffic History Report in an Automatic Email to Administrator
User Capacity	120 Concurrent Users; 500 Local Accounts; 500 On-Demand Accounts	500 Concurrent Users; 2500 Local Accounts; 2000 On-Demand Accounts
System Management	WebGUI; Console Interface; Customizable Login and Logout Portal Page; HTTPS Remote Management; 3 Levels of Management Accounts : Admin, Manager & Operator SNMP v1/v2c (DSA-3600); SNMP v1/v2c/v3 (DSA-6100); Remote Firmware Upgrade; NTP; Backup and Restore of System Configuration	

* Available in Future Firmware Release

DLM-3500 is an intelligent WAN Link Management appliance designed to optimize bandwidth utilization of your network. DLM-3500 keeps monitoring the health and availability of each connection, detecting outages of your WAN links. In case of failure, its auto-routing will direct traffic to available link and Multi-homing seamlessly deliver your business critical application and keep remote users connected.



DTM-2200 is a WAN traffic management appliance that constantly monitors, analyzes, and controls traffic flowing between LAN and WAN, so as to provide Layer 4-7 application optimization for your business critical applications such as Customer Relationship Management (CRM), ERP, VoIP.

DLM-3500

10/100BASE-TX x 5
(WAN x 4 / LAN x 1)



- Multi-Homing
- WAN Link Load-Balancing
- Bandwidth Management
- DoS Protection
- Stateful Inspection
- MRTG Support
- DHCP Server
- UPnP

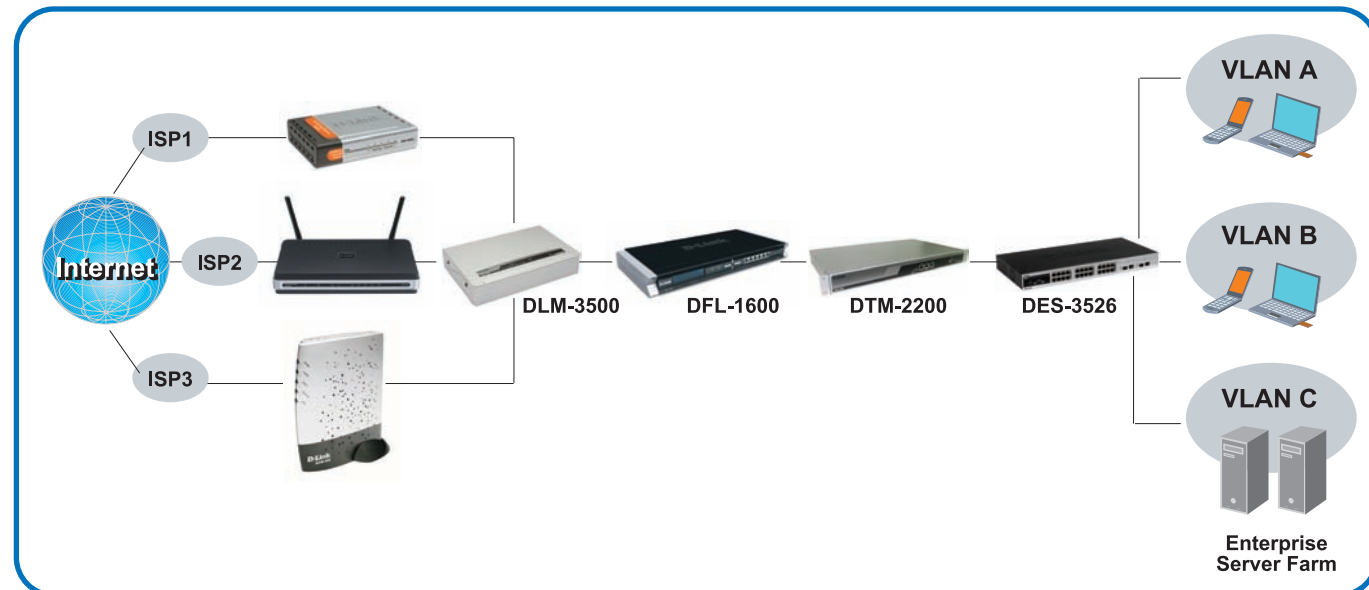
DTM-2200

10/100BASE-TX x 3
(Internal x 1 / External x 1 / Management x 1)



- Quota Limitation
- Connection Limitation
- Traffic Reporting
- QoS Enhancement
- Traffic Analysis
- Real-Time Statistics
- Transparent Deployment
- Application Level Optimization
- Overload Bypass

DLM-3500 & DTM-2200 Application Diagram



DLM-3500 WAN Link Management

Model		DLM-3500
Standard		IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.1p QoS
Interface	10BASE-T/100BASE-TX Port (RJ-45)	WAN x 4 / LAN x 1
	Console Port (RJ-11)	✓
	Auto Negotiation/ Auto MDI/MDIX	✓
	Flow Control	✓
Power	Power Supply	Input: 100~240V, 47~63-Hz, 0.3A Max; Output: 12V 1A Max; Through External Power Adapter
Environment	Operating Temperature	0 to 45 °C
	Storage Temperature	-20 to 75 °C
Dimension	W x D x H mm	229 x 149 x 42
Weight	Device Only	1.2kg
Certification	EMI Certification	FCC Class B / CE Class B
	Safety	LVD (EN60950)
Package Contents		DLM-3500; Power Adapter; CD-ROM; Quick Installation Guide; Console Cable; Ethernet Cable (Crossover)
Performance & Capacity	WAN Throughput	50 Mbps
	Current Sessions	17,000
IP/ Routing		WAN: Static, PPPoE, PPTP, DHCP IP Grouping (Max. 5 IP groups and 20 rules) Multiple Public IP Pass Through Static Routing on LAN side (Up to 20 subnets) Persistent Routing; Policy Based Routing
Network		Static NAT, Dynamic NAT, PAT; WAN Aggregation; DHCP Server MAC address Clone; DMZ Support Service Grouping (Max. 5 Service Group and 20 Rules) Build-in DNS Server with Multiple Domain Support Support UPnP (Max. 40 Settings); Support Virtual Server (Max. 20 Servers)
Firewall & Security		Stateful Packet Inspection Firewall (Max. 20 Rules) Access Control List; DoS Protection; IPsec, PPTP VPN Pass-through
Load Balancing & Multihoming		Outbound Load Balancing / Auto Routing (Fixed, Weighted Round-Robin, Weighted by Traffic); Inbound Load Balancing and Multi-Homing (Multiple Domains, Multiple DNS per Domain, Fault-Tolerance, User Defined Multi-Homing TTL); Virtual Server
Policy-based Bandwidth Management		Maximum and Minimum Bandwidth Control Policy-Based Traffic Shaping Per-IP Maximum Connection, Per-IP Maximum Rate Control
System Management & Administration		Console Interface; Web GUI; CLI; SNMP v1/v2c; MRTG Support; Log Viewer; Email Notification; Support External Syslog Server; Real-Time Performance Monitor; Event Log and Alarm

DTM-2200 Traffic Management

Model		DTM-2200
Standard		IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX
Interface	10BASE-T/100BASE-TX Port (RJ-45)	Internet x 1 / External x 1 / Management x 1
	Console Port (RJ-11)	✓
	Auto Negotiation/ Auto MDI/MDIX	✓
	Flow Control	✓
Power	Power Supply	12V / 12.5A Internal AC to DC Switching Power Supply
Environment	Operating Temperature	0 to 45 °C
	Storage Temperature	-20 to 75 °C
	Operating Humidity	10% to 80%
	Storage Humidity	5% to 90%
Dimension	W x D x H mm	441 x 255 x 44
Weight	Device Only	4.275 Kg
Certification	EMI Certification	FCC Class A / CE Class A
Performance & Capacity	Bandwidth	20 Mbps
	Maximum Concurrent Connections	200K
QoS Enhancement		Bi-Directional Traffic Management Guaranteed Minimum / Maximum Bandwidth Multiple Priority Levels (Up to 7 Levels) Layer-7 Protocol Support; Hierarchical QoS Class Scheduling; Identity-based policies
QoS Monitoring		Traffic Analysis; Real-Time Statistics
Access Control		Authentication (LDAP, NTLM, RADIUS, Local database) Quota (By user, By IP/ IP Range/ IP Subnet, Prepaid, Periodical) Connection Limit (By IP/ IP Range/ IP Subnet)
System Management & Administration		Web GUI; Console CLI; SNMPv1/ SNMP Trap; Real-Time Monitoring; Alert via Email / SNMP; System Load, Port Status, Port Traffic Rate; Configuration Backup / Restore

D-View 6.0 provides a user-friendly interface with easy access to all the features and tools from a single location. Using D-View is easy to learn and it can ease the administrator task without manually create the topology because it provides robust features to quickly generate the topology. Providing flexibility, the administrator can also import or export the topology.



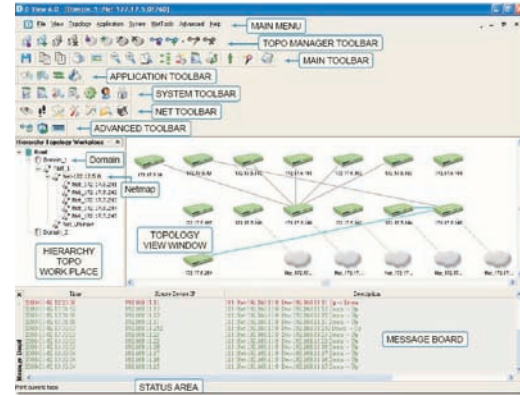
Power over Ethernet (PoE) series adapters receive power supply over the network cable.

Integrated SNMP Management Software

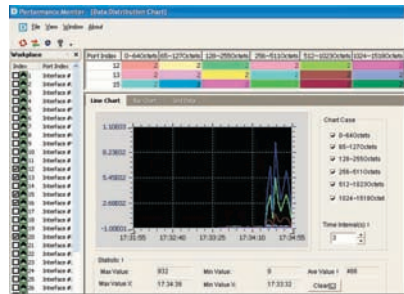
D-View 6.0

D-View 6.0 Standard (DV-600S)
Standalone Architecture

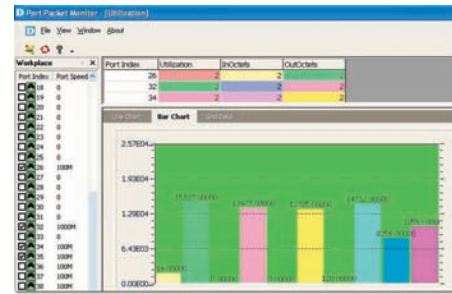
D-View 6.0 Professional (DV-600P)
Client-Server Architecture



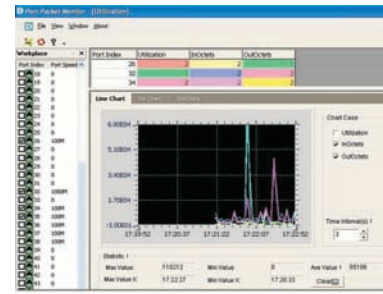
D-View Topology Discovery Screen



Network Performance Monitoring Screen



Port Packet Monitor using Bar Chart Screen



Port Packet Monitor using Line Chart Screen

Power over Ethernet (PoE)

DWL-P1012

12-Port PoE Midspan
19" Rackmount



DWL-P200

PoE Adapter Kit
Base Unit + Terminal Unit for 5V or 12V Ethernet-Enabled Device



DWL-P50

PoE Adapter or 5V or 12V Ethernet-Enabled Device



KVM Switches (KVM Series)

DKVM-16

16-Port Keyboard, Video, Mouse (KVM) Switch
19" Rackmount



DKVM-8E

8-Port Keyboard, Video, Mouse (KVM) Switch



DKVM-CB3

For Monitor: DB-15 HD (Blue)
For Mouse (PS/2): Mini DIN 6-pin (Green)
For Keyboard (PS/2): Mini DIN 6-pin (Purple)
Number of cables may differ, depending on your application.



SNMP Management Software

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	<= 1000	>= 1000
Topology Management	Topology Map; Topology Import / Export; Domain Manager; Link Manager; Web Client; Topology Discovery	
Fault / Event Management	Trap Editor; Trap Filter; Event Configuration; Polling Configuration; System Log; Syslog Server	
Device Management	Batch Configuration; Device Customization; Device Manager; MIB Compiler / MIB Browser; MIB Utilities; Surveillance for Windows Server	
Resource Management	Device Locator; Device Statistics; Performance Monitor; Port Packet Monitor; Reporting	
Security Management	Authentication; Differentiated User Access Control; SNMPv3 Security	
System Management	System Configuration; Administrator Manager; Link Capacity Check; Device Type Check; Safeguard Check; Trace Route	

DWL-P50 Power Over Ethernet (PoE) Adapter / DWL-P200 PoE Adapter Kit / DWL-P1012 PoE Midspan

Model	DWL-P50	DWL-P200	DWL-P1012
Description	PoE Adapter	PoE Adapter Kit	PoE Midspan
Standard	IEEE 802.3 10BASE-T / IEEE 802.3u 100BASE-TX / IEEE 802.3af Power over Ethernet (DWL-P50 only)		
Interface	10/100BASE-TX 10/100BASE-TX PoE Supply Console Port (RJ-45)		IEEE 802.3 10BASE-T / IEEE 802.3u 100BASE-TX / IEEE 802.3x Flow Control / IEEE 802.3af Power over Ethernet
Power	Power Supply Max. Power Consumption PoE	12.5W	100 to 240VAC (50/60Hz) 28.8W PoE Format : Alternative B Max. Supplied Power : 15.4W Max. Power Per Port : 15.4W
Environment	Operating / Storage Temperature Operating / Storage Humidity	0 to 40°C / -40 to 70°C 10 to 80% / 5 to 90%	
Certification	EMI Certification Safety Certification	CE Class B / FCC Class B / VCCI Class B / C-Tick Class B UL	
Dimension	W x D x H mm	80.9 x 52 x 28	
Weight	Device Only	80g	55g(Base Unit); 70g(Terminal Unit) 2.99kg
Housing Enclosure		Plastic	
Package Contents		DWL-P50; Female-to-Female Power Connector; Ethernet Cable	DWL-P200 (Base Unit + Terminal Unit); Female-to-Female Power Connector; Ethernet Cable DWL-P1012; Power Cord; Rackmount Kit; Rubber Feet; Manual
Option			WebGUI; Password Setup; SNMPv1; Trap; Sntp; PoE Setup; Schedule Management; Storage of Setup File; FW Upgrade/Storage

DKVM-8E / DKVM-16 KVM Switches

Model	DKVM-8K	DKVM-16	
Port Expansion	PCs Per Device Max. Units Per Stack Max. No. of Connected PCs	8 8 64	16 8 128
Interface	VGA / Mouse / Keyboard	1 / 1(PS/2) / 1 (PS/2)	
Connector Type		VGA : 15-Pin HD DB Type Female; Mouse / Keyboard : 6-Pin Mini-DIN Female	
Power	Power Supply Max. Power Consumption	DC 12V, 1A (Through External AC Adapter) 11W	
Environment	Operating / Storage Temperature Operating / Storage Humidity	0 to 50°C / -20 to 60°C 10 to 80% / 5 to 90%	
Certification	EMI Certification Safety Certification	CE Class B / FCC Class B / VCCI Class B CSA International / CB	
Dimension	W x D x H mm 19" Rackmount	410 x 169 x 45 ✓	
Weight	Device Only	2.20 kg	3.50 kg
Housing Enclosure		Metal	
Package Contents		KVM Series Switch; Power Adapter; 3-ft 3-in-1 Cable Kit to Daisy Chain; Manual; 6-ft 3-in-1 Cable to PC x 2sets; One Pair of Rackmount Brackets; Screws x 8; Rubber Feet x 4	



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FAX: 0212-289-7606
URL: www.dlink.com.tr

MEMO

A series of horizontal dashed lines for writing a memo.

