



Business Solutions Product Guide  
Networking and  
IP Surveillance Solutions

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A high-angle, over-the-shoulder photograph of a person with dark hair, wearing a white t-shirt and a blue wristband, sitting at a desk in a server room. They are looking at a computer monitor displaying a network configuration interface. The room features a perforated metal server cabinet and a tiled floor.

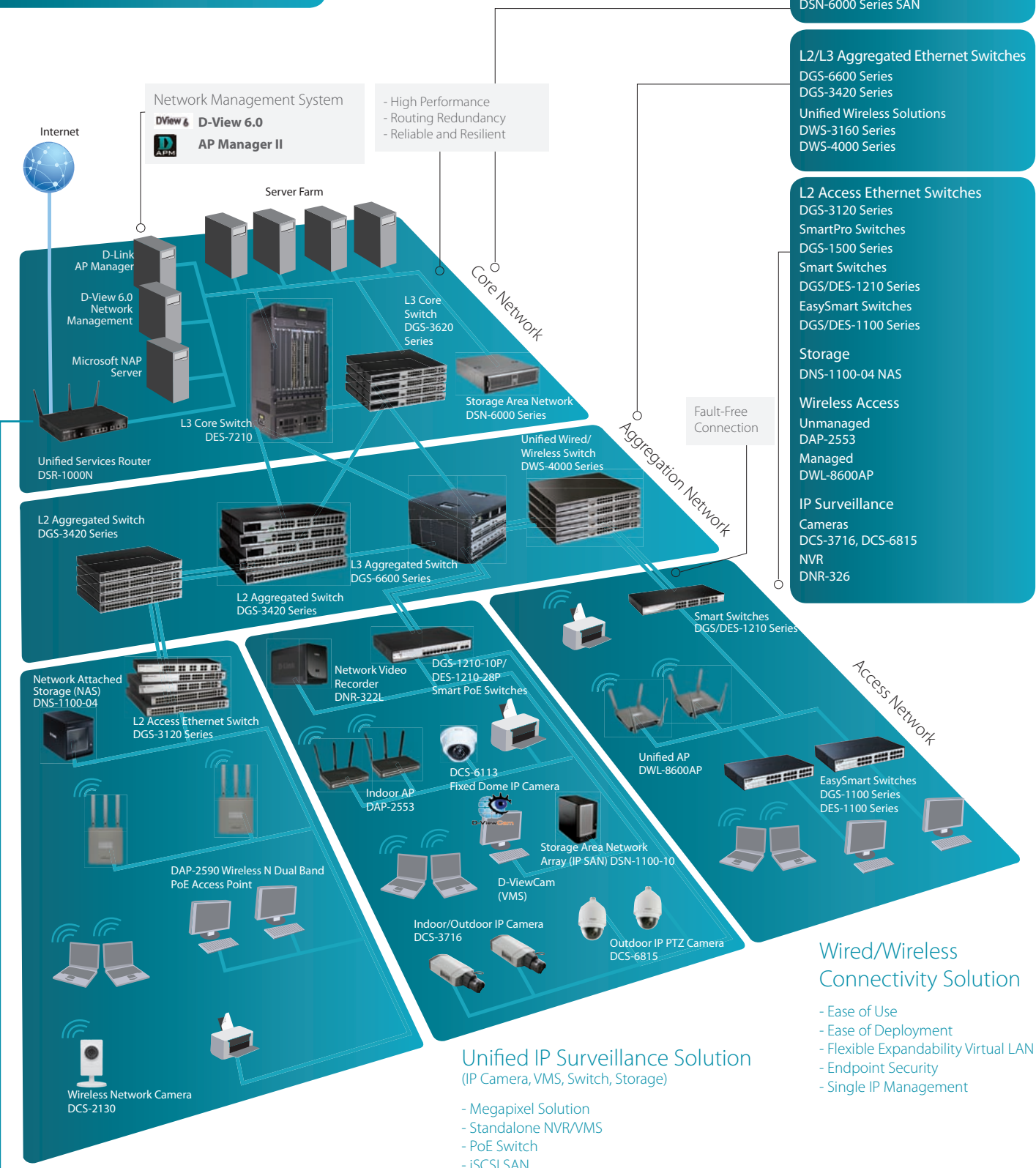
## Think more performance, more reliability, more functionality

For 27 years D-Link has been creating complete, end-to-end networking solutions that deliver just that and more. With a track record of industry-beating growth, today D-Link is a billion dollar company with the scale, the resources, the experience and the expertise that the world's most demanding businesses look for.

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

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

# Key Solutions



**L3 Core Ethernet Switches**  
 DES-7200 Series  
 DGS-3620 Series  
**Storage**  
 DSN-6000 Series SAN

**L2/L3 Aggregated Ethernet Switches**  
 DGS-6600 Series  
 DGS-3420 Series  
**Unified Wireless Solutions**  
 DWS-3160 Series  
 DWS-4000 Series

**L2 Access Ethernet Switches**  
 DGS-3120 Series  
**SmartPro Switches**  
 DGS-1500 Series  
**Smart Switches**  
 DGS/DES-1210 Series  
**EasySmart Switches**  
 DGS/DES-1100 Series

**Storage**  
 DNS-1100-04 NAS  
**Wireless Access**  
 Unmanaged  
 DAP-2553  
 Managed  
 DWL-8600AP  
**IP Surveillance**  
 Cameras  
 DCS-3716, DCS-6815  
 NVR  
 DNR-326

**Network Management System**  
 D-View 6.0  
 AP Manager II  
 - High Performance  
 - Routing Redundancy  
 - Reliable and Resilient

Fault-Free Connection

## Wired/Wireless Connectivity Solution

- Ease of Use
- Ease of Deployment
- Flexible Expandability Virtual LAN
- Endpoint Security
- Single IP Management

## Unified IP Surveillance Solution (IP Camera, VMS, Switch, Storage)

- Megapixel Solution
- Standalone NVR/VMS
- PoE Switch
- iSCSI SAN

## Data/Video/Audio Triple Play Application Solution

- Policy-Based Traffic Prioritisation
- Optimise the Quality of Multi-services

## Unified Services Router

- Remote management
- 3G support
- Virtual Private Network (VPN)

# Key Solutions

D-Link is a global leader in providing network connectivity solutions for a range of businesses. From the beginning, D-Link engineers have researched, designed and manufactured innovative, standards-based networking solutions that provide our customers with secure, reliable, easy to manage high performance networks. We sell our state-of-the-art hardware at the best prices, and even though price may be the deciding factor for many new customers, D-Link's innovation, reliability and service keep them loyal year after year.

## Access Network

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

- **Wireless Connectivity**  
D-Link Unified solutions bring robust, stable and secure wireless access to the business. The new generation of Wireless AC and N Access Points offer seamless connectivity, self-healing mechanisms, traffic segmentation and centralised management to achieve a wireless environment as productive and secure as a wired network.
- **Power over Ethernet**  
D-Link's unparalleled range of PoE switches are designed with functionality and robustness in mind. From unmanaged, plug and play solutions, to PoE modules in high-end chassis switches, D-Link offers features like Time-Based PoE to centrally cut off the power when not in use, and the new 802.3at PoE+ standard, to provide extra power to the next generation of network appliances.
- **IP Surveillance**  
Traditionally, CCTV cameras, Video Recorders and sensors have been a separate part of a business' subsystems. IP technology applied to surveillance brings flexibility, unified management and comprehensive image recording and indexing to modern networks. With a complete range of IP cameras and Network Video Recordings (NVR), D-Link can offer the solution that best matches your business needs.

## Aggregation Network

Aggregation network is where traffic from the access network is distributed across the business. Therefore, routing, filtering and WAN access processes, and access to resources like network storage take place at this level. D-Link offers flexible and robust solutions with Layer 2+ and Layer 3 managed switches, ready for the next generation of IP networks:

- **IPv6**  
As the range of IPv4 addresses are being depleted, IPv6 is being deployed in an increasing number of organisations such as Internet Service Providers (ISP) and international data carriers. Therefore businesses need to build the migration from IPv4 to IPv6 into their Network strategies to ensure that they are able to benefit from the advanced services that only IPv6 can offer. Most D-Link aggregation switches are 'IPv6 Ready' certified and are ready to be integrated in current and future networks, protecting both your investment and IT budget.

- **Bandwidth Management and Traffic Filtering and Analysis**

As the business network is under increasing pressure due to the surge on the amount of traffic and additional services, IT administrators need to ensure that traffic is at a reasonable level and network resources are utilised properly. D-Link can offer the tools to run a network smoothly and avoid disruptions, such as bandwidth management to a high level of granularity, D-Link has SafeGuard Engine to protect the switch from unexpected traffic peaks or virus outbreaks, and sFlow compatibility to analyse network sessions in great detail.

- **Network Storage**

As the business data grows and new technologies like virtualisation are being widely implemented, effective storage is a primary concern for any business. D-Link's range of Network Access Storage (NAS) devices can ensure that all your important data is easily accessible yet protected from unauthorised access. RAID technology protects your content from disk failures and additional services like FTP and File Server provide secure access to your data from the Internet. For businesses with more complex storage needs, D-Link's Storage Attached Network (SAN) products provide advanced features like consolidation, volume snapshots and virtualisation, with a range of devices that are "VMware Ready" certified.

## Core Network

The core is the business backbone and is the most critical part of the network. High availability, resiliency and fault isolation are important factors to avoid critical disruptions. D-Link has the technology to ensure that the core processes run smoothly and meet the business needs:

- **10 Gigabit**

As network traffic increases, Gigabit technology is becoming a bottleneck at the core portion of the network. 10 Gigabit switches as well as 10 Gigabit uplinks on Gigabit switches are being deployed as a crucial technology to ensure that the core can provide the services and features needed at the lower levels of the network. D-Link offer 10 GbE technology in both switches, and copper and fibre modules in a wide variety of Layer 2+ and Layer 3 core switches.

- **xStacking Technology**

D-Link's stacking technology provides resiliency and high availability in the form of high-speed, dual-ring stacking solutions that can work around a hardware fault in milliseconds. Faulty hardware can be hot-swapped and replaced without impacting the rest of the network, minimising downtime and ensuring that critical processes are not interrupted.

# Switches

If a switch fails, then a business can experience a number of issues, from loss of connectivity for a group of users, to major disruption and downtime for the entire network. D-Link has the knowledge and expertise to help you find the right solution for your business. From the core of your network to its edge, D-Link's comprehensive selection of switches includes 10 Gigabit, Gigabit, Fast Ethernet and PoE that range from entry level to fully managed, more sophisticated solutions. Products under this category include Unmanaged, EasySmart, Smart, SmartPro, Managed, xStack, Chassis and Unified Wireless.

## Unmanaged

- Simplest way to build a network and let it run itself
- Plug-and-play connectivity for small businesses
- Ideal for small networks that are sharing resources
- Green Ethernet
- PoE compliant, eliminating the need for external power supplies allowing you to utilise current cables and reducing cable clutter for a tidier system

## EasySmart

- An ideal entry-level managed solution
- Basic managed features for small networks
- Easily configurable through any web browser
- Fanless, silent switches, can be deployed in any environment

## Smart

- Many of the benefits of managed, as outlined below, but without the complexity or cost
- Ease of configuration through web-management
- Ideal for users wishing to build small to medium size networks but who don't need the advanced features necessary for corporate deployments
- PoE compliant eliminating the need for external power supplies allowing you to utilise current cables and reducing cable clutter for a tidier system

## SmartPro

- Centralised management and virtual stacking via D-Link intuitive single IP management
- Layer 3 static routing allows for scalable network design for future business growth
- Supports unique Auto Voice and Auto Surveillance VLANs to prioritise traffic from VoIP phones and IP cameras in the network

## Managed

- Allows administrators to monitor traffic across the network, introduce redundancy and control access
- Found in networks with numerous users and applications, where performance and reliability must be maximised and security enforced
- Ideal for large sites where server farms are deployed, with hundreds of users sharing multiple printers and applications and routinely using wireless access and video-conferencing, such as in corporate headquarters
- Includes D-Link's industry leading selection of xStack switches
- PoE compliant, eliminating the need for external power supplies allowing you to utilise current cables and reducing cable clutter for a tidier system

## xStack

- Award-winning range
- High performance and 10GbE stacking options
- 10GbE, Gigabit and Fast Ethernet versions, with Layer 2 and Layer 3 features
- PoE compliant, eliminating the need for external power supplies allowing you to utilise current cables and reducing cable clutter for a tidier system

## Chassis

- Enterprise-class performance, security and control
- Modular architecture with redundant control planes option
- High port density with PoE and 10GbE line cards available
- PoE compliant eliminating the need for external power supplies allowing you to utilise current cables and reducing cable clutter for a tidier system

## Unified Wireless

- Managed switches which offer flexible deployment, one single device can manage both wired and wireless access traffic – unified switch = wireless controller + LAN switch
- Feature-rich centralised management for wireless Access Points (AP) and clients, including security policy and RF parameters
- Enables seamless wireless roaming without the need for cursor re-authentication: necessary in particular for Voice-over-WLAN (VoWLAN) applications
- Resiliency of the entire wireless network through self-healing network and AP load balancing. The unified switch can effectively manage the wireless bandwidth, optimise WLAN traffic and ensure maximum RF coverage



# PoE (Power Over Ethernet)

## What is Power-over-Ethernet (PoE)?

Power-over-Ethernet allows a single cable to provide both data connection and electrical power to any PoE-enabled devices such as wireless access points, network cameras and IP phones. PoE passes electrical power along with data on Ethernet (LAN) cabling to network devices. It allows you to install and power wireless access points, network cameras and VoIP phones.

With PoE you only need one cable for both power and data so wireless access points and IP surveillance cameras, for example, can be installed without having to run power to inaccessible places such as ceilings and roofs. You can also protect such devices from outages, by adding a central Uninterruptible Power Supply (UPS), and both monitor and manage energy consumption centrally-perhaps even switching devices off when they're not needed. Support for PoE can be added to existing networks but, if you're serious about it, PoE enabled switches don't need additional wiring and are easier to manage. Either way check for support for industry standards, both on the switches and networking devices you want to power.

## What is PoE power budget?

The PoE power budget is the maximum amount of power that a switch can provide to all the devices connected to it. If this is exceeded then devices will not function correctly as they are not receiving adequate power. In order to choose the right switch the overall power consumption for the network must be calculated. This can be done by adding up the maximum power consumption of every device connected to the switch.

It is essential to consider the current and future power requirements of the network, since over specifying the power budget of a switch will result in higher initial costs. D-Link has two Smart switch families to address different requirements, Smart and Smart+. The Smart+ range has higher power

budgets and is capable of providing higher power per port than the Smart range which is more economical.

PoE devices can transmit a Discovery Protocol that informs the PoE Switch of the actual power required by the device. If the power is less than the default 15.4W/25.5W, the PoE switch acknowledges the request with its available power and modifies the power budget accordingly. If the requesting powered device exceeds the power budget for the switch, the port is either powered down, or the port remains in low power mode.



## IP phones

IP phones are commonly connected and powered by PoE. A standard IP phone will consume around 4-7W of power whereas one with a backlit, colour screen or even video conferencing capability will use substantially more.



## Wireless Access Points

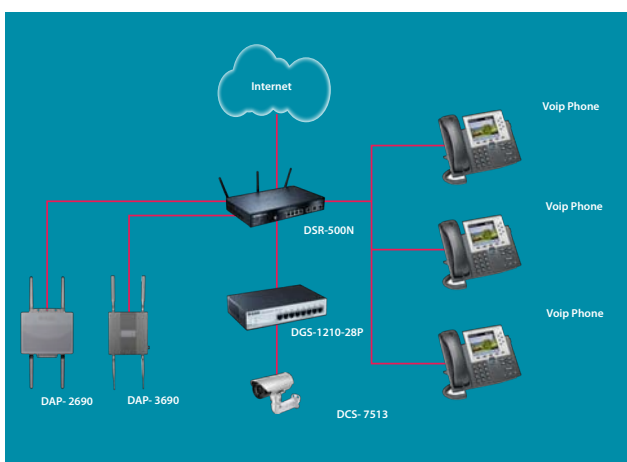
Due to their placements Wireless Access Points typically use PoE to power themselves. Different types of Wireless APs have different power requirements. For example, dual-band concurrent APs require more power as they broadcast on both the 2.4 and 5 GHz frequencies. The latest Wireless AC technology delivers wireless speeds of up to 1300 Mbps on the 5GHz band with enhanced coverage and can benefit from PoE+'s additional power.



## IP Cameras

There are several types of IP cameras from a basic box camera to an outdoor pan, tilt and zoom (PTZ) speed dome camera with an integrated heater, each one has a different power requirement.

Basic outdoor IP cameras have a power consumption of about 7W, however additional features require additional power so that the power requirements increases. An outdoor PTZ will require a significantly larger amount of power.



# PoE (Power Over Ethernet)

## What is PoE +

The original IEEE 802.3af-2003 PoE standard provides up to 15.4 W of DC power (minimum 44 V DC and 350 mA to each device). Only 12.95 W is assured to be available at the powered device as some power is dissipated in the cable. The updated IEEE 802.3at PoE standard also known as PoE+ or PoE plus, provides up to 25.5 W of power.

PoE+ is beneficial for devices that require more power such as Pan-Tilt-Zoom cameras, thin clients and video phones. It also expands PoE functionality to a wider range, making it possible to power a larger number of edge devices from a single PoE port.

## How can PoE be Green?

Using D-Link's integrated time-based PoE functionality, it is possible to automatically shut down ports which also shut down the devices on a predefined schedule, saving power, money and increasing security.

## Benefits of PoE

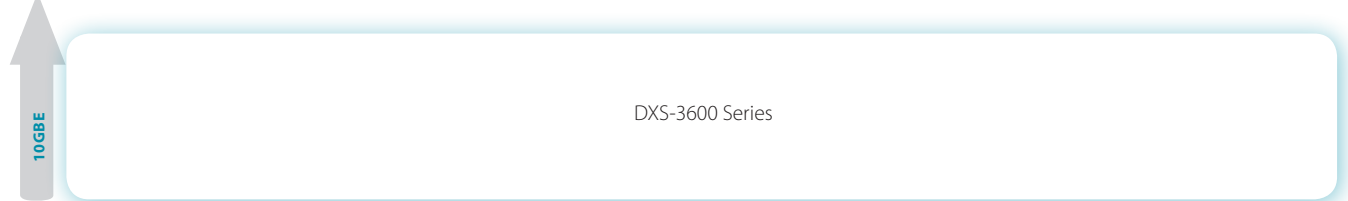
- **Reduced Costs** – With PoE, only one cable - a simple CAT-5 Ethernet is required to be routed to each device instead of two and fewer power adapters are needed. In large organisations this brings a major cost reduction.
- **Flexibility** – A PoE enabled appliance can be installed virtually anywhere; without the need for AC outlets. This provides flexibility and scalability in placing this network equipment – Switches, Wireless Access Points, and IP Cameras – at the most optimal locations instead of locations where power is available. This also enables better network designs.
- **Reliability** - PoE infrastructure enables centralised power management that provides back up with an Uninterrupted Power Supply (UPS) to the devices and all the distributed PD networking devices; even during power failures this ensures the reliability and availability of powered devices.
- **Network Control** – Network administrators can control and monitor devices using SNMP. Devices can be powered down when not in use or if there is unauthorised access, which allows for increased security.
- **Simplicity to add, move and change the network** - PoE-enabled switches help network additions, moves and changes to be accomplished faster. It allows the network to be more flexible and accommodating to changing business and network requirements.
- **Centralised Power Management** - Centrally managed power enables remote shutdown or remote reset capabilities. Through managing a PoE-enabled LAN switch via a web browser or by SNMP, remote networking devices can be easily reset or shut down saving the time and expense of dispatching a technician.
- **Security** - Shutting down unnecessary PoE network devices when no one is at the office ensures better business security.
- **Eco-friendly** - As with security, shutting down unnecessary PoE network devices can also save power and money for a business.



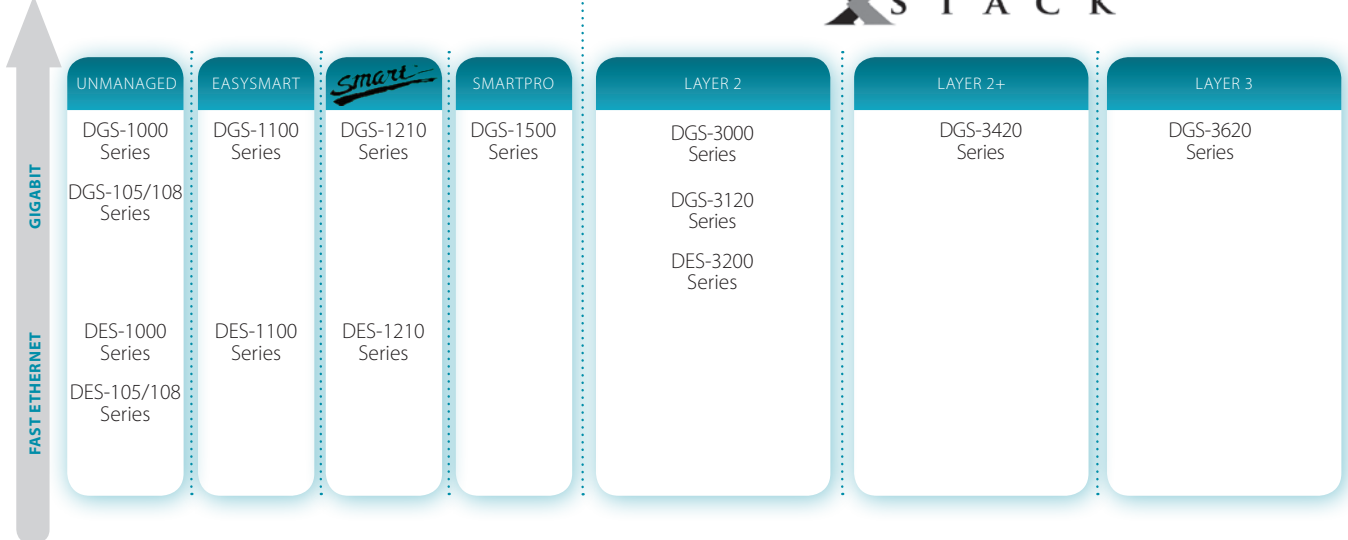
## Chassis Switches



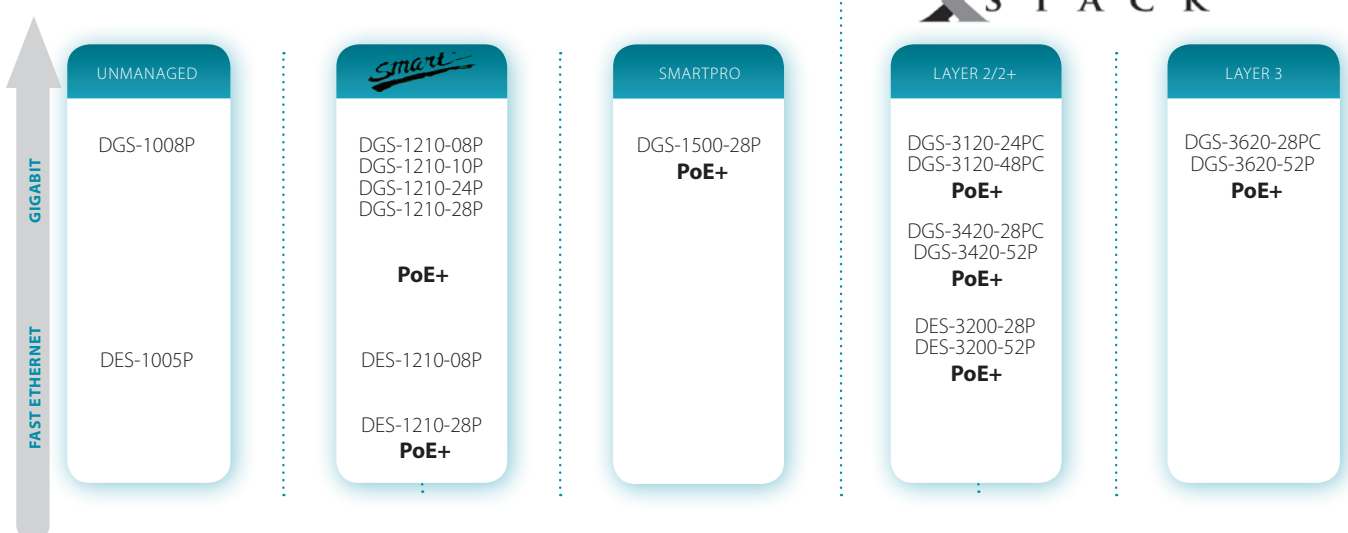
## Concentrator Switch



## Standalone Switches



## PoE Switches



# xStack Chassis Switches

## DES-7200 Series



X S T A C K



The 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 a high level of performance, security and control is required. It provides the flexibility of deploying Gigabit and/or 10-Gigabit packet switching and routing.

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

## DES-7206-BASE

- 6-slot chassis
- I/O module slot x 4
- CPU module slot x 2
- Loadsharing/redundant switching capacity of up to 192 Gbps
- Up to 192 Gigabit ports
- Up to 8 10-Gigabit ports
- Built in replaceable fan module
- Built in dust filter
- Optional redundant power supply

## Modules

### 10GbE Modules

DES-7200-2XG 2-port 10GE XFP module

### Gigabit Modules

DES-7200-48 48-port 10/100/1000BASE-T module including 4 Combo 10/100/1000BASE-T/SFP ports  
 DES-7200-24 24-port 10/100/1000BASE-T module including 12 Combo 10/100/1000BASE-T/SFP ports  
 DES-7200-24GE 24-port 100/1000M SFP Enhanced Module

### CPU and Extension Modules

DES-7200-CM1 CPU module for DES-7206 Chassis, 96G switching capacity  
 DES-7200-CM3 CPU module for DES-7206 Chassis, 96G switching capacity, with support for Advanced Service Engine (DES-7200-ASE3)  
 DES-7200-ASE3 DES-7200 Advanced Service Engine (ASE) module with MPLS support

### Optional Redundant/Replacement Power Supplies

DES-7200-1200AC 1200W redundant AC power supply  
 DES-7200-2000AC 2000W redundant AC power supply

### Replacement Fan Tray

DES-7206-FAN Fan tray for DES-7206-BASE  
 DES-7210-FAN Fan tray for DES-7210-BASE

### Optional Management Software

DV-600S D-View 6.0 Network Management Software (standard edition)  
 DV-600P D-View 6.0 Network Management Software (professional edition)



Model		DES-7206-BASE
Interfaces	Fast Ethernet	
	Gigabit Ethernet	
	SFP Slots	4 Slots available for any combination of Ports 2 Slots for CPU Modules
	Combo Gigabit/SFP Slots	
	10GbE Slots	
General Features	Stackability	
	Stacking Speed (per Port)	
	Switching Capacity	192 Gbps
	Forwarding Mode	Store-and-Forward
	Packet Buffer Memory	2 M
	MAC Table	16 K per Module (Versions A1, A2), 32 K per Module (Version A3)
	Flow Control	802.3x, HOL Blocking Prevention
L3 Features	MDI/MDIX	Configurable
	Loop Protection	802.1Q, 802.1w, 802.1s, RERP
	803.2ad Link Aggregation	128 Groups, 8 Ports per Group
	Port Mirroring	One-to-One, Many-to-One, RX/TX/Both, Flow-Based, RSPAN
	Loopback Detection	
Virtual LAN (VLAN)	Cable Diagnostics	
	IP Interfaces	2 K
	Routing Protocols	Static, RIP v1/v2, RIPng, OSPF v2/v3, BGP v4, BGP+, MPLS*
	Policy-Based Routing	•
	Route Balancing	ECMP/WCMP
	IPv6 Tunneling	Static, ISATAP, GRE, 6to4
Multicasting	VRRP	•
	VLANs	Static+Dynamic: 4 K
	GVRP	•
	Protocol VLAN (802.1v)	•
Quality of Service (QoS)	Double VLAN (Q-in-Q)	Port-Based / Selective
	Groups	1 K
	Protocols	IGMP v1 / v2 / v3, PIM-SM, PIM-DM, PIM Spare-Dense
	Standard	802.1p, DSCP
Security	Number of Queues	8
	Mode	Strict / WRR / Strict+WRR
	CoS Handling	VLAN ID, 802.1p, MAC
	Bandwidth Control	Port-Based, Flow-Based
	STP Security	BPDU Filtering, BPDU Guard, Root Restriction, UDLD
	Per-Port MAC Limitation	•
	Static MAC	84
	Storm Control	Broadcast / Multicast / Unicast
	IP-MAC-Port Binding	1 K
Authentication, Authorisation and Accounting (AAA)	DHCP Spoofing Prevention	•
	ARP Spoofing Prevention	•
	Traffic Segmentation	•
	D-Link SafeGuard Engine	•
	802.1x Authentication	Port-Based, Host-Based, Dynamic VLAN Assignment
Access Control Lists (ACL)	Web-Based Access Control (WAC)	Port-Based, Host-Based, Dynamic VLAN Assignment
	MAC-Based Access Control (MAC)	Port-Based, Host-Based, Dynamic VLAN Assignment
	Network Access Protection (NAP)	Port-Based, Host-Based, Dynamic VLAN Assignment
	Guest VLAN	•
Management	Switch Access	RADIUS / TACACS+, 3-Level User Account (number of entries depending on installed Modules)
	Rules	
	ACL Handling	Ether Type, VLAN ID, 802.1p, MAC, IP, IPv6, DSCP, Port, Protocol, Payload (User-Defined)
	Time-Based ACL	•
	Switch Access	Web GUI, Telnet, Console
	sFlow	•
Physical and Environment	SNMP	v1 / v2c / v3
	DHCP	Server, Client, Relay (IPv4, IPv6)
	RMON	•
	TFTP Client	•
	Syslog	•
	Power Supply	Internal, Redundant
	Max. Power Consumption	(Depending on Installed Modules)
Compatible Transceivers and Cables	Power Saving Technology	
	Operating Temperature	0 to 40 °C
	Operating Humidity	10% to 90% RH
	Dimensions (W x D x H)	437 x 508 x 647 mm
	Mean Time Between Failures (MTBF)	(Depending on Installed Modules)
Compatible Transceivers and Cables	10GbE XFP Transceivers	DEM-421XT, DEM-422XT
	SFP Transceivers	DEM-210, DEM-211, DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT
	WDM SFP Transceivers	DEM-331T, DEM-331R
	Cables	

\* Requires 7200-ASE3 Module

# xStack Chassis Switches

## DGS-6600 Series

X S T A C K

dlinkgreen



For a customisable solution based on your business needs, D-Link's DGS-6600 modular chassis allows you to implement a solution-specific switch with multiple modules. The DGS-6600 is a Layer 3 backbone chassis-based Gigabit switch that provides everything a business needs for a reliable network. This 4-Slot chassis offers a 576Gbps switch fabric capacity supporting wire speed L2/L3 packet switching in dynamic or static environments. Some of the features include a high port density, with L2/L3/L4 Class of Service (CoS) and Access Control Lists (ACL), QoS, Link Aggregation, hot-swappable line cards and redundant power supply, and traffic monitoring. Designed for performance and flexibility, this chassis switch offers you the price/performance ratio necessary to deploy a cost-effective enterprise backbone network.

- 4/8\* slot modular chassis
- Hot-swappable line cards
- Optional redundant power supply
- 4K IP interfaces
- 32K MAC address per module
- 4K VLANs
- 8 priority queues
- 128 trunk group, 8 port per group
- Telnet/console CLI
- SNMP v1,v2c,v3/RMON
- CPU utilisation monitoring
- TFTP client
- Web GUI
- Traffic monitoring
- SYSLOG

### DGS-6604-SK

- 4-slot chassis starter kit
- I/O module slot x 3
- CPU module slot x 1
- Switching capacity of up to 576 Gbps
- Up to 144 Gigabit ports
- Up to 24 10-Gigabit ports
- Built in replaceable fan module
- Built in dust filter
- Optional redundant power supply includes
  - DGS-6604 4-slot chassis
  - DGS-6600-CM control module
  - DGS-6600-PWR 850W AC power supply

### DGS-6608-SK

- 8-slot chassis starter kit
- I/O module slot x 6
- CPU module slot x 2
- Loadsharing/redundant switching capacity of up to 1.152 Tbps
- Up to 288 Gigabit ports
- Up to 48 10-Gigabit ports
- Built in replaceable fan module
- Built in dust filter
- Optional redundant power supply includes
  - DGS-6608 8-slot chassis
  - DGS-6600-CM-II control module
  - DGS-6600-PWR 850W AC power supply

## Modules

### 10 GbE Modules

DGS-6600-8XG	8-port 10GE XFP module for DGS-6604 only
DGS-6600-24SC2XS	12-Port SFP, 12-Port Combo 1000BASE-T/SFP and 2-Port 10G SFP+ Module for DGS-6604 only
DGS-6600-16XS-D	16-port 10GE SFP+ Module with MPLS function DGS-6600 Series

### Gigabit Modules

DGS-6600-48T	48-port 10/100/1000Base-T module
DGS-6600-48TS	24-port 10/100/1000Base-T and 24-port SFP module
DGS-6600-48S	48-port SFP module

### PoE Modules

DGS-6600-48P	48-port 10/100/1000Base-T PoE module
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### CPU Modules

DGS-6600-CM	Control module for DGS-6604
DGS-6600-CM-II	Control module for DGS-6604 and DGS-6608

### Optional Redundant/Replacement Power Supply Modules

DGS-6600-PWR	850W AC power supply for DGS-6604 and DGS-6608
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### Replacement Fan Tray

DGS-6600-FAN	Smart fan module for DGS-6604
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### Optional Management Software

DV-600S	D-View 6.0 Network Management Software Standard Edition
DV-600P	D-View 6.0 Network Management Software Professional Edition



Model		DGS-6604-SK	DGS-6608-SK	
Interfaces	Fast Ethernet	3 Slots available for any combination of Ports 1 Slot for CPU Module	6 Slots available for any combination of Ports 2 Slot for CPU Module	
	Gigabit Ethernet			
	SFP Slots			
	Combo Gigabit/SFP Slots			
	10GbE Slots			
General Features	Stackability	576 Gbps	1.152 Tbps	
	Stacking Speed (per Port)			
	Switching Capacity			
	Forwarding Mode			Store-and-Forward
	Packet Buffer Memory			2 M
	MAC Table			32 K per Module
	Flow Control			802.3x, HOL Blocking Prevention
	MDI/MDIX			Configurable
L2 Features	Loop Protection	802.1Q, 802.1w, 802.1s		
	803.2ad Link Aggregation	128 Groups, 8 Ports per Group		
	Port Mirroring	One-to-One, Many-to-One, RX/TX/Both, Flow-Based, RSPAN		
	Loopback Detection			
	Cable Diagnostics			
L3 Features	IP Interfaces	4 K		
	Routing Protocols	Static, RIP v1/v2, RIPng, OSPF v2/v3, BGP v4, BGP+*		
	Policy-Based Routing	.		
	Route Balancing	ECMP/WCMP*		
	IPv6 Tunneling	Static, ISATAP, 6to4		
	VRRP	.		
Virtual LAN (VLAN)	VLANs	Static+Dynamic: 4 K		
	GVRP	.		
	Protocol VLAN (802.1v)	.		
	Double VLAN (Q-in-Q)	Port Based / Selective		
Multicasting	Groups	2 K		
	Protocols	IGMP v1 / v2 / v3, PIM-SM, PIM-DM, PIM Spare-Dense		
Quality of Service (QoS)	Standard	802.1p, DSCP		
	Number of Queues	8		
	Mode	Strict / WRR / Strict+WRR / DRR / WDRR		
	CoS Handling	802.1p		
	Bandwidth Control	Port-Based, Flow-Based		
Security	STP Security	BPDU Filtering, Root Restriction		
	Per-Port MAC Limitation	.		
	Static MAC	16		
	Storm Control	Broadcast / Multicast / Unicast		
	IP-MAC-Port Binding	.		
	DHCP Spoofing Prevention	.		
	ARP Spoofing Prevention	.*		
	Traffic Segmentation	.		
	D-Link SafeGuard Engine	.		
Authentication, Authorisation and Accounting (AAA)	802.1x Authentication	Port-Based, Host-Based, Dynamic VLAN Assignment		
	Web-Based Access Control (WAC)	.		
	MAC-Based Access Control (MAC)	.		
	Network Access Protection (NAP)	.*		
	Guest VLAN	.		
Access Control Lists (ACL)	Switch Access	RADIUS / TACACS+, 3-Level User Account		
	Rules	(number of entries depending on installed Modules)		
	ACL Handling	VLAN ID, 802.1p, MAC, IP, IPv6, DSCP, Port, Protocol, Payload (User-Defined)		
Power over Ethernet	Time-Based ACL	.		
	Standard	802.3af		
	PoE Ports	48-Port PoE Module (DGS-6600-48P)		
	PoE Budget	586-2217W (dependent on number of DGS-6600-PWR installed)		
	Time-Based PoE	.		
Management	Switch Access	Web GUI, Telnet, Console		
	sFlow	.		
	SNMP	v1 / v2c / v3		
	DHCP	Server, Client, Relay (IPv4, IPv6)		
	RMON	.		
	TFTP Client	.		
	Syslog	.		
Physical and Environment	Power Supply	Internal, Redundant		
	Max. Power Consumption	(Depending on Installed Modules)		
	Power Saving Technology	.		
	Operating Temperature	0 to 50 °C		
	Operating Humidity	10% to 90% RH		
	Dimensions (W x D x H)	484 x 470 x 280 mm	445x470x500mm	
Modules / Transceivers	Mean Time Between Failures (MTBF)	(Depending on Installed Modules)		
	10GbE SFP+ Modules	DEM-431XT, DEM-431XT-DD, DEM-432XT, DEM-432XT-DD, DEM-433XT		
	10GbE XFP Transceivers	DEM-421XT, DEM-422XT, DEM-423XT		
	SFP Transceivers	DEM-210, DEM-211DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT		
	WDM SFP Transceivers	DEM-331T, DEM-331R		

\* Implemented in future firmware upgrade

# Layer 3 10GbE Stackable\* Managed Switches

## DXS-3600 Series



D-Link's DXS-3600 Series Layer 3 Stackable\* 10GbE Managed Switch consists of new compact, high-performance switches that feature wire speed 10-Gigabit Ethernet switching, routing, and very low latency. The 1U height and selectable front-to-back or back-to-front air flow make the DXS-3600 Series suitable for enterprise and campus aggregation network environments. The DXS-3600 Series switches have 24 or 8 fixed 10 GbE SFP+ ports and can accommodate more ports with the addition of an expansion module. The expansion modules not only provide extra 10G SFP+ ports, but also increase the flexibility of 120G stacking, or low-cost 10GBASE-T connections for different applications.

- 1x 10/100/1000Base-T Ethernet port for out-of-band remote management
- Fast performance with up to 960 Gbps switching capacity
- 24 fixed SFP+ 10G ports
- 1x RJ-45 console port for out-of-band local management
- Access control list
- Port security
- Traffic segmentation
- Broadcast/multicast/unicast storm control
- DoS attack prevention
- OSPF/BGP
- Three Colour Marker – classifying network traffic for QoS
- Web-based GUI
- Telnet
- Command Line Interface (CLI)
- SSH
- SNMP & RMON
- LLDP/LLDP-MED
- L2/L3/L4 multi-layer access control lists
- 802.1x user authentication via TACACS+ and RADIUS servers
- Web-based graphical interface
- Saves energy and increases the product's lifespan

### DXS-3600-16S

- 10GbE SFP+ port x 8
- Open expansion slot x 1
- Switching capacity of up to 480 Gbps
- Hot-swappable power modules for power redundancy and load sharing
- Hot-swappable fan trays with airflow control provide cooling redundancy

### DXS-3600-32S

- 10GbE SFP+ port x 24
- Open expansion slot x 1
- Switching capacity of up to 960 Gbps
- Up to 480G stacking bandwidth with four devices functioning together as one
- Hot-swappable power modules for power redundancy and load sharing
- Hot-swappable fan trays with airflow control provide cooling redundancy

## Optional Products

### Optional Software Image Upgrade Licenses

DXS-3600-32S-SE      DXS-3600-32S Standard to Enhanced Image Upgrade License

### Optional Expansion Modules

DXS-3600-EM-4XT      4 Ports 10GBASE-T Module  
 DXS-3600-EM-8T      8 Ports 10/100/1000BASE-T Module  
 DXS-3600-EM-Stack      2 Ports 120G CXP Stacking Module (for DXS-3600-32S only)

### Optional Redundant/Replacement Power Supplies

DXS-3600-PWR-FB      300W AC power supply with front-to-back airflow

### Optional Redundant/Replacement Fan Tray

DXS-3600-FAN-FB      Fan module with front-to-back airflow

### Optional 120G Stacking Cable

DEM-CB50CXP      DXS-3600-32S stacking cable for use with DXS-3600-EM-Stack

### Optional 10 Gbps SFP+ Direct Attach Stacking Cables

DEM-CB100S      10-GbE SFP+ 1 m Direct Attach Stacking Cable  
 DEM-CB300S      10-GbE SFP+ 3 m Direct Attach Stacking Cable

### Optional Management Software

DV-600S      D-View 6.0 Network Management Software (standard edition)  
 DV-600P      D-View 6.0 Network Management Software (professional edition)

\* Physical stacking only available on DXS-3600-32S



Model		DXS-3600-32S	DXS-3600-16S
Interfaces	10 Gigabit Ethernet SFP+	24	8
	Expansion Slot		1
General Features	Stackability	Virtual stacking of up to 32 units, physical stacking of up to 4 units	Virtual stacking of up to 32 units.
	Stacking speed (per Port)	240 Gbps (full duplex)	
	Switching Capacity	960 Gbps	480Gbps
	Forwarding Mode	714.28 Mpps	357.14Mpps
	Packet Buffer Memory		9 MB
	MAC Table		128k
	Flow Control	802.3x, HOL Blocking Prevention	
L2 Features	803.2ad Link Aggregation	Max 16 Groups per device , 12 ports per group	
	Port Mirroring	One-to-one, Many-to-one, Mirroring for Tx/Rx/Both, 4 Mirroring groups	
	Flow Mirroring	One-to-One, Many-to-One, Mirroring for Rx , 4 mirroring groups	
	Jumbo Frame	upto 12,000 Bytes	
L3 Features	ARP	512 Static ARP	
	IP Interface	Supports 256 interfaces	
	Default Routing	•	
	Static Routing	Max. 1K IPv4 entries, Supports route distribution, Supports secondary route, Supports equal Cost/weighted Cost, multi-path route	
Virtual LAN (VLAN)	VLANs	upto 4k static VLANs	
	GVRP	upto 4k dynamics VLANs	
	Subnet -based VLAN	•	
	Double VLAN (Q-in-Q)	Port-based, Selective	
	Port-based VLAN	•	
	MAC- based VLAN	•	
VLAN Group	Max4K Static VLAN Groups , Max 4094 VIDs		
Multicasting	Groups		
	Protocols		
Quality of Service (QoS)	Standard	802.1p	
	No. of Queues	8 per port	
	Mode	Strict +WRR	
	CoS Handling	802.1p Priority Queues ,DSCP,VLAN, MAC address, IP address, IPv6 Traffic class, IPv6 flow label ,TCP/UDP port	
	Bandwidth Control	Port-based (Ingress/Egress, min. granularity 8 Kb/s) Flow-based (Ingress/Egress, min. granularity 8 Kb/s) Per queue bandwidth control (min. granularity 8 Kb/s)	
Security	STP Security		
	Per-Port MAC Limitation	Upto 12 addresses per port/system	
	Static MAC		
	Storm Control	Broadcast /Multicast/ Unicast	
	IP-MAC-Port Binding	ARP inspection, IP inspection, DHCP Snooping	
	DHCP Server Screening	•	
	ARP Spoofing Prevention	Max 64 entries	
	Traffic Segmentation	•	
D-Link SafeGuard Engine	•		
Authentication, Authorisation and Accounting (AAA)	802.1x Authentication	•	
	Guest VLAN	Port-based, Host -based	
	Switch Access		
Access Control Lists (ACL)	Max ACL entries	1792 ingress ACL rule, 1k egress ACL rule, 1K VLAN ACL rules	
	Time-Based ACL	802.1p priority,VLAN,MAC address,Ether type,IP address,DSCP/Protocol type,TCP/UDP port number ,IPv6 Traffic class and flow lable	
Management	Web-based GUI	•	
	Command Line Interface (CLI)	•	
	Telnet	•	
	SNMP	•	
	SSH	•	
	RMON	•	
	RADIUS/TACACS+	•	
	TFTP Client	•	
	LLDP/LLDP-MED	•	
	Power Supply	Internal	
Physical and Environment	Max. Power Consumption	116.8 W	74.3 W
	Power Saving Technology		
	Number of Fans	3	
	Operating Temperature	0 to 45 °C	
	Operating Humidity	0% to 95% RH	
	Dimensions (W x D x H)	440 x 506 x 44 mm	
Mean Time Between Failures (MTBF)	134,330 hours		
Modules / Transceivers	10GbE SFP+ Modules	DEM-431XT, DEM-431XT-DD, DEM-432XT, DEM-432XT-DD, DEM-433XT	
	SFP Transceivers	DEM-210, DEM-211, DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT	
	WDM SFP Transceivers	DEM-331T, DEM-331R	

# xStack Layer 3 Gigabit Stackable Managed

## DGS-3620 Series



X S T A C K



dlinkgreen

The xStack DGS-3620 Series of next generation Gigabit Layer 3 Managed switches deliver performance, flexibility, security, multi-layer QoS and access control, along with redundant power solutions for businesses. With high Gigabit port densities, Gigabit SFP and 10-Gigabit SFP+ support, and advanced software solutions, these switches can act as either departmental access layer devices or core switches to form a multilevel network structured with backbone and centralised high-speed servers. Service providers can take advantage of the high SFP density switches to structure the cores of Fibre to the Building (FTTB) networks that they extend to the subscriber's sites.

- Physical stack of up to 12 units, 576 Gigabit ports
- Up to 40 Gbps full-duplex stacking bandwidth
- Optional external redundant power supply
- 802.1p priority queues/multi-layer CoS
- Loopback Detection (LBD)
- L2/L3/L4 multi-layer access control
- Virtual stack of up to 32 units using Single IP Management (SIM)
- 802.1X guest VLAN
- IP multicast support for bandwidth-intensive applications
- SSH/SSL support
- Flexible software options with standard Image (SI) and Enhanced Image (EI) for advanced features
- PoE/PoE+ versions available
- Telnet
- Command Line Interface (CLI)
- Web-based GUI
- RMON support
- Traffic segmentation
- Supports Microsoft NAP
- D-Link Safeguard Engine

### Optional Accessories

#### Optional Software Image Upgrade Licenses

DGS-3620-28TC-SE-LIC DGS-3620-28TC standard to enhanced image upgrade license  
 DGS-3620-28SC-SE-LIC DGS-3620-28SC standard to enhanced image upgrade license  
 DGS-3620-28PC-SE-LIC DGS-3620-28PC standard to enhanced image upgrade license  
 DGS-3620-52T-SE-LIC DGS-3620-52T standard to enhanced image upgrade license

#### Optional 10 Gbps SFP+ Direct Attach Stacking Cables

DEM-CB100S 10GbE SFP+ 1m direct attach stacking cable  
 DEM-CB300S 10GbE SFP+ 3m direct attach stacking cable

#### Optional Redundant Power Supplies

DPS-500 140W redundant power supply for DGS-3620-28TC, DGS-3620-28SC and DGS-3620-52T  
 DPS-700 589W redundant power supply For DGS-3620-28PC and DGS-3620-52P

#### Optional Management Software

DV-600S D-View 6.0 Network Management Software (standard edition)  
 DV-600P D-View 6.0 Network Management Software (professional edition)

### DGS-3620-28TC

- 10/100/1000BASE-T port x 20
- Combo 10/100/1000BASE-T/SFP port x 4
- 10GbE SFP+ port x 4

### DGS-3620-28SC

- SFP port x 20
- Combo 10/100/1000BASE-T/SFP port x 4
- 10GbE SFP+ port x 4

### DGS-3620-28PC

- 10/100/1000BASE-T PoE port x 20
- Combo 10/100/1000BASE-T PoE/SFP port x 4
- 10GbE SFP+ port x 4
- 802.3af and 802.3at PoE/PoE+ support
- 370W PoE power budget (760W with DPS-700 RPS)

### DGS-3620-52T

- 10/100/1000BASE-T port x 48
- 10GbE SFP+ port x 4

### DGS-3620-52P

- 10/100/1000BASE-T PoE port x 48
- 10GbE SFP+ port x 4
- 802.3af and 802.3at PoE/PoE+ support
- 370W PoE power budget (760W with DPS-700 RPS)





Model		DGS-3620-28TC	DGS-3620-28SC	DGS-3620-28PC	DGS-3620-52T	DGS-3620-52P
Interfaces	Fast Ethernet					
	Gigabit Ethernet	20		20	48	48
	1GbE SFP Slots		20			
	10GbE SFP+ Slots	4	4	4	4	4
	Combo Gigabit/SFP+ Slots	4	4	4		
General Features	Stackability	Virtual stacking of up to 32 units, physical stacking up to 12 units				
	Stacking Speed (per Port)	20 Gbps (full duplex)				
	Switching Capacity	128 Gbps	128 Gbps	128 Gbps	176 Gbps	176 Gbps
	Forwarding Mode	Store-and-forward				
	Packet Buffer Memory	2MB				
	MAC Table	32K Entries				
	Flow Control	802.3x, HOL Blocking Prevention				
	MDI/MDIX	Configurable				
L2 Features	Loop Protection	802.1Q, 802.1w, 802.1s, ERPS				
	803.2ad Link Aggregation	Max. 32 Groups per Device. 8 Gigabit Ports or 2 10 Gigabit Ports per Group				
	Port Mirroring	One-to-One, Many-to-One, Flow Based, RSPAN				
	Loopback Detection	•				
	Cable Diagnostics	•				
L3 Features	IP Interfaces	256				
	Routing Protocols	Static, RIP v1/v2, RIPng*, OSPF v2, OSPF v3*, BGP v4*, BGP+ v4*				
	Policy-Based Routing	•				
	Route Balancing	ECMP/WCMP				
	IPv6 Tunneling	Static*, ISATAP*, GRE*, 6to4*				
Virtual LAN (VLAN)	VRRP	•				
	VLANs	Static, 4 K, Dynamic: 255				
	GVRP	•				
	Protocol VLAN (802.1v)	•				
Multicasting	Double VLAN (Q-in-Q)	Port-based / Selective				
	Groups	2K				
	Protocols	IGMP V1 / V2 / V3, PIM-SM, PIM-SM v6*, PIM-DM, PIM Spare-Dense, DVMRP v3*				
Quality of Service (QoS)	Standard	802.1p				
	Number of Queues	8				
	Mode	Strict / WRR/ Strict+WRR/WRED <sup>1</sup>				
	CoS Handling	Switch Port, VLAN ID, 802.1p, MAC, IPv4, IPv6, DSCP, Port, Protocol, IPv6 Traffic Class, IPv6 Flow Label, Payload (User-Defined)				
Security	Bandwidth Control	Port-Based, Flow-Based				
	STP Security	BPDU Filtering, Root Restriction				
	Per-Port MAC Limitation	•				
	Static MAC	16				
	Storm Control	Broadcast / Multicast / Unicast				
	IP-MAC-Port Binding	500 Entries				
	DHCP Spoofing Prevention	•				
	ARP Spoofing Prevention	•				
	Traffic Segmentation	•				
Authentication, Authorisation and Accounting (AAA)	D-Link SafeGuard Engine	•				
	802.1x Authentication	Port-Based, Host-Based, Dynamic VLAN Assignment				
	Web-Based Access Control (WAC)	Port-Based, Host-Based, Dynamic VLAN Assignment				
	MAC-Based Access Control (MAC)	Port-Based, Host-Based, Dynamic VLAN Assignment				
	Network Access Protection (NAP)	802.1x NAP, DHCP NAP				
Access Control Lists (ACL)	Guest VLAN	•				
	Switch Access	RADIUS / TACACS+, 4-Level User Account				
	Rules	Ingress: 6 profiles, 256 rules per profile, Egress: 4 profiles, 128 rules per profile				
Power over Ethernet	ACL Handling	Switch Port, VLAN ID, 802.1p, MAC, IPv4, IPv6, DSCP, Port, Protocol, IPv6 Traffic Class, IPv6 Flow Label, Payload (User-Defined)				
	Time-Based ACL	•				
	Standard			802.3af, 802.3at		802.3af, 802.3at
	PoE Ports			24		48
Management	PoE Budget			370 W		370 W
	Time-Based PoE			•		•
	Switch Access	Web GUI, Telnet				
	sFlow	•				
	SNMP	V1 / V2c / V3				
	DHCP	Server, Client, Relay (IPv4, IPv6)				
Physical and Environment	RMON	•				
	TFTP Client	•				
	Syslog	•				
	Power Supply	Internal				
	Max. Power Consumption	45.1 W	43.4 W	502.2 W	76 W	517.1 W
	Power Saving Technology	Green Ethernet				
Modules / Transceivers	Operating Temperature	0 to 50 °C				
	Operating Humidity	10% to 90% RH				
	Dimensions (W x D x H)	441 x 310 x 44 mm	441 x 310 x 44 mm	441 x 310 x 44 mm	441 x 310 x 44 mm	441 x 310 x 44 mm
	Mean Time Between Failures (MTBF)	292,976 Hours	298,263 Hours	236,811 Hours	247,929 Hours	235,645 Hours
	10GbE SFP+ Transceivers	DEM-431XT, DEM-431XT-DD, DEM-432XT, DEM-432XT-DD, DEM-433XT				
Modules / Transceivers	SFP Transceivers	DEM-210, DEM-211, DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT				
	WDM SFP Transceivers	DEM-331T, DEM-331R				

\* Enhanced Image (EI) only

<sup>1</sup> R25 is supported

# xStack Layer 2+ Gigabit Stackable Managed Switches

## DGS-3420 Series



X S T A C K



dlinkgreen

The xStack DGS-3420 series of next generation Layer 2+ Gigabit switches delivers performance, flexibility, security, multi-layer QoS, and accessibility, along with redundant power solutions for SMBs and enterprises. With high Gigabit port densities, Gigabit SFP, 10-Gigabit SFP+ support, and advanced software solutions, these switches can act as either departmental access layer devices or aggregation switches to form a multilevel network structured with backbone and centralised high-speed servers. Service providers can take advantage of the high SFP density switches (DGS-3420-28SC) to structure the aggregation of Fiber to the Building (FTTB) networks that are extended to the subscribers' sites.

- Physical stack of up to 12 Units, 576 Gigabit ports
- Up to 40 Gbps full-duplex stacking bandwidth
- Optional external redundant power supply
- Five different models in the series, including PoE/PoE+ versions
- Comprehensive security features, including Microsoft NAP
- Comprehensive IPv6 support
- Multiple functions in a single device: switching, static routing, PoE, eliminating the need of purchasing multiple routers and switches
- Web-based GUI for easy management
- SD card slot to store and restore configuration files
- Green technology - power-saving mode, time-base PoE, Smart Fans

### Optional Accessories

#### Optional 10 Gbps SFP+ Direct Attach Stacking Cables

DEM-CB100S 10-GbE SFP+ 1 m Direct Attach Stacking Cable  
DEM-CB300S 10-GbE SFP+ 3 m Direct Attach Stacking Cable

#### Optional Redundant Power Supplies

DPS-500 140W redundant power supply for DGS-3420-28TC, DGS-3420-28SC and DGS-3420-52T  
DPS-700 589W redundant power supply For DGS-3420-28PC and DGS-3420-52P

#### Optional Management Software

DV-600S D-View 6.0 Network Management Software (standard edition)  
DV-600P D-View 6.0 Network Management Software (professional edition)

### DGS-3420-28TC

- 10/100/1000BASE-T port x 20
- Combo 1000BASE-T/SFP port x 4
- 10GbE SFP+ port x 4

### DGS-3420-28SC

- SFP port x 20
- Combo 1000BASE-T/SFP port x 4
- 10GbE SFP+ port x 4

### DGS-3420-28PC

- 10/100/1000BASE-T PoE port x 20
- Combo 10/100/1000BASE-T PoE/SFP port x 4
- 10GbE SFP+ port x 4
- 802.3af and 802.3at PoE/PoE+ support
- 370W PoE power budget (740W with DPS-700 RPS)

### DGS-3420-52T

- 10/100/1000BASE-T port x 48
- 10GbE SFP+ port x 4

### DGS-3420-52P

- 10/100/1000BASE-T PoE port x 48
- 10GbE SFP+ port x 4
- 802.3af and 802.3at PoE/PoE+ support
- 370W PoE power budget (740W with DPS-700 RPS)



Model		DGS-3420-28TC	DGS-3420-28SC	DGS-3420-28PC	DGS-3420-52T	DGS-3420-52P
Interfaces	Fast Ethernet					
	Gigabit Ethernet	20		20	48	48
	SFP Slots		20			
	Combo Gigabit/SFP Slots	4	4	4		
	10GbE SFP+ Slots	4	4	4	4	4
General Features	Stackability	Virtual stacking of up to 32 units, physical stacking up to 12 units				
	Stacking Speed (per Port)	20 Gbps (full duplex)				
	Switching Capacity	128 Gbps	128 Gbps	128 Gbps	176 Gbps	176 Gbps
	Forwarding Mode	Store-and-Forward				
	Packet Buffer Memory	2 MB				
	MAC Table	16 K				
	Flow Control	802.3x, HOL Blocking Prevention				
	MDI/MDIX	Configurable				
L2 Features	Loop Protection	802.1Q, 802.1w, 802.1s, ERPS				
	803.2ad Link Aggregation	32 Groups, 8 Gb Ports per Group / 2 10GbE Ports per Group				
	Port Mirroring	One-to-One, Many-to-One, RX/TX/Both, Flow-Based, RSPAN				
	Loopback Detection	•				
	Cable Diagnostics	•				
L3 Features	IP Interfaces	256				
	Routing Protocols	Static, Rip v1/v2, RIPng				
	Policy-Based Routing	Based on ACL				
	Route Balancing					
	IPv6 Tunneling	Static, ISATAP, 6to4				
	VRRP	•				
Virtual LAN (VLAN)	VLANs	Static: 4 K, Dynamic: 255				
	GVRP	•				
	Protocol VLAN (802.1v)	•				
	Double VLAN (Q-in-Q)	Port-Based / Selective				
Multicasting	Groups	960 (IGMP), 480 (MLD)				
	Protocols	IGMP v1/v2/v3, MLD v1, v2 Snooping				
Quality of Service (QoS)	Standard	802.1p, DSCP				
	Number of Queues	8				
	Mode	Strict / WRR / Strict+WRR				
	CoS Handling	Switch Port, VLAN ID, 802.1p, MAC, IP, IPv6, DSCP, Port, Protocol, IPv6 Traffic Class, IPv6 Flow Label, Payload (User-Defined)				
Security	Bandwidth Control	Port-Based, Flow-Based				
	STP Security	BPDU Filtering, Root Restriction, UDLD				
	Per-Port MAC Limitation	•				
	Static MAC	16				
	Storm Control	Broadcast / Multicast / Unicast				
	IP-MAC-Port Binding	500 Entries				
	DHCP Spoofing Prevention	•				
	ARP Spoofing Prevention	•				
	Traffic Segmentation	•				
	D-Link SafeGuard Engine	•				
Authentication, Authorisation and Accounting (AAA)	802.1x Authentication	Port-Based, Host-Based, Dynamic VLAN Assignment				
	Web-Based Access Control (WAC)	Port-Based, Host-Based, Dynamic VLAN Assignment				
	MAC-Based Access Control (MAC)	Port-Based, Host-Based, Dynamic VLAN Assignment				
	Network Access Protection (NAP)	802.1x, NAP, DHCP NAP				
	Guest VLAN	•				
Access Control Lists (ACL)	Switch Access	RADIUS / TACACS+, 3-Level User Account				
	Rules	Ingress ACL: 6 Profiles, 256 Rules Per Profile / Egress ACL: 4 Profiles, 128 Rules Per Profile				
	ACL Handling	Ether Type, VLAN ID, 802.1p, MAC, IP, IPv6, DSCP, Port, Protocol, IPv6 Traffic Class, IPv6 Flow Label, Payload (User-Defined)				
Power over Ethernet	Time-Based ACL	•				
	Standard			802.3af and 802.3at		802.3af and 802.3at
	PoE Ports			24		48
	PoE Budget			370 W (740 W with DPS-700 RPS)		370 W (740 W with DPS-700 RPS)
	Time-Based PoE			•		•
Management	Switch Access	Web GUI, Telnet, Console				
	sFlow	•				
	SNMP	v1 / v2c / v3				
	DHCP	Server, Client, Relay (IPv4, IPv6)				
	RMON	•				
	TFTP Client	•				
Physical and Environment	Syslog	•				
	Power Supply	Internal				
	Max. Power Consumption	58.8 Watts	60.2 Watts	478.0 Watts	81.0 Watts	505.4 Watts
	Power Saving Technology	Green Ethernet				
	Operating Temperature	0 to 50 °C				
	Operating Humidity	10% to 90% RH				
	Dimensions (W x D x H)	441 x 310 x 44 mm	441 x 310 x 44 mm	441 x 310 x 44 mm	441 x 310 x 44 mm	441 x 310 x 44 mm
Mean Time Between Failures (MTBF)	287763 Hours	300371 Hours	206190 Hours	255608 Hours	202462 Hours	
Modules / Transceivers	10GbE SFP+ Transceivers	DEM-431XT, DEM-431XT-DD, DEM-432XT, DEM-432XT-DD, DEM-433XT				
	SFP Transceivers	DEM-210, DEM-211, DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT				
	WDM SFP Transceivers	DEM-331T, DEM-331R				

<sup>1</sup>Supported by R1.5 firmware

# xStack Layer 2 Fast Ethernet Managed Switches

## DES-3200 Series



X S T A C K



dlinkgreen

The DES-3200 Series is a member of D-Link's Layer 2 managed switch family designed for the ETTX, FTTX, and enterprise markets. The DES-3200 Series provides 8/16/24, or 48 10/100 Mbps Fast Ethernet connections and various SFP or combo Gigabit/SFP ports uplink options. The DES-3200-10/18 comes in a 9/11-inch compact size and incorporates a fanless design suitable for desktop, telecom cabinet, or distribution box deployment. The DES-3200-28 and 52 models are 1U 19" rack mount size and provide 24/48 copper connections on Fast Ethernet with the beneficial design of 2/4 Gigabit/SFP Combo ports which provide up to 4 Gbps uplink bandwidth or dual Ethernet ring topology support. The DES-3200-28P/52P are IEEE 802.3af and IEEE 802.3at Power over Ethernet (PoE) compliant switches and provide 15.4 W per port and up to 30 W in the first four/eight ports. The PoE/PoE+ powers devices such as video IP phones, wireless access points, and IP cameras directly through Ethernet cables which makes the deployment of the network much easier. All switches of the DES-3200 series feature embedded 2 or 4 Gigabit SFP uplinks, which provides flexible network topology choices such as ring, tree, or mixed.

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

### Optional Accessories

#### Optional Management Software

- |         |   |
|---------|---|
| DV-600S | D-View 6.0 Network Management Software (standard edition)     |
| DV-600P | D-View 6.0 Network Management Software (professional edition) |

### DES-3200-10

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

### DES-3200-18

- 10/100BASE-TX port x 16
- Combo 1000BASE-T/SFP port x 1
- SFP port x 2
- Fanless
- 11-inch, 1U desktop

### DES-3200-28

- 10/100BASE-TX port x 24
- Combo 1000BASE-T/SFP port x 2
- 10/100/1000 BASE-T port x2
- Fanless
- 19-inch, 1U rack-mountable

### DES-3200-28P

- 10/100BASE-TX PoE port x 24
- Combo 1000BASE-T/SFP port x 2
- 10/100/1000 BASE-T port x2
- 802.3af and 802.3at PoE/PoE+ support
- 188W PoE power budget
- Smart fan
- 19-inch, 1U rack-mountable

### DES-3200-52

- 10/100BASE-TX port x 48
- Combo 1000BASE-T/SFP port x 2
- 10/100/1000 BASE-T port x2
- Smart fan
- 19-inch, 1U rack-mountable

### DES-3200-52P

- 10/100BASE-TX PoE port x 48
- Combo 1000BASE-T/SFP port x 2
- SFP port x 2
- 802.3af and 802.3at PoE/PoE+ support
- 370W PoE power budget
- Smart fan
- 19-inch, 1U rack-mountable



Model		DES-3200-10	DES-3200-18	DES-3200-28	DES-3200-28P	DES-3200-52	DES-3200-52P
Interfaces	Fast Ethernet	8	16	24		48	
	Gigabit Ethernet						
	SFP Slots	1	1	2	2	2	2
	Combo Gigabit/SFP Slots	1	1	2	2	2	2
General Features	10GbE Slots						
	Stackability	Virtual stacking of up to 32 units					
	Stacking Speed (per Port)						
	Switching Capacity	5.6 Gbps	7.2 Gbps	12.8 Gbps		17.6 Gbps	
	Forwarding Mode	Store-and-Forward					
	Packet Buffer Memory	1.5 MB					
	MAC Table	16 k					
L2 Features	Flow Control	802.3x, HOL Blocking Prevention					
	MDI/MDIX	Configurable					
	Loop Protection	802.1Q, 802.1w, 802.1s, ERPS					
	803.2ad Link Aggregation	5 Groups 8 Ports per Group	9 Groups 8 Ports per Group	14 Groups 8 ports per group		26 Groups 8 ports per group	
Virtual LAN (VLAN)	Port Mirroring	One-to-One, Many-to-One, RX/TX/Both, Flow-Based					
	Loopback Detection	-					
	Cable Diagnostics	-					
	VLANs	Static: 4 K, Dynamic: 255					
Multicasting	GVRP	-					
	Protocol VLAN (802.1v)	-					
	Double VLAN (Q-in-Q)	-					
Quality of Service (QoS)	Groups	1 K					
	Protocols	IGMP v1 / v2 / v3, MLD v1, v2 Snooping					
	Standard	802.1p, DSCP					
	Number of Queues	8					
Security	Mode	Strict / WRR					
	CoS Handling	Switch Port, VLAN ID, 802.1p, MAC, IP, IPv6, DSCP, Port, Protocol, Payload (User-Defined)					
	Bandwidth Control	Port-Based, Flow-Based					
	STP Security	BPDU Filtering, Root Restriction, UDLD					
	Per-Port MAC Limitation	-					
	Static MAC	64					
	Storm Control	Broadcast / Multicast / Unicast					
	IP-MAC-Port Binding	500 Entries					
	DHCP Spoofing Prevention	-					
	ARP Spoofing Prevention	-					
Authentication, Authorisation and Accounting (AAA)	Traffic Segmentation	-					
	D-Link SafeGuard Engine	-					
	802.1x Authentication	Port-Based, Host-Based, Dynamic VLAN Assignment					
	Web-Based Access Control (WAC)	Port-Based, Host-Based					
	MAC-Based Access Control (MAC)	Port-Based, Host-Based, Dynamic VLAN Assignment					
Access Control Lists (ACL)	Network Access Protection (NAP)	802.1x NAP, DHCP NAP					
	Guest VLAN	-					
	Switch Access	RADIUS / TACACS+, 3-Level User Account					
Management	Rules	512					
	ACL Handling	Ether Type, VLAN ID, 802.1p, MAC, IP, IPv6, DSCP, Port, Protocol, Payload (User-Defined)					
	Time-Based ACL	-					
	Switch Access	Web GUI, Telnet, Console					
	sFlow						
	SNMP	v1 / v2c / v3					
Physical and Environment	DHCP	Client, Relay (IPv4, IPv6)					
	RMON	-					
	TFTP Client	-					
	Syslog	-					
	Power Supply	Internal					
	Max. Power Consumption	13.54W	15.44 W	20.83 W	250.78 W	33.38 W	417.6W
	Power Saving Technology						
Modules/ Transceivers	Operating Temperature	-5 to 50 °C					
	Operating Humidity	10-90% Non-Condensing					
	Dimensions (W x D x H)	228.5 x 195 x 44 mm	280.5 x 180 x 44 mm	441 x 210 x 44 mm	441 x 308 x 44 mm		
	Mean Time Between Failures (MTBF)	873,750 Hours	743,115 Hours	668,867 Hours	216,780 Hours	440,704 Hours	189,396 Hours
Modules/ Transceivers	SFP Transceivers	DEM-210, DEM-211, DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT					
	WDM SFP Transceivers	DEM-331T, DEM-331R					

# xStack Layer 2 Gigabit Stackable Managed

## DGS-3120 Series



X S T A C K



dlinkgreen

The DGS-3120 Series is the enhanced L2 managed stackable solution designed to connect end-users in a secure SMB or enterprise network. The DGS-3120 Series targets businesses that require a high level of network security and maximum uptime. Its comprehensive security features and PoE support make it suitable for any business environment where manageability, reliability and high port densities are necessary at an affordable price. Each of the five switch models in this series is embedded with two different software images - Standard Image (SI) and Enhanced Image (EI). The Standard Image provides sophisticated features for businesses such as advanced Quality of Service (QoS), traffic shaping, L2 multicasting and robust security features. The Enhanced Image supports ERPS, Double VLAN (Q-in-Q), Ethernet OAM, Static Route, IMPB, sFlow, IPv6 features which are suitable for the next generation IPv6 networks or triple play applications. With enhanced network reliability and comprehensive security, as well as proactive and effective network management and future-proof IPv6 support, the DGS-3120 Series is designed to scale as your network requirement grows.

- Built-in 10 GbE stacking ports
- 40Gb stacking bandwidth
- Stackable up to 6 units
- Up to 288 Gigabit ports in a single stack
- PoE/PoE+ versions available
- Optional redundant power supply
- Smart fans
- 19-inch, 1U rack-mountable
- Comprehensive security
- IPv6 ready
- Supports Microsoft NAP
- sFlow
- SD card slot for configuration and system images
- Easy to configure through Web interface
- Power saving technology

### Optional Accessories

#### Optional Software Image Upgrade Licenses

DGS-3120-24TC-SE-LIC DGS-3120-24TC Standard to Enhanced Image Upgrade License  
 DGS-3120-24SC-SE-LIC DGS-3120-24SC Standard to Enhanced Image Upgrade License  
 DGS-3120-24PC-SE-LIC DGS-3120-24PC Standard to Enhanced Image Upgrade License  
 DGS-3120-48TC-SE-LIC DGS-3120-48TC Standard to Enhanced Image Upgrade License  
 DGS-3120-48TP-SE-LIC DGS-3120-48TP Standard to Enhanced Image Upgrade License

#### Optional 10Gbps Stacking and Interconnect Cables

DEM-CB50 50 cm Stacking Cable  
 DEM-CB100 1 cm Stacking Cable  
 DEM-CB300 3 cm Stacking Cable  
 DEM-CB50ICX 50 cm Interconnect Cable

#### Optional Redundant Power Supplies

DPS-200 60W redundant power supply for DGS-3120-24TC and DGS-3120-24SC  
 DPS-500 140W redundant power supply for DGS-3120-48TC  
 DPS-700 589W redundant power supply For DGS-3120-24PC and DGS-3120-48PC

#### Optional Management Software

DV-600S D-View 6.0 Network Management Software (standard edition)  
 DV-600P D-View 6.0 Network Management Software (professional edition)

### DGS-3120-24TC

- 10/100/1000BASE-T port x 20
- Combo 1000BASE-T/SFP port x 4
- 10GbE stacking port x 2

### DGS-3120-24PC

- SFP port x 16
- Combo 10/100/1000BASE-T/SFP port x 8
- 10GbE stacking port x 2

### DGS-3120-24SC

- 10/100/1000BASE-T PoE port x 20
- Combo 1000BASE-T/SFP port x 4
- 10GbE stacking port x 2
- 802.3af and 802.3at PoE/PoE+ support
- 370W PoE power budget (740W with DPS-700 RPS)

### DGS-3120-48TC

- 10/100/1000BASE-T port x 44
- Combo 10/100/1000BASE-T/SFP port x 4
- 10GbE stacking port x 2

### DGS-3120-48PC

- 10/100/1000BASE-T PoE port x 44
- Combo 1000BASE-T/SFP port x 4
- 10GbE stacking port x 2
- 802.3af and 802.3at PoE/PoE+ support
- 370W PoE power budget (740W with DPS-700 RPS)



Model		DGS-3120-24TC	DGS-3120-24PC	DGS-3120-24SC	DGS-3120-48TC	DGS-3120-48PC
Interfaces	Fast Ethernet					
	Gigabit Ethernet	20	20		44	44
	SFP Slots			16		
	Combo Gigabit/SFP Slots	4	4	8	4	4
	10GbE Slots					
General Features	Stackability	Virtual stacking of up to 32 units, physical stacking up to 6 units				
	Stacking Speed (per Port)	20 Gbps (full duplex)				
	Switching Capacity	88 Gbps	88 Gbps	88 Gbps	136 Gbps	136 Gbps
	Forwarding Mode	Store-and-Forward				
	Packet Buffer Memory	2 M				
	MAC Table	16 K				
	Flow Control	802.3x, HOL Blocking Prevention				
	MDI/MDIX	Configurable				
	Loop Protection	802.1Q, 802.1w, 802.1s, ERPS*				
	803.2ad Link Aggregation	32 Groups 8 Gb Ports per Group				
L2 Features	Port Mirroring	One-to-One, Many-to-One, RX/TX/Both, RSPAN, Flow-Based				
	Loopback Detection	•				
	Cable Diagnostics	•				
	IP Interfaces	16*				
	Routing Protocols	Static*				
L3 Features	Policy-Based Routing					
	Route Balancing					
	IPv6 Tunneling					
	VRRP					
	Virtual LAN (VLAN)	VLANs	4 K			
GVRP		•				
Protocol VLAN (802.1v)		•				
Double VLAN (Q-in-Q)		•*				
Multicasting	Groups	1024				
	Protocols	IGMP v1 / v2 / v3, MLD v1, v2 Snooping				
	Standard	802.1p, DSCP				
Quality of Service (QoS)	Number of Queues	4				
	Mode	Strict / WRR				
	CoS Handling	Switch Port, VLAN ID, 802.1p, MAC, IP, IPv6, DSCP, Port, Protocol, Payload (User-Defined)				
	Bandwidth Control	Port-Based, Flow-Based				
	STP Security	BPDU Filtering, Root Restriction				
Security	Per-Port MAC Limitation	•				
	Static MAC	64				
	Storm Control	Broadcast / Multicast / Unicast				
	IP-MAC-Port Binding	510 Entries*				
	DHCP Spoofing Prevention	•*				
	ARP Spoofing Prevention	•				
	Traffic Segmentation	•				
	D-Link SafeGuard Engine	•				
	802.1x Authentication	Port-Based, Host Based, Dynamic VLAN/ACL/QoS Assignment				
	Web-Based Access Control (WAC)	Port-Based, Host Based, Dynamic VLAN/ACL/QoS Assignment				
Authentication, Authorisation and Accounting (AAA)	MAC-Based Access Control (MAC)	Port-Based, Host Based, Dynamic VLAN/ACL/QoS Assignment				
	Network Access Protection (NAP)	801.1X NAP, DHCP NAP				
	Guest VLAN	•				
	Switch Access	RADIUS / TACACS+, 4-Level User Account				
	Rules	1500				
Access Control Lists (ACL)	ACL Handling	Ether Type, VLAN ID, 802.1p, MAC, IP, IPv6, DSCP, Port, Protocol, Payload (User-Defined)				
	Time-Based ACL	•				
	Standard		802.3af, 802.3at			802.3af, 802.3at
Power over Ethernet	PoE Ports		1-20			1-44
	PoE Budget		370 W			370 W
	Time-Based PoE		•			•
	Switch Access	Web GUI, Telnet, Console				
Management	sFlow	•*				
	SNMP	v1 / v2c / v3				
	DHCP	Client, Relay				
	RMON	•				
	TFTP Client	• (IPv4, IPv6*)				
	Syslog	•				
	Power Supply	Internal				
Physical and Environment	Max. Power Consumption	40.5 W	482.7 W	34.1 W	67.1 W	516.5 W
	Power Saving Technology	Green Ethernet				
	Operating Temperature	0 to 50 °C				
	Operating Humidity	10% to 90% RH				
	Dimensions (W x D x H)	440 x 210 x 44 mm	440 x 310 x 44 mm	440 x 210 x 44 mm	440 x 310 x 44 mm	440 x 380 x 44 mm
	Mean Time Between Failures (MTBF)	561,830 Hours	282,541 Hours	516,317 Hours	292,201 Hours	223,006 Hours
Modules / Transceivers	10GbE Modules	DEM-431XT, DEM-431XT-DD, DEM-432XT, DEM-432XT-DD, DEM-433XT				
	SFP Transceivers	DEM-210, DEM-211, DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT,				
	WDM SFP Transceivers	DEM-331T, DEM-331R				

\* Enhanced Image (EI) only

# Gigabit L2 Managed Switches

## DGS-3000 Series



The DGS-3000-10TC is a Layer 2 managed switch product that provides wired Gigabit speed access for metro and campus networks. The DGS-3000-10TC is designed as a 1U rackmount case with IPV6 support suitable for enterprise access or service provider telecom cabinets. It maximises network performance without compromising on reliability and security. Green technology decreases energy costs by reducing power consumption, without compromising on performance.

- Virtual stacking, up to 32 units per virtual stack managed through a single IP address
- 16K MAC Address Table
- 802.3x Flow Control, HOL Blocking Prevention flow control
- Jumbo Frames up to 12K bytes
- BPDU Filtering
- Root Restriction
- Loopback Detection
- Link Aggregation
- Port Mirroring
- 8 queues per port
- DSCP
- 802.1p
- Bandwidth Control
- Queue Handling
- Time-based QoS

### Optional Accessories

#### Optional Management Software

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

### DGS-3000-10TC

- 10/100/1000BASE-T port X 8
- Combo 10/100/1000BASE-T/SFP port x 2
- Desktop, 1U rackmount
- Smart Fan





Model		DGS-3000-10TC
Interfaces	Fast Ethernet	
	Gigabit Ethernet	8
	SFP Slots	2
	Combo Gigabit/SFP Slots	
	10GbE Slots	
General Features	Stackability	Virtual stacking (up to 32 devices)
	Stacking Speed (per Port)	
	Switching Capacity	20 Gbps
	Forwarding Mode	Store-and-Forward
	Packet Buffer Memory	14.88 Mpps
	MAC Table	16K
	Flow Control	802.3x Flow Control , HOL Blocking Prevention
L2 Features	MDI/MDIX	Configurable
	Loop Protection	802.1Q, 802.1w, 802.1s, ERPS
	803.2ad Link Aggregation	802.3ad 802.1AX
	Port Mirroring	One-to-One, Many-to-One, Flow-based (ACL) Mirroring
	Loopback Detection	.
	Cable Diagnostics	.
Virtual LAN (VLAN)	VLANs	255 dynamic VLANs
	GVRP	.
	Protocol VLAN (802.1v)	.
	Double VLAN (Q-in-Q)	.
Multicasting	Groups	1024
	Protocols	IGMP v1/v2 snooping, v3 awareness, MLD v1, v2 awareness
Quality of Service (QoS)	Standard	DSCP, 802.1p
	No. of Queues	8
	Mode	Strict Priority Queue (SPQ), Weighted Round Robin (WRR), Deficit Round Robin (DRR), SPQ + WRR
	CoS Handling	802.1p Priority Queues ,VLAN ID ,MAC Address , Ether Type ,IPv4/v6 Address, IPv6 Traffic Class ,IPv6 Flow Label ,DSCP, Protocol Type,TCP/UDP Port, User-Defined Packet Content
	Bandwidth Control	Port -Based, Host -Based
Security	STP Security	BPDU Filtering, Root Restriction
	Per-Port MAC Limitation	
	Static MAC	
	Storm Control	.
	IP-MAC-Port Binding	.
	DHCP Server Screening	.
	ARP Spoofing Prevention	.
	Traffic Segmentation	.
	D-Link SafeGuard Engine	.
	Switch Access	.
Management	sFlow	.
	SNMP	.
	DHCP	.
	RMON	.
	TFTP Client	.
	Syslog	.
	Power Supply	Internal
Physical and Environment	Max. Power Consumption	16.5 W
	Power Saving Technology	.
	No. of Fans	1
	Operating Temperature	0 to 50°C (32 to 122°F)
	Operating Humidity	10% to 90% RH
	Dimensions (W x D x H)	228.5 x 195 x 44 mm
Mean Time Between Failures (MTBF)	711565.6 hours	
Modules/Transceivers	SFP Transceivers	DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT, DEM-210, DEM-211

# SmartPro Series Switches

## DGS-1500 Series



D-Link's DGS-1500 Series SmartPro switches are designed for businesses which require functions such as L3 Static Routing and Single IP Management (Virtual Stacking) without upgrading to a managed switch. This series integrates advanced management and security functions that are similar to those of a managed switch, but less complex. The switches feature D-Link Green 3.0 technology which enables significant power savings. Additionally, the DGS-1500-28P's 10/100/1000 Mbps ports are PoE-enabled, offering ease-of-use and green features like time-based PoE, which enables the power to the port to be shut off at a predetermined time. Compliant with 802.3af and 802.3at, these switches are capable of feeding power to devices of up to 30 Watts. Management options include SNMP, Web Management, SmartConsole Utility, and Compact CLI. The series also supports ACL filtering and D-Link's Safeguard Engine to protect the network.

- Single IP Management (virtual stacking up to 32 units)
- Power saving via LED and port shutoff, port standby, system hibernation, cable length detection, link status detection
- SNMP trap
- Trap for SmartConsole Utility
- Layer 3 static routing
- Auto Surveillance VLAN
- Loopback detection
- Cable diagnostics
- Configurable MDI/MDIX
- LLDP/LLDP-MED
- Supports IEEE 802.1p QoS, up to four 802.1p priority queues per Port
- Auto Voice VLAN
- Highest priority for VoIP services
- SmartConsole Utility or Web-Based GUI
- Compact CLI through telnet
- Access Control List secures network
- Port security supports 64 MACs per port
- ARP spoofing prevention
- D-Link Safeguard Engine
- 19-inch, 1U rack-mountable

### Optional Accessories

#### Optional Redundant Power Supplies

DPS-700 589W redundant power supply for DGS-1500-28P

#### Optional Management Software

DV-600S D-View 6.0 Network Management Software Standard Edition  
 DV-600P D-View 6.0 Network Management Software Professional Edition

### DGS-1500-20

- 10/100/1000BASE-T port x 16
- SFP port x 4
- Fanless

### DGS-1500-28

- 10/100/1000BASE-T port x 24
- SFP port x 4
- Fanless

### DGS-1500-28P

- 10/100/1000BASE-T PoE port x 24
- SFP port x 4
- 802.3af and 802.3at PoE/PoE+ support
- 370W PoE power budget (740W with DPS-700 RPS)
- Smart fans

### DGS-1500-52

- 10/100/1000BASE-T port x 48
- SFP port x 4
- Smart fans



Model		DGS-1500-20	DGS-1500-28	DGS-1500-28P	DGS-1500-52
Interfaces	Fast Ethernet				
	Gigabit Ethernet	16	24	24	48
	SFP Slots	4	4	4	4
	Combo Gigabit/SFP Slots				
	10GbE Slots				
General Features	Stackability	Virtual stacking of up to 32 units			
	Stacking Speed (per Port)				
	Switching Capacity	40 Gbps	56 Gbps	56 Gbps	104 Gbps
	Forwarding Mode	Store-and-Forward			
	Packet Buffer Memory	1 MB			
	MAC Table	16 K			
	Flow Control	802.3x, HOL Blocking Prevention			
	MDI/MDIX	Configurable			
L2 Features	Loop Protection	802.1D, 802.1w			
	803.2ad Link Aggregation	10 Groups 8 Gb Ports per Group	14 Groups 8 Gb Ports per Group		26 Groups 8 Gb Ports per Group
	Port Mirroring	One-to-One, Many-to-One, RX/TX/Both			
	Loopback Detection	•			
	Cable Diagnostics	•			
L3 Features	IP Interfaces	4			
	Routing Protocols	Static			
	Policy-Based Routing				
	Route Balancing				
	IPv6 Tunneling				
	VRRP				
Virtual LAN (VLAN)	VLANs	Static: 4 K			
	GVRP	•			
	Protocol VLAN (802.1v)				
	Double VLAN (Q-in-Q)				
Multicasting	Groups	256			
	Protocols	IGMP v1/v2			
Quality of Service (QoS)	Standard	802.1p, DSCP			
	Number of Queues	4			
	Mode	Strict / WRR			
	CoS Handling	802.1p, DSCP			
	Bandwidth Control	Port-Based			
Security	STP Security				
	Per-Port MAC Limitation	•			
	Static MAC	64			
	Storm Control	Broadcast / Multicast / Unicast			
	IP-MAC-Port Binding	512 Entries			
	DHCP Spoofing Prevention	•			
	ARP Spoofing Prevention	•			
	Traffic Segmentation	•			
D-Link SafeGuard Engine	•				
Authentication, Authorisation and Accounting (AAA)	802.1x Authentication	Port-Based			
	Web-Based Access Control (WAC)				
	MAC-Based Access Control (MAC)				
	Network Access Protection (NAP)				
	Guest VLAN				
Access Control Lists (ACL)	Switch Access	User Account			
	Rules	200	200	200	450
	ACL Handling	MAC, IP, 802.1p, DSCP/IPV6 Address			
Power over Ethernet	Time-Based ACL				
	Standard	802.3af 802.3at			
	PoE Ports	1-24			
	PoE Budget	370 W (740 W with RPS-700)			
Management	Time-Based PoE	•			
	Switch Access	Web GUI, Telnet			
	sFlow				
	SNMP	v1 / v2c / v3			
	DHCP				
	RMON	•			
	TFTP Client	•			
Physical and Environment	Syslog				
	Power Supply	Internal			
	Max. Power Consumption	14.06 W	16.81 W	447 W	43.5 W
	Power Saving Technology	IEEE 802.3az EEE, Green Ethernet			
	Operating Temperature	5° to 50°			
	Operating Humidity	0% to 95% Non-Condensing			
Modules/ Transceivers	Dimensions (W x D x H)	440 x 140 x 44 mm	440 x 210 x 44 mm	440 x 310 x 44 mm	440 x 250 x 44 mm
	Mean Time Between Failures (MTBF)	253,460 Hours	236,739 Hours	206,075 Hours	201,517 Hours
	SFP Transceivers	DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT			DEM-210, DEM-211, DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT
WDM SFP Transceivers	DEM-331T, DEM-331R				

# Gigabit Smart+ Switches

## DGS-1210 Series



The DGS-1210 Series Smart+ Switches is the latest generation of D-Link Smart+ Switches featuring D-Link Green 3.0 technology. The series offers a high level of energy saving and efficiency, as it also complies with the IEEE 802.3az Energy Efficient Ethernet standard. IPv6 Ready Logo Program Approved, support for IPv6 management and configurations ensures your network remains protected after the upgrade from IPv4 to IPv6. By offering multiple management options, the Smart+ Switches allows quick deployment, infrastructure expansion, and seamless function upgrades. Built for small and medium-sized businesses, the DGS-1210 Series Smart+ Switches provide functionality, security, and manageability for a fraction of the standard cost of ownership.

The DGS-1210 Series Smart+ Switches includes a range of high power budget PoE-enabled switches for businesses looking to power VoIP phones, wireless access points or network cameras. The DGS-1210-10P is a 8-port Smart PoE+ Switch that provides 8 PoE-enabled ports that can supply power of up to 30W each. Whereas the DGS-1210-28P is a Smart PoE+ Switch with a power budget of 187W, that provides 24 PoE-enabled ports with ports 1-4 supporting up to 30W of power output following IEEE 802.3at standard. The design allows more flexibility in power allocation for a variety of powered devices with affordable installation costs

- Internet Group Management Protocol (IGMP) snooping
- Loopback Detection (LBD)
- Cable diagnostics
- 802.1Q virtual LAN (VLAN)
- Management VLAN
- Asymmetric VLAN
- Auto Voice VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- 802.1X access control
- Port security
- Broadcast/multicast/unicast storm control
- D-Link Safeguard Engine
- DHCP server screening
- ARP spoofing prevention
- Web-based GUI
- Simple Network Management Protocol (SNMP)

### Optional Accessories

#### Optional Management Software

- |         |   |
|---------|---|
| DV-600S | D-View 6.0 Network Management Software (standard edition)     |
| DV-600P | D-View 6.0 Network Management Software (professional edition) |

### DGS-1210-10P

- 10/100/1000BASE-T PoE port x 8
- Combo 10/100/1000BASE-T/SFP port x 2
- 802.3af and 802.3at PoE/PoE+ support
- 78W PoE power budget
- Fanless
- 13-inch, 1U desktop

### DGS-1210-20

- 10/100/1000BASE-T PoE port x 16
- SFP port x 4
- Fanless
- 19-inch, 1U rack-mountable

### DGS-1210-28

- 10/100/1000BASE-T PoE port x 24
- SFP port x 4
- Fanless
- 19-inch, 1U rack-mountable

### DGS-1210-28P

- 10/100/1000BASE-T PoE port x 24
- SFP port x 4
- 802.3af and 802.3at PoE/PoE+ support
- 185W PoE power budget
- Smart fans
- 19-inch, 1U rack-mountable

### DGS-1210-52

- 10/100/1000BASE-T PoE port x 48
- SFP port x 4
- Smart fans
- 19-inch, 1U rack-mountable



Model		DGS-1210-10P	DGS-1210-20	DGS-1210-28	DGS-1210-28P	DGS-1210-52
Interfaces	Fast Ethernet					
	Gigabit Ethernet	8	16	24	24	48
	Combo Gigabit/SFP Slots	2				
	SFP Slots		4	4	4	4
General Features	Stackability					
	Stacking speed (per Port)					
	Switching Capacity	20 Gbps	40 Gbps	56 Gbps	56 Gbps	104 Gbps
	Forwarding Mode	Store-and-Forward				
	Packet Buffer Memory	1 MB per device		41.7Mpps	6 MB	6 MB
	MAC Table	16 K				
	Flow Control	802.3x, HOL Blocking Prevention				
L2 Features	MDI/MDIX	Configurable				
	Loop Protection	802.1Q, 802.1w				
	803.2ad Link Aggregation	5 Groups 8 Ports per Group	Max.10 groups per device/ 8ports per group	Max. 14 groups per device/8ports per group		Max.26 Groups per device/8 ports per group
	Port Mirroring	One-to-One, Many-to-One, RX/TX/Both				
	Loopback Detection	•				
Virtual LAN (VLAN)	Cable Diagnostics	•				
	VLANs	Static 256				
	GVRP					
	Protocol VLAN (802.1v)					
	Double VLAN (Q-in-Q)					
Multicasting	Auto Voice VLAN	•				
	Auto Surveillance VLAN	•				
	Groups	256				
Quality of Service (QoS)	Protocols	IGMP v1, v2				
	Standard	802.1p, DSCP				
	Number of Queues	4				
	Mode	Strict / WRR				
	CoS Handling	802.1p, DSCP				
Security	Bandwidth Control	Port -Based				
	STP Security					
	Per-Port MAC Limitation	•				
	Static MAC	64				
	Storm Control	Broadcast / Multicast / Unicast				
	IP-MAC-Port Binding					
	DHCP Server Screening	•				
	ARP Spoofing Prevention	•				
	Traffic Segmentation	•				
	D-Link SafeGuard Engine	•				
Authentication, Authorisation and Accounting (AAA)	802.1x Authentication	Port-Based				
	Web-Based Access Control (WAC)					
	MAC-Based Access Control (MAC)					
	Network Access Protection (NAP)					
	Guest VLAN					
Access Control Lists (ACL)	Switch Access					
	Rules	200				450
	Mac-Based ACL	VLAN ID, 802.1p, MAC, IP, DSCP, Port				
Power over Ethernet	Time-Based ACL					
	Standard	802.3af, 802.3at			802.3af, 802.3at	
	PoE Ports	1-8			1-24	
	PoE Budget	78 W			185 W	
Management	Time-Based PoE	•			•	
	Switch Access	Web GUI, Telnet				
	sFlow					
	SNMP	v1 / v2c / v3				
	DHCP	Client				
	RMON					
	TFTP Client	•				
Syslog	•					
Physical and Environment	Power Supply	Internal				
	Max. Power Consumption	1096W(PoEon) 1445W(PoEoff)	14.06 W	16.81 W	2384 W (PoE on), 274 W (PoE off)	43.5 W
	Power Saving Technology	Link Status, Cable Length detection, LED or Port Shutoff, Port Standby mod, System Hibernation mod				
	Number of Fans	0	0	0	3	2
	Operating Temperature	0 to 40 °C				
	Operating Humidity	0% to 95% Non-Condensing				
	Dimensions (W x D x H)	330x180x44mm	280x180x44mm	440x140x44mm	440x250x44mm	440x250x44mm
Mean Time Between Failures (MTBF)	386,565 Hours	253,460 Hours	236,739 Hours	224,530 Hours	201,517 Hours	
Modules/ Transceivers	SFP Transceivers	DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT,				
	WDM SFP Transceivers	DEM-331T, DEM-331R				

# Gigabit Smart Switches

## DGS-1210 Series



The DGS-1210 Series Smart Switches is the latest generation of D-Link Smart Switches featuring D-Link Green 3.0 technology. The series offers a high level of energy saving and efficiency, as it also complies with the IEEE 802.3af Energy Efficient Ethernet standard. Support for IPv6 management and configurations ensures your network remains protected after the upgrade from IPv4 to IPv6.

By offering multiple management options, the Smart Switches allows quick deployment, infrastructure expansion, and seamless function upgrades. Built for small and medium-sized businesses, the DGS-1210 Series Smart Switches provide functionality, security, and manageability for a fraction of the standard cost of ownership.

The DGS-1210 Series Smart Switches includes a range of affordable PoE-enabled switches for businesses looking to power VoIP phones, wireless access points or network cameras. The DGS-1210-08P is a 8-port Smart PoE Switch that provides 8 PoE-enabled ports that can supply power of up to 15.4W each. Whereas the DGS-1210-24P is a 24-port Smart PoE Switch that provides 12 PoE-enabled ports that can support up to 30W of power output following IEEE 802.3at standard. The design allows more flexibility in power allocation for a variety of powered devices with affordable installation costs.

- Internet Group Management Protocol (IGMP) snooping
- Loopback Detection (LBD)
- Cable diagnostics
- 802.1Q Virtual LAN (VLAN)
- Management VLAN
- Asymmetric VLAN
- Auto Voice VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- 802.1X access control
- Port security
- Broadcast/multicast/unicast storm control
- D-Link Safeguard Engin
- DHCP server screening
- ARP spoofing prevention
- Web-based GUI
- Simple Network Network Management Protocol (SNMP)

### Optional Accessories

#### Optional Management Software

- |         |   |
|---------|---|
| DV-600S | D-View 6.0 Network Management Software (standard edition)     |
| DV-600P | D-View 6.0 Network Management Software (professional edition) |

#### DGS-1210-08P

- 10/100/1000BASE-T PoE port x 8
- 802.3af PoE support
- 45W PoE power budget
- Fanless
- 11-inch, 1U desktop

#### DGS-1210-16

- 10/100/1000BASE-T port x 16
- SFP port x 4
- Fanless
- 11-inch, 1U desktop

#### DGS-1210-24

- 10/100/1000BASE-T port x 24
- SFP port x 4
- Fanless
- 19-inch, 1U rack-mountable

#### DGS-1210-24P

- 10/100/1000BASE-T PoE port x 12
- 10/100/1000BASE-T port x 12
- SFP port x 4
- 802.3af and 802.3at PoE/PoE+ support
- 85W PoE power budget
- 19-inch, 1U rack-mountable

#### DGS-1210-48

- 10/100/1000BASE-T port x 44
- Combo 10/100/1000BASE-T/SFP port x 4
- 19-inch, 1U rack-mountable



Model		DGS-1210-08P	DGS-1210-16	DGS-1210-24	DGS-1210-24P	DGS-1210-48
Interfaces	Fast Ethernet					
	Gigabit Ethernet	8	16	24	24	44
	Combo Gigabit/SFP Slots					4
	SFP Slots	2	4	4	4	
General Features	Stackability					
	Stacking speed (per Port)					
	Switching Capacity	20 Gbps	40 Gbps	56 Gbps	56 Gbps	96 Gbps
	Forwarding Mode	Store-and-Forward				
	Packet Buffer Memory	512 K	512 K	512 K	41.7Mpps	77.4Mpps
	MAC Table	16 K				
	Flow Control	802.3x, HOL Blocking Prevention				
L2 Features	MDI/MDIX	Configurable				
	Loop Protection	802.1Q, 802.1w				
	803.2ad Link Aggregation	8 Groups 8 Ports per Group				
	Port Mirroring	One-to-One, Many-to-One, RX/TX/Both, Flow-Based				
	Loopback Detection	•				
Virtual LAN (VLAN)	Cable Diagnostics	•				
	VLANs	Static 256				
	GVRP					
	Protocol VLAN (802.1v)					
	Double VLAN (Q-in-Q)					
Multicasting	Auto Voice VLAN	•				
	Auto Surveillance VLAN	•				
	Groups	256				
Quality of Service (QoS)	Protocols	IGMP v1, v2				
	Standard	802.1p, DSCP				
	Number of Queues	8	4	4	8	4
	Mode	Strict / WRR				
Security	CoS Handling	802.1p, DSCP				
	Bandwidth Control	Port-based	•	•	Port-based	•
	STP Security					
	Per-Port MAC Limitation	•				
	Static MAC	64				
	Storm Control	Broadcast / Multicast / Unicast				
	IP-MAC-Port Binding	•				
Authentication, Authorisation and Accounting (AAA)	DHCP Server Screening	•				
	ARP Spoofing Prevention	•				
	Traffic Segmentation	•				
	D-Link SafeGuard Engine	•				
	802.1x Authentication	Port-Based				
Access Control Lists (ACL)	Web-Based Access Control (WAC)					
	MAC-Based Access Control (MAC)					
	Network Access Protection (NAP)					
Power over Ethernet	Guest VLAN					
	Switch Access					
	Rules	200				
	Mac-Based ACL	VLAN ID, 802.1p, MAC, IP, DSCP, Port				
Management	Time-Based ACL					
	Standard	802.3af			802.3af, 802.3at	
	PoE Ports	8			12	
	PoE Budget	45W			85W	
	Time-Based PoE	•			•	
	Switch Access	Web GUI, Telnet				
	sFlow					
Physical and Environment	SNMP	v1 / v2c / v3				
	DHCP	Client				
	RMON					
	TFTP Client	•				
	Syslog	•				
Modules/ Transceivers	Power Supply	Internal				
	Max. Power Consumption	56W/60W	17.4 W	24.1 W	9.7W/120W	59.1 W
	Power Saving Technology	Link Status, Cable Length detection, LED or Port Shutoff, Port Standby mod, System Hibernation mod				
	Number of Fans	0	0	0	2	2
	Operating Temperature	0 to 50 °C	0 to 40 °C	0 to 40 °C	0 to 50 °C	0 to 40 °C
	Operating Humidity	10% to 95% Non-Condensing				
Modules/ Transceivers	Dimensions (W x D x H)	280 x 180 x 44 mm	440 x 210 x 44 mm	440 x 210 x 44 mm	441 x 209.9 x 44 mm	440 x 250 x 44 mm
	Mean Time Between Failures (MTBF)	348,795 Hours	799,491 Hours	410,948 Hours	205,768 hours	322,402 Hours
Modules/ Transceivers	SFP Transceivers	DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT,				
	WDM SFP Transceivers	DEM-331T, DEM-331R				

# Fast Ethernet Smart Switches

## DES-1210 Series



The DES-1210 Series is the latest generation of Smart Switches. Equipped with 8, 24 or 48 Fast Ethernet ports, and optional Gigabit and combo Gigabit/SFP ports, this series offers all the features needed in a small and medium business, without the complexity or cost involved. The built-in web interface and PC based SmartConsole Utility make these switches easy to deploy, configure and troubleshoot. Its complete set of features allows for seamless integration in every environment. The PoE option is available on the 8 and 24 port members of the family. Integrating technologies such as time-based PoE which allows the power to be shut off at a predetermined time, saving power on VoIP phones, Wireless Access Points or any other PoE equipment. The DES-1210-28P utilises Smart Fan feature, automatically turning on the system fans only when necessary. This not only saves energy and cost but it also extends the lifespan of the switch. The DES-1210-28P is also compliant with the new PoE+ standard, enabling it to feed up to 30 Watts to connected devices.

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

### Optional Accessories

#### Optional Management Software

- DV-600S D-View 6.0 Network Management Software (standard edition)
- DV-600P D-View 6.0 Network Management Software (professional edition)

#### DES-1210-08P

- 10/100BASE-TX PoE port x 8
- 802.3af PoE support
- 72W PoE power budget
- Fanless
- Desktop size

#### DES-1210-28

- 10/100BASE-TX port x 24
- 10/100/1000BASE-T port x 2
- Combo 1000BASE-T/SFP port x 2
- Fanless
- 19-inch, 1U rack-mountable

#### DES-1210-28P

- 10/100BASE-TX PoE port x 24
- 10/100/1000BASE-T port x 2
- Combo 1000BASE-T/SFP port x 2
- 802.3af and 802.3at PoE/PoE+ support
- 193W PoE power budget
- Smart Fan x3
- 19-inch, 1U rack-mountable

#### DES-1210-52

- 10/100BASE-TX port x 48
- 10/100/1000BASE-T port x 2
- Combo 1000BASE-T/SFP port x 2
- Fanless
- 19-inch, 1U rack-mountable





Model		DES-1210-08P	DES-1210-28	DES-1210-28P	DES-1210-52
Interfaces	Fast Ethernet	8	24	24	48
	Gigabit Ethernet		2	2	2
	Combo Gigabit/SFP Slots		2	2	2
General Features	Stackability				
	Stacking Speed (per Port)				
	Switching Capacity	1.6 Gbps	12.8 Gbps	12.8 Gbps	17.6 Gbps
	Forwarding Mode	Store-and-Forward			
	Packet Buffer Memory	384 K	512 K	512 K	1 M
	MAC Table	8 K			
	Flow Control	802.3x, HOL Blocking Prevention			
L2 Features	MDI/MDIX	Configurable			
	Loop Protection	802.1Q, 802.1w			
	803.2ad Link Aggregation	4 Groups 8 Ports per Group	14 Groups 8 Ports per Group	14 Groups 8 Ports per Group	26 Groups 8 Ports per Group
	Port Mirroring	One-to-One, Many-to-One, RX/TX/Both			
	Loopback Detection	•			
Virtual LAN (VLAN)	Cable Diagnostics	•			
	VLANs	Static: 256			
	GVRP	•			
	Protocol VLAN (802.1v)	•			
	Double VLAN (Q-in-Q)	•			
	Auto Voice VLAN	•			
Multicasting	Auto Surveillance VLAN	•			
	Groups	256			
Quality of Service (QoS)	Protocols	IGMP v1, v2 802.1p, DSCP			
	Number of Queues	4			
	Mode	Strict / WRR			
	CoS Handling	802.1p, DSCP			
	Bandwidth Control	•			
Security	STP Security	•			
	Per-Port MAC Limitation	•			
	Static MAC	64			
	Storm Control	Broadcast / Multicast / Unicast			
	IP-MAC-Port Binding	•			
	DHCP Server Prevention	•			
	ARP Spoofing Prevention	•			
	Traffic Segmentation	•			
	D-Link SafeGuard Engine	•			
Authentication, Authorisation and Accounting (AAA)	802.1x Authentication	Port-Based			
	Web-based Access Control (WAC)	•			
	MAC-based Access Control (MAC)	•			
	Network Access Protection (NAP)	•			
	Guest VLAN	•			
Access Control Lists (ACL)	Switch Access	•			
	Rules	240			
	Mac-Based ACL	VLAN ID, 802.1p, MAC, IP, DSCP, Port			
Power over Ethernet	Time-Based ACL	•			
	Standard	802.3af		802.3af, 802.3at	
	PoE Ports	1-8		802.3af: Ports 1-24 802.3at: Ports 1-4	
	PoE Budget	72 W		193 W	
Management	Time-Based PoE	•		•	
	Switch Access	Web GUI, Telnet			
	sFlow	•			
	SNMP	v1 / v2c / v3			
	DHCP	Client			
	RMON	•			
	TFTP Client	•			
Physical and Environment	Syslog	•			
	Power Supply	External	Internal	Internal	Internal
	Max. Power Consumption	89.4 W (PoE on) 9.6 W (PoE off)	13.4 W	254 W (PoE on) 26.4 W (PoE off)	28.9 W
	Power Saving Technology	Smart Fans			
	Number of Fans	0	0	3	0
	Operating Temperature	0 to 40 °C			
	Operating Humidity	5% to 95% Non-Condensing			
Dimensions (W x D x H)	190 x 120 x 38 mm	440 x 140 x 44 mm	440 x 250 x 44 mm	440 x 250 x 44 mm	
Mean Time Between Failures (MTBF)	274,382 Hours	356,242 Hours	205,416 Hours	592,770 Hours	
Modules/ Transceivers	SFP Transceivers	DEM-210, DEM-211, DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT			
	WDM SFP Transceivers	DEM-331T, DEM-331R			

# Gigabit EasySmart Switches

## DGS-1100 Series



The DGS-1100 Series provides businesses with the benefits of a managed device but without the associated complexity and cost. Equipped with 8, 16 or 24 Gigabit ports, the series integrates basic configurable functions that provide performance and scalability. With an easy-to-use web interface, the EasySmart Series helps users to quickly and easily deploy their network.

- Basic configurable options
- 11-inch metal case. Comes with adapters to install in 19-inch racks
- Fanless, silent operation
- Improved resiliency, longer MTBF (Mean Time Between Failures)
- VLAN support for traffic segmentation
- AutoSurveillance VLAN for easy integration with IP-based surveillance systems
- Loopback detection and broadcast storm control to avoid network downtime
- QoS (Quality of Service) and bandwidth control to ensure smooth operation
- Cable diagnostics function to help to troubleshoot wiring problems
- Configurable through a web interface or SmartConsole utility
- 802.3az Energy Efficient Ethernet (EEE) compliant

### Optional Accessories

#### Optional Management Software

DV-600S	D-View 6.0 Network Management Software (standard edition)
DV-600P	D-View 6.0 Network Management Software (professional edition)

#### DGS-1100-08

- 10/100/1000BASE-T port x 08
- 802.3ad Link Aggregation
- Static VLAN
- 802.1p QoS
- Fanless

#### DGS-1100-08P

- 10/100/1000BASE-T PoE port x 8
- Max Power Budget 64 W
- 802.3ad Link Aggregation
- Static VLAN
- 802.1p QoS
- Fanless

#### DGS-1100-16

- 10/100/1000BASE-T port x 16
- 802.3ad Link Aggregation
- Static VLAN
- 802.1p QoS
- Fanless

#### DGS-1100-24

- 10/100/1000BASE-T port x 24
- 802.3ad Link Aggregation
- Static VLAN
- 802.1p QoS
- Fanless



Model	DGS-1100-08	DGS-1100-08P	DGS-1100-16	DGS-1100-24	
Interfaces	Fast Ethernet				
	Gigabit Ethernet	8	8	24	
	Combo Gigabit/SFP Slots				
General Features	Stackability				
	Stacking Speed (per Port)				
	Switching Capacity	16 Gbps	16 Gbps	32 Gbps	48 Gbps
	Forwarding Mode	Store-and-Forward	11.9 Mpps	Store-and-Forward	Store-and-Forward
	Packet Buffer Memory	2 Mb	2 Mbits	3.5 Mb	
	MAC Table	8 K			
	Flow Control	802.3x, HOL Blocking Prevention			
MDI/MDIX	Auto				
L2 Features	Loop Protection	•			
	803.2ad Link Aggregation	8 Groups, 4 Ports per Group	2 Groups, 2-4 ports per group	8 Groups, 4 Ports per Group	8 Groups, 4 Ports per Group
	Port Mirroring	One-to-One, Many-to-One			
	Loopback Detection	•			
	Cable Diagnostics	•			
Virtual LAN (VLAN)	VLANs ID	32			
	GVRP				
	Protocol VLAN (802.1v)				
	Double VLAN (Q-in-Q)				
	Auto Voice VLAN	•			
Multicasting	Auto Surveillance VLAN	•			
	Groups	32			
	Protocols	IGMP v1/v2			
Quality of Service (QoS)	Standard	802.1p			
	Number of Queues	4			
	Mode	Strict / WRR			
	CoS Handling				
	Bandwidth Control	Port Based			
Security	STP Security				
	Per-Port MAC Limitation	•			
	Static MAC	128			
	Storm Control	Broadcast / Multicast / Unicast			
	IP-MAC-Port Binding				
	DHCP Server Prevention				
	ARP Spoofing Prevention				
	Traffic Segmentation				
	D-Link SafeGuard Engine				
Power Over Ethernet	Standard		802.3af		
	PoE Ports		1 to 8		
	PoE Budget		64W		
	Time-Based PoE				
Management	Switch Access	Web GUI			
	sFlow				
	SNMP				
	DHCP				
	RMON				
	TFTP Client				
	Syslog				
Physical and Environment	Power Supply	Internal			
	Max. Power Consumption	4.89W	78.8 watts (PoE on) 5.2 watts (PoE off)	6.49 W	14.83 W
	Power Saving Technology	IEEE 802.3az Energy Efficient Ethernet			
	Number of Fans	0			
	Operating Temperature	0 to 50 °C	0 to 40 °C	0 to 50 °C	0 to 50 °C
	Operating Humidity	10% to 95% RH Non-Condensing			
	Dimensions (W x D x H)	171 x 98 x 28 mm	190 x 120 x 38 mm	280 x 180 x 44 mm	
Mean Time Between Failures (MTBF)	503,585 hours	708,219 hours	988,205 Hours	774,990 Hours	

# Fast Ethernet EasySmart Switches

## DES-1100 Series



The DES-1100 Series provides businesses with the benefits of a managed device but without the associated complexity and cost. Equipped with 16 or 24 Fast Ethernet ports, the series integrates basic configurable functions that provide performance and scalability. With an easy to use web interface, the EasySmart Series helps users to quickly and easily deploy their network.

- Basic configurable options
- 11-inch metal case. Comes with adapters to install in 19-inch racks
- Fanless, silent operation
- Improved resiliency, longer MTBF (Mean Time Between Failures)
- VLAN support for traffic segmentation
- AutoSurveillance VLAN for easy integration with IP-based surveillance systems
- Loopback detection and broadcast storm control to avoid network downtime
- QoS (Quality of Service) and bandwidth control to ensure smooth operation
- Cable diagnostics function to help to troubleshoot wiring problems
- Configurable through a web interface or SmartConsole utility

### Optional Accessories

#### Optional Management Software

- |         |   |
|---------|---|
| DV-600S | D-View 6.0 Network Management Software (standard edition)     |
| DV-600P | D-View 6.0 Network Management Software (professional edition) |

### DES-1100-16

- 10/100BASE-TX port x 16
- 802.3ad Link Aggregation
- Static VLAN
- 802.1p QoS
- Fanless

### DES-1100-24

- 10/100BASE-TX port x 24
- 802.3ad Link Aggregation
- Static VLAN
- 802.1p QoS
- Fanless



Model		DES-1100-16	DES-1100-24
Interfaces	Fast Ethernet	16	24
	Gigabit Ethernet		
	Combo Gigabit/SFP Slots		
General Features	Stackability		
	Stacking Speed (per Port)		
	Switching Capacity	3.2 Gbps	4.8 Gbps
	Forwarding Mode	Store-and-Forward	
	Packet Buffer Memory	1.75 Mb	
	MAC Table	8 K	
	Flow Control	802.3x	
MDI/MDIX	Auto		
L2 Features	Loop Protection		
	803.2ad Link Aggregation	2 Groups, 4 Ports per Group	
	Port Mirroring	One-to-One, Many-to-One	
	Loopback Detection	•	
	Cable Diagnostics		
Virtual LAN (VLAN)	VLANs ID	32	
	GVRP		
	Protocol VLAN (802.1v)		
	Double VLAN (Q-in-Q)		
	Auto Voice VLAN		
	Auto Surveillance VLAN		
Multicasting	Groups	32	
	Protocols	IGMP v1/v2	
Quality of Service (QoS)	Standard	802.1p	
	Number of Queues	2	
	Mode	Strict / WRR	
	CoS Handling		
	Bandwidth Control	Port-Based	
Security	STP Security		
	Per-Port MAC Limitation		
	Static MAC	128	
	Storm Control	Broadcast / Multicast / Unicast	
	IP-MAC-Port Binding		
	DHCP Server Prevention		
	ARP Spoofing Prevention		
	D-Link SafeGuard Engine		
Management	Switch Access	Web GUI	
	sFlow		
	SNMP		
	DHCP		
	RMON		
	TFTP Client		
Physical and Environment	Syslog		
	Power Supply	Internal	
	Max. Power Consumption	5.96 W	7.68 W
	Power Saving Technology		
	Number of Fans	0	
	Operating Temperature	0 to 40 °C	
	Operating Humidity	10% to 95% RH Non-Condensing	
	Dimensions (W x D x H)	280 x 125 x 44 mm	
Mean Time Between Failures (MTBF)	597,779 Hours	562,006 Hours	

# Gigabit Unmanaged Switches

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



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

## DGS-1000 Series

### DGS-1005D



- 10/100/1000BASE-T port x 5
- External power supply
- Desktop
- Fanless
- D-Link Green

### DGS-1008D



- 10/100/1000BASE-T port x 8
- External power supply
- Desktop
- Fanless
- D-Link Green

### DGS-1008P



- 10/100/1000BASE-T port x 8
- Includes 802.3af PoE ports x 4
- External power supply
- Desktop size
- Fanless

### DGS-1016D



- 10/100/1000BASE-T port x 16
- Internal power supply
- 11-inch, 1U desktop with rack-mount kit
- Fanless
- D-Link Green

### DGS-1024D



- 10/100/1000BASE-T port x 24
- Internal power supply
- 11-inch, 1U desktop with rack-mount kit
- Fanless
- D-Link Green

## DGS-105/108 Series

### DGS-105



- 10/100/1000BASE-T port x 5
- Robust metal product housing
- 802.3az Energy Efficient Ethernet (EEE)
- Cable diagnostics function
- Slot for Kensington security locks

### DGS-108



- 10/100/1000BASE-T port x 8
- Robust metal product housing
- 802.3az Energy Efficient Ethernet (EEE)
- Cable diagnostics function
- Slot for Kensington security Locks



Model		DGS-1005D	DGS-1008D	DGS-1008P	DGS-1016D	DGS-1024D
Interfaces	100BASE-TX					
	1000BASE-T	5	8	8	16	24
	100BASE-FX					
General Features	Switching Capacity	10 Gbps	16 Gbps	16 Gbps	48 Gbps	32 Gbps
	Forwarding Mode	Store-and-Forward				
	Packet Buffer Memory	192 KB	192 KB	192 KB	512 KB	512 KB
	MAC Table	8 K	4 K	4 K	8 K	8 K
	Flow Control	802.3x				
	MDI/MDIX	Auto				
Quality of Service (QoS)	Standard	802.1p	802.1p	802.1p, DSCP	802.1p	802.1p
	Number of Queues			4		
	Mode			Strict		
Power over Ethernet	Standard			802.3af		
	PoE Ports			1-4		
	PoE Budget			52 W		
Physical and Environment	Power Supply		External		Internal	Internal
	Power Saving Technology	Green Ethernet and Energy-Efficient Ethernet(EEE)			Green Ethernet	
	Number of Fans				0	
	Operating Temperature	0 to 40 °C	0 to 40 °C	0 to 50 °C	0 to 40 °C	0 to 40 °C
	Operating Humidity	10%to 90%RH Non-Condensing	10%to 90%RH Non-Condensing	0% to 95% RH Non-Condensing	5% to 90% RH Non-Condensing	
	Dimensions (W x D x H)	44.2 x 100.2 x 32.6 mm	164.5 x 112.4 x 35.0 mm	190 x 120 x 38 mm	280 x 180 x 44 mm	280 x 180 x 44 mm



Model		DGS-105	DGS-108
Interfaces	100BASE-TX		
	1000BASE-T	5	8
	100BASE-FX		
General Features	Switching Capacity	10 Gbps	16 Gbps
	Forwarding Mode	Store-and-Forward	
	Packet Buffer Memory	128 K	128 K
	MAC Table	2 K	8 K
	Flow Control	IEEE 802.3x	IEEE 802.3x
	MDI/MDIX	Auto MDI/MDIX adjustment for all ports	
Quality of Service (QoS)	Standard	IEEE 802.1p	IEEE 802.1p
	Number of Queues	4 Queues	4 Queues
	Mode	Strict	Strict
Physical and Environment	Power Supply	External 5 V/1 A Level "V" Power Adapter	
	Power Saving Technology	Green Ethernet and IEEE 802.3az Energy-Efficient Ethernet (EEE)	
	Number of Fans	0	
	Operating Temperature	0 ° to 50 °C	
	Operating Humidity	5% to 90% RH Non-Condensing	
	Dimensions (W x D x H)	100 x 98 x 28 mm	162 x 102 x 28 mm

# Fast Ethernet Unmanaged Switches

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

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

## DES-1000 Series

### DES-1005D



- 10/100BASE-TX port x 5
- External power supply
- Desktop
- Fanless

### DES-1008D



- 10/100BASE-TX port x 8
- External power supply
- Desktop
- Fanless

### DES-1005P



- Includes 10/100BASE-TX port x 5
- 802.3af PoE port x 1
- QoS support for traffic prioritisation
- Green Ethernet technology
- Fanless - silent operation

### DES-1008PA



- 10/100BASE-TX port x 8
- External power supply
- Desktop
- Fanless

### DES-1008F



- 10/100Base-TX port x 7
- 100Base-FX port x 1
- External power supply
- Desktop size
- Fanless

### DES-1016D



- 10/100BASE-TX port x 16
- Internal power supply
- 11-inch, 1U desktop with rack-mount kit
- Fanless

### DES-1024D



- 10/100BASE-TX port x 24
- Internal Power Supply
- 11-inch, 1U desktop with rack-mount kit
- Fanless

## DES-105/108 Series

### DES-105



- 10/100BASE-TX port x 5
- Plug and Play operation
- QoS functionality
- Robust product metal housing
- Low energy consumption

### DES-108



- 10/100BASE-TX port x 8
- Plug and Play operation
- QoS functionality
- Robust product metal housing
- Low energy consumption





Model		DES-1005D	DES-1008D	DES-1005P	DES-1008PA
Interfaces	100BASE-TX	5	8	5	8
	1000BASE-T				
	100BASE-FX				
General Features	Switching Capacity	1Gbps	1.6 Gbps	1 Gbps	1.6 Gbps
	Forwarding Mode	Store-and-Forward			Store-and-Forward
	Packet Buffer Memory	57 KBytes per device	57 KBytes per device	64 KB	96 K
	MAC Table	2K	1K	2 K	1K
	Flow Control	802.3x			
	MDI/MDIX	Auto			
Quality of Service (QoS)	Standard	802.1p			
	Number of Queues			4	
	Mode			Strict	
Power over Ethernet (PoE)	Standard			802.3af	802.3af
	PoE Ports			1	4
	PoE Budget			52 W	52 W
Physical and Environment	Power Supply	External	External	External	External
	Power Saving Technology	Green Ethernet and Energy-Efficient Ethernet(EEE)		Yes	
	Number of Fans	0			
	Operating Temperature	0 to 50 °C (32 to 122 °F)	0° to 40°C		0 to 40 °C
	Operating Humidity	10% to 90% RH Non-Condensing			5% to 90% RH non-condensing
	Dimensions (W x D x H)	125.3 x 83.4 x 29.1 mm	164.5 x 111.5 x 36.0 mm	140 x 85 x 28mm	172 x 98 x 27.9mm



Model		DES-1008F	DES-1016D	DES-1024D
Interfaces	100BASE-TX	7	16	24
	1000BASE-T			
	100BASE-FX	1		
General Features	Switching Capacity	1.6 Gbps	3.2 Gbps	4.8 Gbps
	Forwarding Mode	Store-and-Forward		
	Packet Buffer Memory	96 KB	160 KB	
	MAC Table	1 K	8 K	
	Flow Control	802.3x		
	MDI/MDIX	Auto		
Quality of Service (QoS)	Standard	802.1p		
	Number of Queues			2
	Mode		Strict	Strict
Physical and Environment	Power Supply	External	Internal	Internal
	Power Saving Technology			
	Number of Fans	0		
	Operating Temperature	0° to 40°C		
	Operating Humidity	10% to 90% RH Non-Condensing		
	Dimensions (W x D x H)	192 x 117 x 32 mm	280 x 125.8 x 44 mm	280 x 125.8 x 44 mm



Model		DES-105	DES-108
Interfaces	100BASE-TX	5	8
	1000BASE-T		
	100BASE-FX		
General Features	Switching Capacity	1.0 Gbps	1.6 Gbps
	Forwarding Mode	Store-and-Forward	
	Packet Buffer Memory	384 KBytes per Device	768 KBytes per Device
	MAC Table	2 K	1 K
	Flow Control	IEEE 802.3x	
	MDI/MDIX	Auto MDI/MDIX Adjustment for all Ports	
Quality of Service (QoS)	Standard	IEEE 802.1p	IEEE 802.1p
	Number of Queues	2 Queues	2 Queues
	Mode	Strict	WRR Mode
Physical and Environment	Power Supply	External 5 V/1 A Level "V" Power Adapter	
	Power Saving Technology	Green Ethernet and IEEE 802.3az Energy Efficient Ethernet (EEE)	
	Number of Fans		
	Operating Temperature	0 to 50 °C	
	Operating Humidity	10% to 90% RH Non-Condensing	
	Dimensions (W x D x H)	100 x 98 x 28 mm	162 x 102 x 28 mm

# Network Management D-View 6.0

## DV-600S and DV-600P

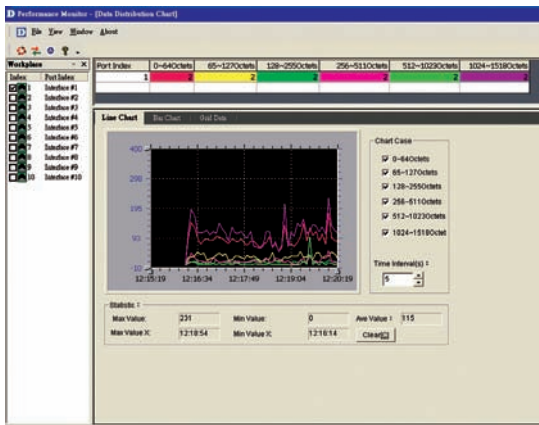


D-View 6.0 provides user-friendly interface with easy access to all the features and tools from a single location. D-View is easy to learn and can help ease the administrator's task of manually creating network topology because it provides robust features for quick generation of such topology within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

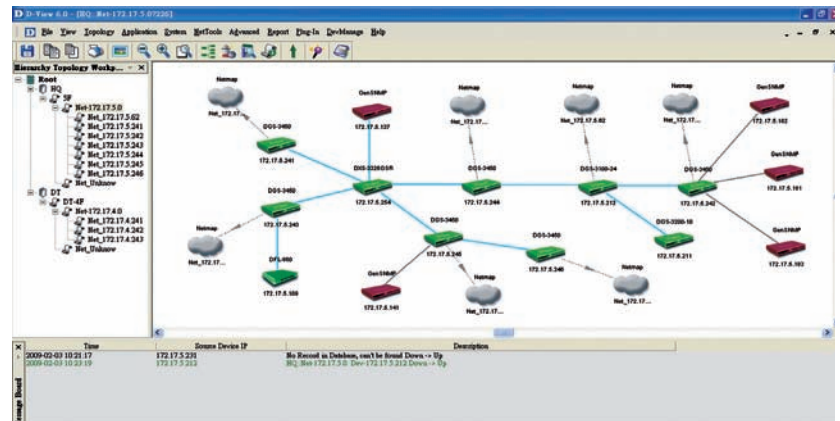


Model	D-View 6.0 Standard (DV-600S)	D-View 6.0 Professional (DV-600P)
Hardware Requirement	CPU: 1.4GHz and above; DRAM: 1G and above; Hard Disk: 200MB; Ethernet Interface: 10/100/1000Mbps	
Software Requirement	Internet Explorer 6 SP1 and above; Microsoft® XML Parser; SDK	
Operating System Requirement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

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



Performance



Topology Map

## D-View Plug-ins

Model	Description	Products	Configuration and Management	Monitoring	RePorting
E2ES Plug-in	D-Link's D-View E2ES (End-to-End Security) console plug-in facilitates the configuration and management of all of D-Link's managed switches, enabling users to centrally configure, monitor and react to network threats. The integration of the E2ES (End-to-End Security) plug-in into D-Link's D-View management software provides a simple end-to-end containment and protection solution to ensure Gateway, End-Point and Joint switch and Firewall Security, resulting in reduced management and monitoring costs.	<p>xStack Switches DGS-3600, DGS-3400, DGS-3200, DES-3800, DES-3528/52 Series</p> <p>Managed Switches DGS-3100, DES-3028/52 Series</p>	<p>Integrated Console for switches including</p> <ul style="list-style-type: none"> <li>IP-MAC-Port Binding (IMPB)</li> <li>Access Control List (ACL)</li> <li>802.1X Authentication</li> <li>MAC-Based Access Control (MAC)</li> <li>Web-Based Access Control (WAC)</li> <li>Loopback Detection (LBD)</li> <li>Port Security</li> <li>Microsoft® Network Access Protection (NAP)</li> </ul>	<ul style="list-style-type: none"> <li>Built-in RADIUS Service</li> <li>Microsoft® Network Access Protection (NAP)</li> </ul>	<ul style="list-style-type: none"> <li>System resource statistics</li> <li>RePorting for passed authentication</li> <li>RePorting for failed authentication</li> <li>RePorting for logged-in Users</li> <li>RePorting for database backup and restore</li> </ul>
Wireless Plug-in	D-Link's D-View Wireless Plug-in is a platform for managing enterprise wireless and wired LAN network. In addition to D-View's LAN management functionality, Wireless Plug-in provides a unified console for managing the broad portfolio of D-Link's enterprise wireless LAN products, including Unified Switches, Unified Access Points and Standalone Access Points. With D-View Wireless Plug-in, IT managers can control, configure and monitor all D-Link Switches and Wireless Access Points from a single location, significantly reducing operation overhead and total cost of ownership (TCO).	<p>Unified Switches DWS-3000, DWS-4000 Series</p> <p>Unified Access Points DWL-3500AP, DWL-8500AP, DWL-8600AP</p> <p>Stand-alone Access Points DAP-2590, DWL-3200AP, DWL-8200AP</p>	<ul style="list-style-type: none"> <li>Multiple Unified Switch Management</li> <li>Unified Access Point Management</li> <li>Batch configuration for Access Points of same Model</li> <li>Different wireless profiles are available to set AP configuration</li> </ul>	<ul style="list-style-type: none"> <li>Rogue AP Detection</li> <li>Client Statistics</li> <li>AP Statistics</li> <li>Global Statistics</li> </ul>	<p>Display a variety of AP reReports for easier management and troubleshooting including</p> <ul style="list-style-type: none"> <li>Client Association</li> <li>Security</li> <li>AP Utilisation</li> <li>AP Channel Usage</li> </ul>

# SFP/XFP Transceivers

D-Link's Small Form-Factor Pluggable (SFP) and 10-Gigabit Small Form-Factor Pluggable (XFP) Transceivers can achieve long distance data transmission and high speed communication with single-mode fibre, multi-mode fibre and copper cables.

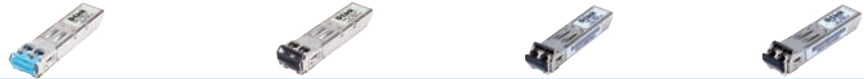
These modules can be installed into switches and media converters.

## Fast Ethernet SFP Transceivers



Model	DEM-210	DEM-211
Standard	IEEE 802.3u 100 BASE-FX	IEEE 802.3u 100 BASE-FX
Connector	Duplex LC	Duplex LC
Fibre Type	Single-Mode	9/125 $\mu\text{m}$
	Multi-Mode	62.5/125 $\mu\text{m}$
Wavelength	1310 nm	1310 nm
Max. Distance	15 km	2 km
Power	3.3 V	3.3 V
Hot-Pluggable	•	•

## Gigabit Ethernet SFP Transceivers



Model	DEM-310GT	DEM-311GT	DEM-314GT	DEM-315GT
Standard	IEEE 802.3z 1000 BASE-LX	IEEE 802.3z 1000 BASE-SX	IEEE 802.3z 1000 BASE-LX	IEEE 802.3z 1000 BASE-LX
Connector	Duplex LC	Duplex LC	Duplex LC	Duplex LC
Fibre Type	Single-Mode	9/125 $\mu\text{m}$	9/125 $\mu\text{m}$	9/125 $\mu\text{m}$
	Multi-Mode	50/125 $\mu\text{m}$ 62.5/125 $\mu\text{m}$	50/125 $\mu\text{m}$ 62.5/125 $\mu\text{m}$	
Wavelength	1310 nm	850 nm	1310 nm	1550 nm
Max. Distance	10 km	550 m	50 km	80 km
Power	3.3 V	3.3 V	3.3 V	3.3 V
Hot-Pluggable	•	•	•	•

## Gigabit Ethernet WDM Bi-Directional SFP Transceivers



Model	DEM-331R <sup>2</sup>	DEM-331T <sup>2</sup>
Standard	IEEE 802.3z 1000 BASE-BX	IEEE 802.3z 1000 BASE-BX
Connector	Simplex LC	Simplex LC
Fibre Type	Single-Mode	9/125 $\mu\text{m}$
	Multi-Mode	
Wavelength	TX: 1310 nm RX: 1550 nm	TX: 1550 nm RX: 1310 nm
Max. Distance	40 km	40 km
Power	3.3 V	3.3 V
Hot-Pluggable	•	•

<sup>2</sup> DEM-331R and DEM-331T used as a pair

## 10 Gigabit Ethernet SFP+/XFP Transceivers



Model	DEM-431XT	DEM-432XT	DEM-433XT	DEM-421XT	DEM-422XT
Standard	IEEE 802.3ae 10G BASE-SR	IEEE 802.3ae 10G BASE-LR	IEEE 802.3ae 10G BASE-ER	IEEE 802.3ae 10G BASE-SR	IEEE 802.3ae 10G BASE-LR
Form Factor	SFP+	SFP+	SFP+	XFP	XFP
Connector	Duplex LC	Duplex LC	Duplex LC	Duplex LC	Duplex LC
Fibre Type	Single-Mode	9/125 $\mu\text{m}$	9/125 $\mu\text{m}$		9/125 $\mu\text{m}$
	Multi-Mode	50/125 $\mu\text{m}$ 62.5/125 $\mu\text{m}$		50/125 $\mu\text{m}$ 62.5/125 $\mu\text{m}$	
Wavelength	850 nm	1310 nm	1550 nm	850 nm	1310 nm
Max. Distance	300 m	10 km	40km	300 m	10 km
Power	3.3 V	3.3 V	3.3 V	3.3/5 V	3.3/5 V
Hot-Pluggable	•	•	•		

# Redundant Power Supplies

## DPS Series



Model	DPS-200	DPS-500	DPS-600	DPS-700
Output Power	60 W	140 W	500 W	589 W
Input Power	90 to 264 VAC	90 to 264 VAC	90 to 264 VAC	90 to 264 VAC
Dimensions (mm)	196 x 195 x 50	196 x 195 x 50	441 x 139 x 44.5	441 x 139 x 44
Mounting Options (see table below)	DPS-800 DPS-900	DPS-800 DPS-900	19" rack, 1U	19" rack, 1U

Compatible Switches	DPS-200	DPS-500	DPS-600	DPS-700
DGS-1500-28P				•
DGS-3000-10TC	•			•
DGS-3120-24TC	•			
DGS-3120-24SC	•			
DGS-3120-24PC				•
DGS-3120-48TC			•	
DGS-3120-48PC				•
DGS-3420-28TC		•		
DGS-3420-28SC		•		
DGS-3420-28PC				•
DGS-3420-52T		•		
DGS-3420-52P				•
DGS-3620-28TC		•		
DGS-3620-28SC		•		
DGS-3620-28PC				•
DGS-3620-52T		•		
DGS-3620-52P				•
DWS-3160-24TC	•			
DWS-3160-24PC				•
DWS-4026			•	



Mounting Options	DPS-800	DPS-900
No. of RPS Slots	2	8
Form Factor	19" rack, 1U	19" rack, 5U

# Modules and Media Converters

## DES, DEM and DMC Series



Modules	DEM-410CX	DEM-410X
Standard	IEEE 802.3ak 10-Gigabit Ethernet	IEEE 802.3ae 10-Gigabit Ethernet
No. of Ports	1	1
Connector	CX4 (Copper)	XFP (Fibre)
Accessories	DEM-CB100	DEM-421XT DEM-422XT
Compatibility	DGS-3426P DGS-3427 DGS-3450 DGS-3627 DGS-3627G DGS-3650 DWS-4026	DGS-3426P DGS-3427 DGS-3450 DGS-3627 DGS-3627G DGS-3650 DWS-4026



Media Converters	DMC-300SC	DMC-515SC	DMC-530SC	DMC-700SC	DMC-810SC	DMC-805X
Standards	10/100 BASE-TX 100 BASE-TX	10/100 BASE-TX 100 BASE-TX	10/100 BASE-TX 100 BASE-TX	100 BASE-TX 1000 BASE-SX	100 BASE-TX 1000 BASE-LX	IEEE 802.3ak, IEEE-802.3ae, IEEE-802.3aq
Connectors	SC / RJ-45	SC / RJ-45	SC / RJ-45	SC / RJ-45	SC / RJ-45	CX4 – SFP+
Data Rate	100 Mbps	100 Mbps	100 Mbps	1 Gbps	1 Gbps	20Gbps
Fibre Type	Multi-Mode	Single-Mode	Single-Mode	Multi-Mode	Single-Mode	Multi-Mode
Max. Distance	2 Km	15 Km	30 Km	550 m	10 Km	80 Km



Chassis and Accessories	DMC-1000	DMC-1001	DMC-1002
Description	16-Slot Media Converter Chassis with internal Power Supply	Redundant Power Supply for DMC-1000	SNMP Management Module for DMC-1000

# Power over Ethernet (PoE) Adapters

## DWL and DPE Series

D-Link's Power over Ethernet (PoE) adapters are designed to help simplify network maintenance and deployments at offices, factories and Wi-Fi hot spots. These adapters allow Surveillance Cameras and Wireless Access Points to be installed on building rooftops, ceilings or high walls where wall AC outlets may be inaccessible.

### DWL-P50

#### 5/12VDC PoE Splitter



##### Main Features

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

##### Physical Features

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

### DWL-P200

#### 5/12VDC PoE Kit



##### Main Features

- Use without a PoE Switch
- Supply Power to Devices

##### Physical Features

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

### DPE-101GI

#### 1-Port Gigabit PoE Injector



##### Main Features

- Use without a PoE switch
- Supply Power to Devices

##### Physical Features

- Terminal Unit x 1
- Max Power Input 48 V
- Gigabit Speed
- Use only with D-Link's Access Points



# Business Wireless



Wireless technology provides businesses with a flexible and cost-effective way to send and receive data. D-Link's range of Wireless AC and N products provide stable connectivity which is robust enough to be deployed at the very core of your network. Products under this category include Standalone/Managed Access Points, Single Band and Dualband Access Points and Antennas.



# Wireless AC



## The World's fastest Wi-Fi technology is here!

Wireless AC is the next generation of Wi-Fi. Designed for much higher speeds, wider coverage and better sustained performance with a larger number of devices so that you get whole coverage, seamless performance on all devices and speeds that are up to four times faster!

### Next generation Wi-Fi for businesses

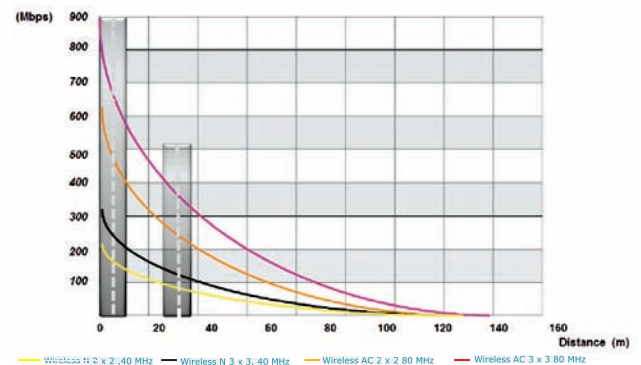
Dubbed "Wireless AC", "5G" or even "Gigabit" Wi-Fi, 802.11ac delivers up to 4\* times the bandwidth of current Wireless N products with yet more to come. With the ability to handle high demand business applications, Wireless AC will revolutionise the way businesses utilise their wireless connection around the office.

Everything from sharing larger files, high definition video conferencing to real-time or scheduled data backups has been made possible with 802.11ac, thanks primarily to the move to the 5GHz radio spectrum where there is less noise and interference from competing technologies. Moreover, there's just a lot more space available in this band, allowing for up to 19 non-overlapping wireless channels compared to just three with 802.11n. Plus, those channels can be made wider to carry a lot more data with 80MHz and ultimately 160MHz channels available in 802.11ac, compared to 20/40MHz with 802.11n.

The way in which radio signals are transmitted is also changing. Out go omni-directional antennas, broadcasting every which way they can, in favour of so-called "beamforming" technology, where the signal is directed at the device it is meant for, further enhancing that 4x boost in Wi-Fi bandwidth.

Beamforming also helps to improve range and reliability. The maximum distance supported by Wi-Fi is unchanged at 200-300m, but by concentrating and directing signals, 802.11ac eliminates dead spots, and at the same time, improve signal strength and reliability at all distances.

802.11ac makes it possible to support more devices on the network at the same time, automatically adjusting the wireless signals to provide an optimised connection for each one. Plus, by delivering more data in less time, 802.11ac helps extend battery life on mobile devices, enabling you to get more done between charges.



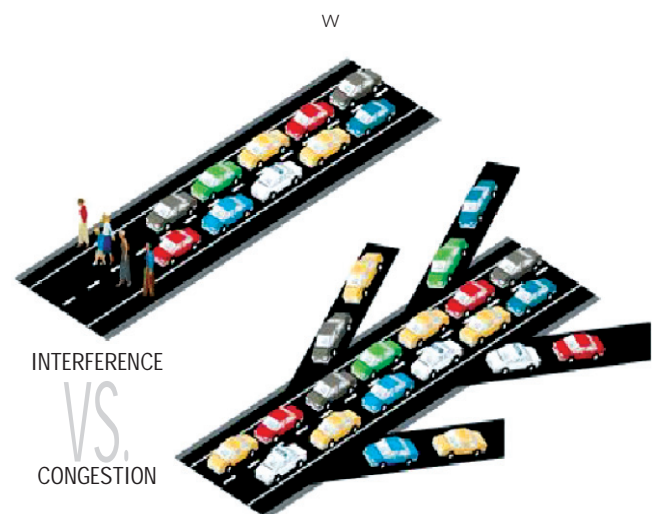
### Why is it time to move from Wireless N

#### Interference

Most mobile devices and wireless routers currently use the 2.4 GHz frequency which slows down the data transfer rate/overall packet flow

#### Congestion

Congestion occurs when too many devices are accessing the router at the same time and doing so slow the speed of the data transfer.



\*When compared with Wireless N300.

## Why Wireless AC?

### Exclusive use of the 5 GHz frequency

- With so many devices connected to the 2.4 GHz frequency band, interference has reached a point where it can cripple your data flow and speed
- The 5 GHz frequency band is less common and Wireless AC uses the 5 GHz band for its transmission. With fewer devices connected you get less interference and faster speeds



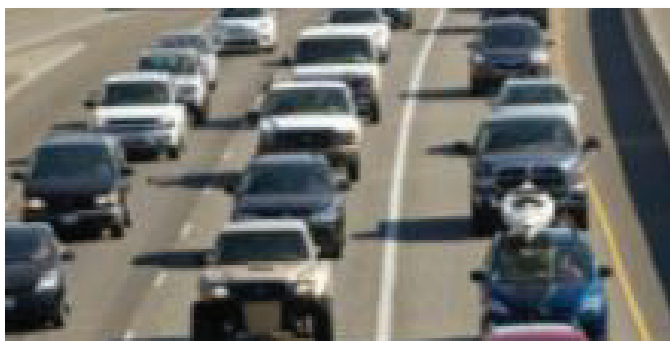
Wireless AC is similar to the car speeding through the free lane

### Extensibility

Future 11ac improvements will include standardised 'Beamforming' that will synchronise antenna signals for higher performance and improved Wi-Fi range.

### Wider channel bandwidth

- Previous wireless standards had bands ranging from 20 MHz to 40 MHz. But with Wireless AC, the band has increased to 80 MHz, meaning a wider band for your data to pass through at faster speeds.
- It also offers non-overlapping and higher bandwidth for higher performance and reliability



Existing wireless is like cars going slowly on a 3-lane motorway

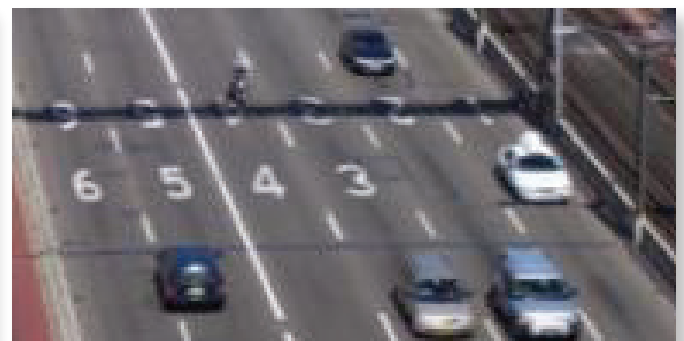
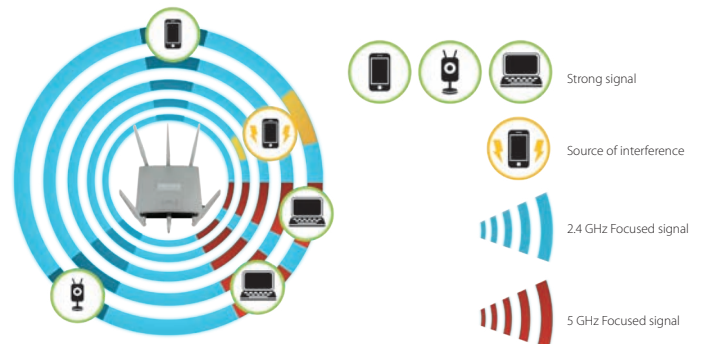
## AC SmartBeam™

AC SmartBeam™ targets devices with weak reception by sending a focused signal to the device. This ensures that all the devices within your network get optimized wireless connectivity no matter where they are.

Standard Access Point



AC SmartBeam™ Router



Wireless AC is like the same amount of cars going fast on a 6-lane motorway

# Range Overview

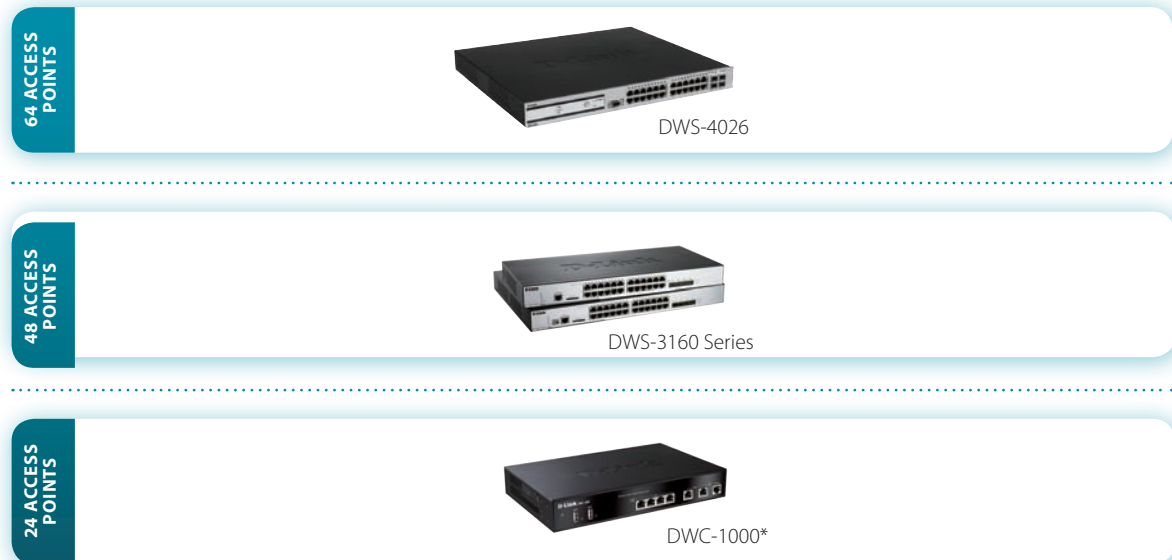
## Standalone Wireless Access Points



## Unified Wireless Access Points

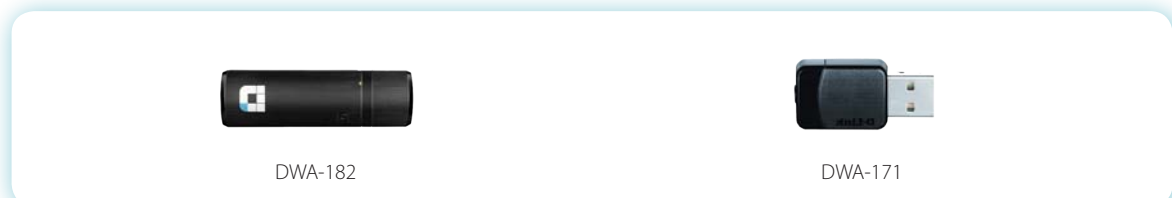


## Unified and Managed Solutions



\* DWC-1000 supports 6 Access Points as standard and can be upgraded to 24 Access Points through license upgrade  
 DWS-3160 supports 12 Access Points as standard and can be upgraded to 48 Access Points through license upgrade

## Network Adapters



# Standalone Wireless Access Points

## DAP Series

Wireless technology offers businesses more flexible and inexpensive ways to send and receive data. D-Link has a range of robust wireless access points able to work in both 2.4GHz and 5GHz frequencies. Backwards compatible with all Wi-Fi technologies, our wireless range includes single and dual band Wireless N devices that are plenum-rated for mounting on walls and ceilings. Robust enough to be deployed at the very core of your network, they give greatly enhanced reliability and coverage, and include advanced security features to keep you completely safe from intrusion.



### DAP-2310

#### Wireless N Access Point



- 802.11n connectivity for increased network capacity
- Up to 300 Mbps wireless speeds
- Four products in one: Access Point, Wireless Client, WDS, WDS with AP
- 1 Gigabit Ethernet port for the fastest wired speeds
- Multiple SSID for wireless network segmentation
- VLAN support
- WMM™ (Wireless Multi Media) to prioritise audio, video and voice applications
- Enhanced security with RADIUS support
- High power radio design

### DAP-2360

#### Wireless N PoE Access Point



- Allows network administrators to deploy a highly manageable and extremely robust 802.11n wireless network
- High power single radio design of the antennas reduces dead spots and increase capacity.
- The antennas are detachable and provide optimal wireless coverage in the 2.4GHz (802.11g and 802.11n) band
- Up to 300Mbps wireless Speeds
- PoE Support for convenient installation

### DAP-2553

#### Wireless N600 Dual-Band PoE Access Point



- Selectable Dual Band Connectivity for Increased Network Capacity
- Ideal for Indoor Deployments
- Periodical Key Change in WPA/WPA2- Personal
- Four products in one: Access Point, Wireless Client, WDS, WDS with AP

### DAP-2590

#### Wireless N Dual Band PoE Access Point



- Selectable dual band connectivity for increased network capacity
- Enjoy wireless speeds of up to 300 Mbps in either 2.4 GHz and 5 GHz wireless bands.
- Multiple operational modes as access point, wireless client, WDS, WDS with AP
- Rugged metal plenum-rated housing
- Enhanced network security features with NAP support
- PoE support for one cable installation
- Easy management

### DAP-2690

#### Wireless N Simultaneous Dual-Band PoE Outdoor Access Point



- Simultaneous dual band for high-performance wireless connection
- Enjoy wireless speeds of up to 300 Mbps in both 2.4 GHz and 5 GHz wireless bands
- Load balancing with band steering to provide more stable and faster wireless connection
- Multiple operational modes as access point, wireless client, WDS, WDS with AP
- Rugged metal plenum-rated housing
- Enhanced network security features with NAP support
- PoE support for one cable installation Wireless Client
- Easy management

# Standalone Wireless Access Points



Model	DAP-2310	DAP-2360	DAP-2553	DAP-2590	DAP-2690
<b>Wired Standards</b>					
IEEE 802.3 10BASE-T	•	•	•	•	•
IEEE 802.3u 100BASE-TX	•	•	•	•	•
IEEE 802.3ab 1000BASE-T	•	•	•	•	•
<b>Wireless Standards</b>					
IEEE 802.11a			•	•	•
IEEE 802.11g	•	•	•	•	•
IEEE 802.11n	•	•	•	•	•
Bandsteering support <sup>1</sup>					•
Simultaneous Dualband					•
<b>Operation Modes</b>					
AP Client Mode	•	•	•	•	•
Bridge (WDS) Mode	•	•	•	•	•
Bridge with AP Mode	•	•	•	•	•
<b>Antenna Features</b>					
No. of Antennas	2	2	3	3	4
Gain	2 dBi	5 dBi	3 dBi for 2.4 Ghz a 5 dBi for 5 Ghz	4 dBi for 2.4GHz 6 dBi for 5GHz	4 dBi for 2.4GHz 6 dBi for 5GHz
Detachable	•	•	•	•	•
Dipole Antenna	•	•	•	•	•
Embedded Antenna					
<b>Authentication Features</b>					
64/128-Bit WEP	•	•	•	•	•
WPA/WPA2-PSK	•	•	•	•	•
WPA/WPA2-EAP	•	•	•	•	•
TKIP/AES	•	•	•	•	•
802.1X User Authentication	•	•	•	•	•
<b>Security Features</b>					
MAC Address Filtering	•	•	•	•	•
SSID Broadcast Disable	•	•	•	•	•
Rogue AP Detection	•	•	•	•	•
WLAN Partition	•	•	•	•	•
802.1Q VLAN	•	•	•	•	•
Multiple SSIDs for Network Segmentation	•	•	•	•	•
<b>Grouping Features</b>					
Load Balancing	•	•	•	•	•
Link Integrity	•	•	•	•	•
User Limit	•	•	•	•	•
<b>QoS Features</b>					
WMM (WiFi Multimedia)	•	•	•	•	•
<b>Networking Features</b>					
Auto-Channel Scan	•	•	•	•	•
Auto-Power Adjustment					
<b>Management Features</b>					
SNMP	•	•	•	•	•
D-View	•	•	•	•	•
AP Manager Utility	•	•	•	•	•
Configuration through Array	•	•	•	•	•
Telnet	•	•	•	•	•
SSH	•	•	•	•	•
Management via Wireless Controller					
<b>Installation Features</b>					
For Outdoor Usage					
802.3af Power over Ethernet		•	•	•	•

# Standalone Wireless Access Points

## DAP and DWL Series

Wireless technology offers businesses more flexible and inexpensive ways to send and receive data. D-Link has a range of robust wireless access points able to work in both 2.4GHz and 5GHz frequencies. Backwards compatible with all Wi-Fi technologies, our wireless range includes single and dual band Wireless N devices that are plenum-rated for mounting on walls and ceilings. Robust enough to be deployed at the very core of your network, they give greatly enhanced reliability and coverage, and include advanced security features to keep you completely safe from intrusion.



### DAP- 2695

#### Wireless AC1750 Simultaneous Dual-Band PoE Access Point

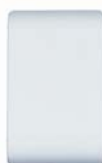


Wireless AC

- Super-fast Wireless AC Performance- Latest Wireless AC technology, fully backwards compatible with existing Wi-Fi standards
- Flexible simultaneous dual-band technology with band steering that automatically makes use of the less crowded 5 GHz frequency
- Enhanced network security and access control features, as well as wireless segmentation
- Flexible Operation

### DAP-3310

#### Wireless N PoE Outdoor Access Point with PoE Pass-Through



- Built to withstand harsh environments with waterproof IPX6 standard
- Allows for flexible installation as well as supplies additional power to another PoE powered device such as an IP surveillance camera
- Multiple operational modes including access points, WDS, WDS with AP, wireless client, wireless repeater, WISP client router or WISP repeater.
- Long distance wireless networking with WDS and WISP.
- Secure wireless connectivity with WAP/WPA2.

### DAP-3520

#### Wireless N Dual-Band PoE Outdoor Access Point



- Connect wirelessly with speeds of up to 300 Mbps using the Wireless N (802.11n standard).
- Provides the option to switch between 2.4 GHz and 5 GHz bands, giving more flexibility when setting up and optimising your wireless network.
- Fully backwards compatible with legacy 802.11a/b/g devices that work with either 2.4 GHz or 5 GHz bands

### DAP-3690

#### Wireless N Simultaneous Dual-Band PoE Outdoor Access Point



- Concurrent Dual Band 802.11n Connectivity
- IP67 Housing with Built-in Heater & Sensor
- Supports upto 16SSIDs (8 per radio)
- Enterprise Security and Management
- Internal & External Radius Support
- Integrated 802.3at Power over Ethernet(PoE)
- Operates as- AP, WDS, WDS with AP, Wireless Client

### DWL-3200AP

#### Wireless PoE Access Point



- Powerful and reliable wireless access point for business-class enterprise environments
- Up to 108Mbps Wireless Speed
- Integrated 802.3af Power over Ethernet(PoE)
- Advanced Wireless Security and Network Management
- WDS (Wireless Distribution System) Support

# Standalone Wireless Access Points



Model	DAP-2695	DAP-3310	DAP-3520	DAP-3690	DWL-3200AP
<b>Wired Standards</b>					
IEEE 802.3 10BASE-T	•	•	•	•	•
IEEE 802.3u 100BASE-TX	•	•	•	•	•
IEEE 802.3ab 1000BASE-T	•	•	•	•	
<b>Wireless Standards</b>					
IEEE 802.11a	•		•	•	
IEEE 802.11g	•	•	•	•	•
IEEE 802.11n	•	•	•	•	
IEEE 802.11ac	•				
Simultaneous Dualband	•			•	
<b>Operation Modes</b>					
AP Client Mode	•	•	•	•	•
Bridge (WDS) Mode	•	•	•	•	•
Bridge with AP Mode	•	•	•	•	•
<b>Antenna Features</b>					
No. of Antennas	6			4	2
Gain	Three 4 dBi for 2.4 GHz Three 6 dBi for 5 GHz	10 dBi	8 dBi for 2.4Ghz 10 dBi for 5Ghz	5 dBi for 2.4Ghz 7 dBi for 5Ghz	5 dBi
Detachable	•		•	•	•
Dipole Antenna	•		•	•	•
Embedded Antenna			•		
<b>Authentication Features</b>					
64/128-Bit WEP	•	•	•	•	•
WPA/WPA2-PSK	•	•	•	•	•
WPA/WPA2-EAP	•	•	•	•	•
TKIP/AES	•	•	•	•	•
802.1X User Authentication	•	•	•	•	•
<b>Security Features</b>					
MAC Address Filtering	•	•	•	•	•
SSID Broadcast Disable	•	•	•	•	•
Rogue AP Detection	•	•	•	•	•
WLAN Partition	•	•	•	•	•
802.1Q VLAN	•		•	•	•
Multiple SSIDs for Network Segmentation	•	•	•	•	•
<b>Grouping Features</b>					
Load Balancing	•	•	•	•	•
Link Integrity	•	•	•	•	•
User Limit	•	•	•	•	•
<b>QoS Features</b>					
WMM (WiFi Multimedia)	•	•	•	•	•
<b>Networking Features</b>					
Auto-Channel Scan	•	•	•	•	•
Auto-Power Adjustment				•	
<b>Management Features</b>					
SNMP	•	•	•	•	•
D-View	•	•	•	•	•
AP Manager Utility	•	•	•	•	•
Configuration through Array	•	•	•	•	•
Telnet	•	•	•	•	•
SSH	•	•	•	•	•
Management via Wireless Controller					
<b>Installation Features</b>					
For Outdoor Usage		•	•	•	
802.3af Power over Ethernet	•	•	•	•	•

# Unified Wireless Access Points



## DWL Series

D-Link Unified Wireless Access Points are highly manageable and scalable with high data transmission speeds, optional support for Power over Ethernet and advanced security features.

### Managed Mode

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

### Standalone Mode

- Local Storage of Configuration

### Managed and Standalone Mode

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

## DWL-2600AP

### Unified Wireless N PoE Access Point



- Wireless performance of up to 300Mbps network throughput
- Self-configuring cluster enables easier provisioning
- Up to 16 virtual Access Points may be created from a single unit
- Load balancing - to optimise high network traffic volume and redundancy
- Supports the latest standards in Wi-Fi Security

## DWL-3500 AP

### Unified Wireless PoE Access Point



- Up to 108Mbps Wireless Speed
- Controlled from the Wireless Switch, adding a layer of protection in case of theft or vandalism.
- Rogue AP detection
- Advanced Wireless Security & Quality of Service

## DWL-3600AP

### Unified Wireless N PoE Access Point



- Expand a Wi-Fi network to cover a larger area
- Load balancing to optimise high network traffic volume and redundancy
- 802.11n connectivity for increased network capacity
- Supports the latest standards in Wi-Fi Security
- To identify and track assets equipped with an Aeroscout Radio Frequency ID (RFID) tag.

## DWL-6600AP

### Unified Wireless N Simultaneous Dual-Band PoE Access Point



- Concurrent dual-band - works in 2.4 GHz and 5 GHz simultaneously
- Flexible deployment, stand-alone or centrally managed by a wireless controller
- Wireless performance of up to 300 Mbps network throughput in each band
- Self-configuring cluster enables easier provisioning
- Up to 32 Virtual Access Points (VAP) can be created from a single device
- Automatic load-balancing among neighbouring Access Point
- Flexible Quality of Service (QoS) with Wi-Fi MultiMedia (WMM)

## DWL-8500AP

### Unified Wireless Dual-Band PoE Access Point



- Up to 108Mbps Wireless Speed
- Rogue AP detection
- Advanced Wireless Security & Quality of Service
- PoE support for Easy Deployment
- Centralised Wireless Intelligence

## DWL-8600AP

### Unified Wireless N Simultaneous Dual-Band PoE Access Point



- Green technology for advanced power saving
- Supports advanced wireless functions
- Flexible Quadband Wireless LAN connectivity
- Optimal Wireless Performance
- Total security & Quality of Service(QoS)



# Unified Wireless Access Points



Model	DWL-2600AP	DWL-3500AP	DWL-3600AP	DWL-6600AP	DWL-8500AP	DWL-8600AP
<b>Wired Standards</b>						
IEEE 802.3 10BASE-T	•	•	•	•	•	•
IEEE 802.3u 100BASE-TX	•	•	•	•	•	•
IEEE 802.3ab 1000BASE-T			•	•		•
<b>Wireless Standards</b>						
IEEE 802.11a			•	•	•	•
IEEE 802.11g	•	•	•	•	•	•
IEEE 802.11n	•		•	•		•
Simultaneous Dualband				•	•	•
<b>Operation Modes</b>						
AP Client Mode						
Bridge (WDS) Mode	•	•	•	•	•	•
Bridge with AP Mode	•	•	•	•	•	•
<b>Antenna Features</b>						
No. of Antennas		2			2	4
Gain	3 dBi	5dBi	4.7 dBi	5 dBi for 2.4 Ghz 6 dBi for 5 Ghz	2.5 dBi for 2.4 Ghz 5.5 dBi for 5 Ghz	4 dBi for 2.4 Ghz 6 dBi for 5 Ghz
Detachable		•		Connectors for external antennas	•	•
Dipole Antenna	•	•	•	•	•	•
Embedded Antenna	•	•	•	•		
<b>Authentication Features</b>						
64/128-Bit WEP	•	•	•	•	•	•
WPA/WPA2-PSK	•	•	•	•	•	•
WPA/WPA2-EAP	•	•	•	•	•	•
TKIP/AES	•	•	•	•	•	•
802.1X User Authentication	•	•	•	•	•	•
<b>Security Features</b>						
MAC Address Filtering	•	•	•	•	•	•
SSID Broadcast Disable	•	•	•	•	•	•
Rogue AP Detection	•	•	•	•	•	•
WLAN Partition	•	•	•	•	•	•
802.1Q VLAN	•	•	•	•	•	•
Multiple SSIDs for Network Segmentation	•	•	•	•	•	•
<b>Grouping Features</b>						
Load Balancing	•	•	•	•	•	•
Link Integrity	•	•	•	•	•	•
User Limit	•	•	•	•	•	•
<b>QoS Features</b>						
WMM (WiFi Multimedia)	•	•	•	•	•	•
<b>Network Features</b>						
Auto-Channel Scan	•	•	•	•	•	•
Auto-Power Adjustment		•	•	•	•	•
<b>Management Features</b>						
SNMP	•	•	•	•	•	•
D-View		•	•	•	•	•
AP Manager Utility	•	•	•	•	•	•
Configuration through Array	•	•	•	•	•	•
Telnet	•	•	•	•	•	•
SSH	•	•	•	•	•	•
Management via Wireless Controller/ Unified Switch	•	•	•	•	•	•
<b>Installation Features</b>						
For Outdoor Usage						
802.3af Power over Ethernet	•	•	•	•	•	•

# Unified Wired/Wireless Access System

## DWS-3160 Series



The DWS-3160 is D-Link's latest Unified L2+ Gigabit Wired/Wireless Switch. Designed to be the ideal mobility solution for businesses, the DWS-3160 empowers administrators to exercise total control over their wireless networks by centralising all aspects of provisioning and management. Able to manage up to 48 D-Link Unified Access Points by itself and up to 192 in a switch cluster, the DWS-3160 can be configured to act either as a Wireless Controller in the core network, or as an L2+ Gigabit Switch at the edge, enabling it to be seamlessly integrated into any existing network infrastructure

### Unified Switches

#### Wireless Management

- Management of up to 12 Access Points per switch
- Upgrade licenses for up to 48 Access Points per switch
- Up to 192 APs per Switch Cluster
- Automatic AP RF Channel Adjustment
- Automatic AP Transmit Output Power Adjustment
- Centralised AP Firmware Upgrade

### Optional Accessories

#### Optional Software Image Upgrade Licenses

DWS-316024TCAP12-LIC	DWS-3160-24TC additional 12 access points support license
DWS-316024TCAP24-LIC	DWS-3160-24TC additional 24 access points support license
DWS-316024PCAP12-LIC	DWS-3160-24PC additional 12 access points support license
DWS-316024PCAP24-LIC	DWS-3160-24PC additional 24 access points support license

#### Optional Redundant Power Supplies

DPS-200	60W redundant power supply for DWS-3160-24TC
DPS-700	589W redundant power supply For DWS-3160-24PC

#### SFP transceivers

DEM-310GT	1000Base-LX, Single-mode, 10 Km
DEM-311GT	1000BaseLX, Multi-mode, 550 m
DEM-312GT2	1000Base-LX, Multi-mode, 2 Km
DEM-314GT	1000Base-LX, Single-mode, 50 Km
DEM-315GT	1000Base-LX, Single-mode, 80 Km

#### WDM SFP transceivers

DEM-331T	1000Base-LX, 1550 nm, 1310 nm, 40 Km
DEM-331R	1000Base-LX, 1310 nm, 1550 nm, 40 Km

#### Optional Management Software

DV-600S	D-View 6.0 Network Management Software Standard Edition
DV-600P	D-View 6.0 Network Management Software Professional Edition

### Unified Switches DWS- 3160 -24TC

- 20 x 10/100/1000Base-T ports
- 4 x Combo 10/100/1000BASE-T/SFP ports
- 1 x console (RJ-45) port
- Management of up to 12 Access Points per switch
- Upgrade licenses for up to 48 Access Points per switch
- Up to 192 APs per Switch Cluster
- Automatic AP Transmit Output Power Adjustment

### DWS- 3160 -24PC

- 20 x 10/100/1000Base-T PoE ports
- 4 x Combo 10/100/1000BASE-T/SFP ports
- 1 x Console (RJ-45) port
- Management of up to 12 Access Points per switch
- Upgrade licenses for up to 48 Access Points per switch
- Up to 192 APs per Switch Cluster
- Automatic AP Transmit Output Power Adjustment



Model	DWS-3160-24TC	DWS-3160-24PC	
Port Interface	10/100/1000BASE-T (RJ-45)	20	
	Combo 1000BASE-T/SFP	4	
General Features	Switching Capacity	48 Gbps	
	Maximum Forwarding Rate	35.71 Mpps	
	Forwarding Mode	Store and Forward	
	Packet Buffer Memory	2 MB	
	MTBF	561,829 hours	282,541 hours
	Console Port	RJ-45	
WLAN Management Capability		Centralised	
Roaming		Fast Roaming; Intra-Switch/Inter-Switch Roaming; Intra-Subnet/Inter-Subnet Roaming	
Access Control and Bandwidth Management		Up to 32 SSIDper AP (16 SSIDperfrequency band); AP Load Balancing based on the number of users or AP utilisation; Flexible Mapping Schemes	
Managed Access Point		DWL-2600AP; DWL-3600AP;DWL-6600AP;DWL-8600AP	
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; d-hoc Client Monitoring; AP Authentication Supporting Local Database and External RADIUS Server; Centralised RF/Security PolicyManagement; Automatic AP RF Channel Adjustment; Automatic APTransmitOutput Power Adjustment;Centralised Firmware Upgrade	
WLAN Security		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; d-hoc Client Monitoring; AP Authentication Supporting Local Database and External RADIUS Server; Centralised RF/Security PolicyManagement; Automatic AP RF Channel Adjustment; Automatic APTransmitOutput Power Adjustment;Centralised Firmware Upgrade	
L2 Features		MAC addressstable: 16K; IGMP Snooping;MLDSnooping;802.1D/w/s SpanningTree;802.3ad Link Aggregation; 802.1ab LLDP; Port Mirroring(One-to-One and Many-to-One) Jumbo Frame Size: Up to 13 KB	
Virtual LAN (VLAN)		StaticVLANgroups: 3,965; 802.1qVLANTagging;802.1v;Subnet-basedVLAN;MAC-basedVLAN; GVRP; DoubleVLAN; VoiceVLAN	
L3 Features		IPv4/v6 Static Route; RoutingTable Size: 512 Static Routes; VRRP; ARP Proxy	
Quality of Service (QoS)		VoiceVLAN;Wireless Multimedia (WMM);802.1p PriorityQueues; CoS-basedQoS;Per-Flow Bandwidth Control; Per-PortTraffic Shaping;MinimumBandwidth Guarantee	
Access Control List (ACL)		ACL Based on: Switch Port, MAC Address, 802.1p Queues, VLAN, Ether Type, DSCP, IP Address, Protocol Type, TCP/UDP Port	
LAN Security		RADIUS Authentication Management Access; TACACS+ Authentication for Management Access; SSH& SSL Support; MAC Filtering; 802.1x Port-based Access Control & GuestVLAN; Denial of Service Protection; Dynamic ARP Inspection; Protected Port; Broadcast StormControl; Access Control List	
Management Methods		Management of up to 12 Access Points perswitch; Upgrade licensesfor up to 48 Access Points perswitch; Up to 192 APs per Switch Cluster; Single IP Management(SIM); SSH; SSL; SNMP v1, 2c, 3; sFlow; Dual Image Support; Web GUI; Command Line Interface	
Physical and Environment	Dimension	440 x 210 x 44	440 x 310 x 44
	Weight	2.55 Kg	5.24 Kg
	Max. Power Consumption	37.7W	467 W (full PoE load)
	PoE		802.3af (370 W power budget, 740 W with DPS-700)
	RPS	DPS-200	DPS-700
	Temperature		0 to50 °C/-40 to 70 °C
		Humidity	10-90% RH / 5-90% RH
Certification	EMI-EMC		FCC Class A, CE; ICES-003, C-Tick,VCCI
	Safety		UL/cUL; CB

# Unified Wired/Wireless Access System

## DWS-4000 Series



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

### Wireless Management

- L2/L3 Fast Roaming
- Intra-Switch/Inter-Switch Roaming
- Centralised Security Policy/AP/Client Management and Monitoring
- Adaptive Wireless
- Automatic RF Channel Adjustment
- Automatic AP Transmit Output Power Adjustment
- AP-AP Tunnel
- AP Load Balancing
- AP Auto-Discovery and Firmware Dispatch
- AP Authentication
- RF Self-Healing
- Auto-VoIP
- Wi-Fi Multimedia (WMM)
- SpectraLink Voice Priority (SVP)
- Remote AP Reboot
- Visualised AP Management Tool
- Wireless Intrusion Detection and Prevention System (WIDS/WIPS)
- Rogue AP/Client Detection and Mitigation
- WPA/WPA2 Personal/Enterprise
- Captive Portal
- Station Isolation

### Wired Management

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

## Optional Accessories

### Optional Redundant Power Supplies

DPS-600 500W redundant power supply

### Optional Management Software

DV-600S D-View 6.0 Network Management Software Standard Edition  
 DV-600P D-View 6.0 Network Management Software Professional Edition

### Modules

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

### 10-Gigabit Ethernet XFP Transceivers

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

### Gigabit Ethernet SFP Transceivers

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

### Gigabit Ethernet WDM SFP Transceivers

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

## Unified Switch DWS-4026

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



Model		DWS-4026
IEEE LAN Standard		802.3; 802.3u; 802.3z; 802.3ab; 802.3ae; 802.3af
Port Interface	10/100/1000BASE-T (RJ-45)	20 (PoE)
	Combo 1000BASE-T/SFP	4
	10 GbE Slot	2
	XFP Module	DEM-410X
	CX4 Module	DEM-410CX
Stackability	Physical Stack	Via CX4/XFP Module; Duplex Chain/Ring Topology; Bi-Directional Redundant Stacking Topology; Up to 40 Gbps (Full Duplex); Up to 12 Units per Stack
General Features	Switch Capacity	88 Gbps
	Forwarding Rate	65.47 Mpps (Maximum)
	Forwarding Mode	Store and Forward
	Buffer Memory	750 KB
	MTBF	185,540 Hours
Console Port		Female RS-232 DB-9 Console for Out-of-Band Configuration
WLAN Management Capability		Max. 64 APs per Switch; Max. 256 APs per Cluster; Max. 2048 Wireless Users (1024 Tunneled, 2048 Non-Tunneled)
Roaming		Fast Roaming (Wireless Adapter needs to support too); Intra-Switch / Inter-Switch Roaming; Intra-Subnet / Inter-Subnet Roaming; AP-AP-Tunnel
Access Control and Bandwidth Management		Max. 32 SSID per AP (16 SSID per RF Frequency Band); AP Load Balancing Based on the No. of Users or Utilisation per AP
Managed Access Point		DWL-2600AP, DWL-3500AP, DWL-3600AP, DWL-6600AP, DWL-8500AP, DWL-8600AP
AP Management		AP Auto-Discovery; Remote AP Reboot; AP Monitoring: List Managed AP, Authentication Failed AP, Rogue AP; Ad-Hoc Clients Monitoring; Client Monitoring: List Clients Associated with Each Managed AP; AP Authentication Supporting Local Database and External RADIUS Server; Centralised RF/Security Policy Management; Visualised AP Management Tool (Support up to 16 JPG Files); Unified AP Support (DWL-8600AP): Managed/Standalone Mode
WLAN Security		Wireless Intrusion Detection and Prevention System (WIDS); Rogue AP Mitigation; 64/128-Bit WEP Data Encryption; Rogue and Valid AP Classification Based on MAC Address; WPA Personal/Enterprise; WPA2 Personal/Enterprise; Wireless Station and AP Monitoring on RF Channel, MAC Address, SSID, Time; Captive Portal; Station Isolation; Encryption Type Support: WEP, WPA, Dynamic WEP, TKIP, AES-CCMP, EAP-FAST, EAP-TLS, EAP-TTLS, EAP-MD5, PEAP-GTC, PEAP-MS-CHAPv2, PEAP-TLS; MAC Authentication
L2 Features		MAC Address Table Size: 8 K Entries; IGMP Snooping: 1 K Multicast Groups; MLD Snooping; 802.1D STP, 802.1s Rapid STP, 802.1w Multiple STP; 802.3ad Link Aggregation: Max. 32 Groups, Max. 8 Ports per Group; Jumbo Frame: Max. 9 KBytes; 802.1ab Link Layer Discovery Protocol (LLDP); LLDP-MED; Port Mirroring: One-to-One, Many-to-One; Flow Control: 802.3x in Full Duplex, Back Pressure in Half Duplex, Head-of-Line Blocking Prevention
Virtual LAN (VLAN)		802.1Q Tagged VLAN; 802.1v Protocol VLAN; VLAN Groups: Max. 3,965 Entries; Subnet-Based VLAN; GARP VLAN Registration Protocol (GVRP); MAC-Based VLAN; Double VLAN; Voice VLAN
L3 Features		IPv4 Static Route; Routing Table Size: Max. 128 Static Routes; Floating Static Route; Proxy Address Resolution Protocol (ARP); Virtual Router Redundancy Protocol (VRRP); Routing Information Protocol (RIP) v1/v2
Quality of Service (QoS)		802.1p Priority Queues (Max. 8 Queues per Port); Auto-VoIP; Minimum Bandwidth Guarantee per Queue; Traffic Shaping per Port; Per-Flow Bandwidth Control; CoS Based on: Switch Port, VLAN, DSCP, TCP/UDP Port, TOS, Dest/Source MAC Address, Dest/Source IP Address
Access Control List (ACL)		ACL Based on: Switch Port, MAC Address, 802.1p Queues, VLAN, Ether Type, DSCP, IP Address, Protocol Type, TCP/UDP Port
LAN Security		RADIUS and TACACS+ Authentication for Management Access; Secure Shell (SSH) v1/v2; Secure Sockets Layer (SSL) v3; Transport Layer Security (TLS) v1; MAC Filtering; Denial of Service Protection; Dynamic ARP Inspection (DAI); Port Security: 20 MAC per Port, Port Violation Notification; 802.1X Port-Based Access Control and Guest VLAN; Broadcast Storm Control in Granularity of 1% of Link Speed; DHCP Snooping; Protected Port; DHCP Filtering
Management Methods		Web-Based GUI; Switch Clustering; RADIUS Accounting; Command Line Interface (CLI); Telnet Client; TFTP Client; Telnet Server: Max. 5 Sessions; sFlow; BootP/DHCP Client; DHCP Server; DHCP Relay; Dual Images; Port Description; Multiple Configuration Files; Dual Image Services; Simple Network Management Protocol (SNMP) v1/v2c/v3; Remote Monitoring (RMON) v1; Simple Network Time Protocol (SNTP); System Log
Physical and Environment	Dimension	19-inch; 1U Rack-Mount; 440 x 389 x 44 mm (W x D x H)
	Weight	6 Kg
	Power Input	Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply
	Max. Power Consumption	525 W (With All PoE Ports in Operation)
	PoE	802.3af (370 W power budget)
	RPS	DPS-600
	Temperature	0 to 40 °C (Operation); -10 to 70 °C (Storage)
Certification	Humidity	10%~90% (Operation); 5%~90% (Storage) Non-Condensing
	EMI-EMC	FCC Class A; CE; VCCI; C-Tick; ICES-003; EN 60601 1-2
	Safety	UL/cUL; CB

# Wireless Controller

## DWC-1000



The DWC-1000 Wireless Controller is a centralised wireless LAN manager developed specifically for businesses that are looking for an easy to use, scalable solution to manage and configure their wireless network.

With the ability to manage up to six wireless Access Points (upgradable to 24) and a maximum of 96 wireless Access Points in a Controller Cluster, the DWC-1000 is a cost-effective mobility solution for businesses. Its auto-managed AP discovery and single point management allow customers to acquire an enterprise class system without the burden of executing massive and complex configurations. With a robust and comprehensive security detection system, the DWC-1000 also enables managed APs to block potential attacks from unauthorised users and devices, especially for wireless environments.

- Integrated appliance for centralised wireless network management
- Integrates seamlessly in any network infrastructure – no modifications required
- An ideal solution to move to Wireless N from legacy technologies
- Upgrade licenses – pay only for the functionality that you need
- Support for 6 Access Points; upgradeable to 24 Access Points
- Three Access Point models available, supporting every wireless standard
- Up to 4 Wireless Controllers in a cluster, to manage up to 96 Access Points centrally
- Dynamic wireless network adjustment to ensure top performance at all times
- Can be connected directly to the Internet – ideal for branch offices
- Upgrade licenses available for extra VPN and Firewall functionality
- Easy to use Web interface and straightforward configuration
- USB port for file and printer sharing
- Enhanced security with Captive Portal and RADIUS support

### Optional Accessories

#### Upgrade licenses:

DWC-1000-VPN-LIC      DWC-1000 additional 6 access points support license  
DWC-1000-6AP-LIC      DWC-1000 VPN Security license

#### Optional Management Software

DV-600S      D-View 6.0 Network Management Software Standard Edition  
DV-600P      D-View 6.0 Network Management Software Professional Edition

### DWC -1000

- 10/100/1000 Option (WAN) Ports X2
- 10/100/1000 LAN Ports X 4
- USB 2.0 Ports x2
- Up to 24 APs per cluster
- Upgrade to 96 APs per cluster



Model		DWC-1000
Interface	Ethernet	2 10/100/1000 Option (WAN) Ports <sup>3</sup> 4 10/100/1000 LEON Ports
	USB	2 USB 2.0 Ports
	Console	RJ-45
Capacity and Performance	Maximum Access Points per Unit (default/ upgrade)	6/ 24 <sup>1</sup>
	Maximum Access Points per Cluster (default/ upgrade)	24/ 96 <sup>1</sup>
	Concurrent Captive Portal Authentication Users (Wired/ Wireless)	124/ 400
	Dedicated IPsec VPN Tunnels <sup>2</sup>	70
	Dedicated PPTP/ L2TP VPN Tunnels <sup>2</sup>	25
	Dedicated SSL VPN Tunnels <sup>2</sup>	20
Access Point Management	Compatible Managed APs	DWL-2600AP, DWL-3600AP, DWL-6600AP, DWL-8600AP
	AP Discovery & Control	Layer-2 Layer-3
	AP Monitoring	Managed AP Rogue AP Authentication Fail AP Standalone AP
	Client Monitoring	Authenticated Client Rogue Client Authentication Fail Client Ad-hoc Client
	Centralised RF/Security Policy Management	.
Roaming	Fast Roaming	.
	Intra-controller/Inter-controller Roaming	.
	Intra-subnet/Inter-subnet Roaming	.
Security	Wireless Security	WEP Dynamic WEP WPA Personal/ Enterprise WPA2 Personal/ Enterprise
	Wireless Intrusion Detection & Prevention System (WIDS)	Rogue and Valid AP Classification Rogue AP Mitigation
	LAN Security	802.1x Port-Based Access Control and Guest VLAN
	Authentication	Captive Portal MAC Authentication
VLAN	VLAN Group	Up to 255 Entries
	802.1q VLAN Tagging	.
	Subnet-Based VLAN	.
	Port-Based VLAN	.
Firewall System <sup>2</sup>	Policy	Each Feature Supports 100 Rules Supports up to 600 Firewall Rules
	Dynamic Route	RIPv1, RIPv2
	Dynamic DNS	.
	NAT, PAT	.
	Web Content Filtering	Static URL Keywords
Networking <sup>2</sup>	Route Failover	.
	Outbound Load Balancing	.
Virtual Private Network (VPN) <sup>2</sup>	Encryption Methods	DES, 3DES, AES, Twofish, Blowfish, CAST-128, NULL
	IPsec NAT Traversal	.
	Dead Peer Detection	.
	IP Encapsulating Security Payload (ESP)	.
	IP Authentication Header (AH)	.
	VPN Tunnel Keep Alive	.
SSL Virtual Private Network (SSL VPN) <sup>2</sup>	Hub and Spoke	.
	SSL Encryption Methods	DES, 3DES, AES
System Management	SSL Message Integrity	MD5, SHA1
	Web-Based User Interface	HTTP
	Command Line Interface	.
	SNMP	v1, v2c, v3
Physical & Environment	Power Supply	Internal Power Supply: DC 12V/2.5A
	Max. Power Consumption	19.3 W
	Dimension	180 x 280 x 44 mm (7.09 x 11.02 x 1.73 inches)
	Operation Temperature	0 to 40 °C (32 to 104 °F)
	Storage Temperature	-20 to 70 °C (-4 to 158 °F)
	Operation Humidity	5% to 95%, Non-Condensing
	EMI Safety	FCC Class B, CE Class B, VCCI, C-tick, IC cUL, LVD (EN60950-1)

<sup>1</sup>The number of managed APs can be increased through purchase of license upgrades. Only available in groups of 6 licenses per upgrade.

<sup>2</sup>Features enabled through purchase of the VPN/Router/Firewall license upgrade.

# Antennas - Single/Dual Band (2.4/5 GHz)/Accessories

## ANT Series



Monoband/Dualband Antennae (2.4/5GHz)	ANT24-1600N	ANT50-2000N
Electrical		
Connector Type	N jack x 2	N jack x 2
Gain	16-17 dBi	20 dBi
Horizontal/Vertical Angle	18°-25°	10°
Front to Back Ratio	-25 dB (max)	-30 dB (max)
Polarisation	Linear/Vertical/Horizontal	Dual Linear 45°
Impedance	50 Ohms	50 Ohms
Physical and Environmental		
Survival Wind Speed	216 Km/h (max)	216 Km/h (max)
Operating Temperature	-40 °C to 80 °C	-40 °C to 80 °C
Weight	1.1 Kg	1.32 Kg
Dimensions (mm)	320 x 320 x 43	320 x 320 x 20
Material	PC, UV-resistant	PC, UV-resistant
Mounting Type	Wall and Pole	Wall and Pole



Accessories	ANT24-CB03N	ANT24-CB06N	ANT24-CB09N	ECB-ANT240500	ECB-ANT241200
Cable Type	HDF-400	HDF-400	HDF-400	ULA-198	ULA-198
Length (m)	3	6	9	3	3
Cable Loss (dB)	1	2	3	2.5	2.5
Connection Type	N-Male N-Female	N-Male N-Female	N-Male N-Female	N-Male SMA-Female	SMA-Male SMA-Female
Use With	Outdoor Antennae	Outdoor Antennae	Outdoor Antennae	Outdoor Antennae	ANT24-1200



# Wireless Network Adapters

D-Link's Wireless USB Adapters - the DWA -182 and DWA-171 enable you to transform your wireless Internet connection by using the Wireless AC Technology, the fastest wireless technology available today. It allows you to experience faster wireless speeds than ever before by delivering this powerful technology to your desktop or notebook computer.

## DWA-182

### Wireless AC Dual-Band USB Adapter



Download web content and sync files to a mobile device up to 4 times faster than the previous standard, and have extended coverage with fewer wireless deadspots. Get revolutionary wireless speeds which allow you to check your email and upload files or Skype™ calls and stream HD videos to multiple devices using the interference-free 5GHz band.

**Next Generation Wireless Technology** - Wireless AC for smooth HD video streaming and fast file transfers and lag free video conferences.

**Dual-Band Performance** - Up to 300Mbps (2.4GHz) or 867Mbps (5GHz) to deliver fast wireless speeds and less interference for maximum throughput

**Backwards Compatibility** - Compatible with existing Wi-Fi routers and range extenders

**Simple Setup** - WPS Push Button for easy connection to your wireless network interference for maximum throughput



## DWA-171

### Wireless AC Dual-Band Nano USB Adapter



With its integrated dual-band technology, over the 2.4 GHz (150 Mbps) or 5 GHz (up to 433 Mbps) bands, you'll have reduced Wi-Fi interference to maximise throughput for faster video streaming, gaming, and VoIP calls.

**Next Generation Wireless Technology** - Wireless AC for smooth HD video streaming and fast file transfers and lag free video conferences

**Dual-Band Performance** - Up to 150Mbps (2.4GHz) or 433Mbps (5GHz) for DWA-171 to deliver fast wireless speeds and less interference for maximum throughput

**Backwards Compatibility** - Compatible with existing Wi-Fi routers and range extenders

**Simple Setup** - WPS Push Button for easy connection to your wireless network





Model	DWA-182	DWA-171
Wireless Standards	IEEE 802.11ac (Draft)/n/g/b/a	IEEE 802.11ac (Draft)/n/g/b/a
Wireless Speed	300 Mbps 2.4 GHz 867 Mbps 5 GHz	433 Mbps 5 GHz 300 Mbps 2.4 GHz
WPS one button connection	•	•
Wi-Fi Protected Access Support	WPA and WPA2	WPA and WPA2
USB Type	USB 2.0	USB 2.0
Security	Wi-Fi Protected Access (WPA & WPA2)	Wi-Fi Protected Access (WPA & WPA2)
Antenna Type	Integrated antenna	Integrated antenna
Operating System	Windows 8/7/Vista/XP/2000 (32/64-bit)	
Dimensions	97.3 x 29.1 x 13.5 mm	31.7 x 18.8 x 8 mm
Weight	20.5 grams	3.9 grams

# Security



Protecting a network against attacks and unauthorised access is key to the survival of any business. D-Link's security solutions offer end-to-end defence to ensure all areas of the network are secured. Products under this category include Unified Services Routers.

# Unified Services Routers

## DSR Series



Customised for small businesses, D-Link's Unified Services Routers are all-in-one gateway devices providing outstanding performance and rich functionalities, including IEEE 802.11n (ratified version), 3G WAN redundancy, IPv6 and comprehensive VPN features (SSL/IPSec/PPTP/L2TP).

- Static/Dynamic IP WAN Type
- Point-to-Point over Ethernet (PPPoE)
- SSL/IPSec/PPTP/L2TP VPN
- VPN Hub and Spoke
- IPSec/PPTP/L2TP VPN Pass-Through
- 3G WAN Redundancy (DSR-1000N only)
- Network Address Translation (NAT)
- Transparent Mode
- WAN Traffic Failover
- Outbound Load Balancing<sup>1</sup>
- Remote Management (Web, SNMP, SSH, Telnet)
- Internet Group Management Protocol (IGMP) Proxy/Snooping
- Stateful Packet Inspection (SPI)
- L2 to L7 Access Control
- IP/MAC Binding
- Virtual LAN (VLAN)
- Intrusion Prevention System (IPS)
- Wireless Security (WEP, WPA, WPA2, WPS)
- Multiple SSIDs
- SSID-to-VLAN Mapping
- IPv6 Phase 2 Certified

<sup>1</sup> DSR-500N, DSR-1000N only

### DSR-250N

- 10/100/1000BASE-T x 1 (WAN)
- 10/100/1000BASE-T x 8 (LAN)
- IEEE 802.11n Wireless LAN (2.4 GHz)
- USB 2.0 Port x1
- 2dBi Dipole Antennas x2 (Detachable)
- Internal Power Supply
- D-Link Green Technology

### DSR-500N

- 10/100/1000BASE-T x 2 (WAN)
- 10/100/1000BASE-T x 4 (LAN)
- IEEE 802.11n Wireless LAN (2.4 GHz)
- USB 2.0 Port x 1
- 2dBi Dipole Antenna x 3 (Detachable)
- Internal Power Supply
- D-Link Green Technology

### DSR-1000N

- 10/100/1000BASE-T x 2 (WAN)
- 10/100/1000BASE-T x 4 (LAN)
- IEEE 802.11n Wireless LAN (2.4 GHz + 5 GHz)
- USB 2.0 Port x 2
- 2dBi Dipole Antenna x 3 (Detachable)
- 3G Support
- Internal Power Supply
- D-Link Green Technology



Model	DSR-250N	DSR-500N	DSR-1000N
Interfaces	1 x Gigabit Ports (WAN)	2 x Gigabit Ports (WAN)	2 x Gigabit Ports (WAN)
	8 x Gigabit Ports (LAN)	4 x Gigabit Ports (LAN)	4 x Gigabit Ports (LAN)
Firewall Throughput	1 x USB 2.0	1 x USB 2.0	2 x USB 2.0
VPN Throughput	45 Mbps	70 Mbps	130 Mbps
Concurrent Sessions	35 Mbps	35 Mbps	70 Mbps
New Sessions (Per Second)	20,000	30,000	60,000
Firewall Policies	200	300	600
Internet Connection Type	Static/Dynamic IP, L2TP/PPTP/PPPoE/Multiple PPPoE		
Firewall System	NAT, PAT		
	Web Content Filtering (URL, Keywords)		
Networking	Intrusion Prevention System (IPS)		
	Static Routing	Static Routing, RIP v1/v2, OSPF <sup>1</sup>	
	Inter-VLAN Routing		
	Dynamic DNS		
	DHCP Server/Client/Relay		
	VLAN Support (Port-Based)		
	IGMP Proxy		
	Route Failover		
		3G Redundancy <sup>2</sup>	3G Redundancy
		Outbound Load Balancing	
Wireless	802.11b/g/n		802.11a/b/g/n
	Single Frequency (2.4 GHz)		Concurrent Frequency (2.4 + 5 GHz)
	WEP/WPA/WPA2		
	PSK/EAP		
VPN	Wi-Fi Protect Setup (WPS)		
	25 Tunnels	35 Tunnels	70 Tunnels
	DES, 3DES, AES, Twofish, Blowfish, CAST-128, NULL		
	IPSec/PPTP/L2TP Server		
	IPSec NAT Traversal		
	Dead Peer Detection		
	IP Encapsulation Security Payload (ESP)		
	IP Authentication Header (AH)		
	VPN Tunnel Keep-Alive		
	Hub-and-Spoke		
SSL VPN	5 SSL VPN Tunnels	10 SSL VPN Tunnels	20 SSL VPN Tunnels
Bandwidth Management	DES, 3DES, AES		
	MD5, SHA1		
System Management	Max. Bandwidth Control		
	Priority Bandwidth Control (Port-Based QoS, 3 Classes)		
Physical and Environmental	HTTP, HTTPS, CLI		
	SNMP v1, v2c, v3		
Physical and Environmental	Internal Power Supply		
	12.6 W Max	16.8 W Max	19.3 W Max
	140 x 203 x 35 mm	180 x 280 x 44 mm	
	Operating Temperature 0 to 40 °C		
	Operating Humidity 5% to 95% RH Non-Condensing		
	250,000 Hours MTBF	260,000 Hours MTBF	

<sup>1</sup> DSR-500N, DSR-1000N only  
<sup>2</sup> Available in the future



# IP Surveillance



The security of your business is at risk if there is no monitoring system in place to protect your business assets. Choosing to implement IP Surveillance offers the advantage of leveraging your existing network infrastructure to maximise investment. IP Surveillance not only provides all of the superior functionality of an effective analogue CCTV offering, but adds several key benefits, such as increased accessibility, real-time alerts, unlimited storage and secure image distribution, and superior cost benefits. Products under this category include IP Cameras, Network Video Recorders, Camera Accessories and Video Encoders.

# Range Overview

## Fixed Cameras (Indoor)



## Fixed Cameras (Outdoor)



## Wireless Fisheye Camera (Indoor)



## Dome Cameras



## PTZ Cameras



# Fixed Network Cameras (Wired + Wireless)

D-Link offers a wide range of fixed network cameras to meet the surveillance requirements for indoor usage and for day to night monitoring. The fixed network cameras are reliable, economical and of high-quality. The cameras can be connected to a network to provide a fixed viewing direction once they are mounted.

## DCS-930L

### Cloud Camera



- 1/5"VGA progressive scan CMOS lens
- MJPEG Video format
- Motion Detection
- E-Mail notification with Snapshot
- Built-in microphone



## DCS-932L

### Day/Night Cloud Camera



- 1/5"VGA progressive scan CMOS lens
- Infrared-Cut Removable Filter with 5m IR Built-in
- MJPEG Video format
- Motion Detection
- E-Mail notification with Snapshot



## DCS-933L

### Day/Night Cloud Camera



- 1/5"VGA progressive scan CMOS lens
- Infrared-Cut Removable Filter with 5m IR Built-in
- MJPEG and H.264 Video format
- Motion and Sound Detection
- E-Mail notification with Snapshot and video
- Built-in Wireless Extender (max. 5 clients)



## DCS-942L

### Enhanced Day/Night Cloud Camera



- 1/5"VGA progressive scan lens
- Infrared-Cut Removable Filter with 5m IR Built-in
- Motion Detection
- E-Mail notification with Snapshot
- Onboard Storage Card Slot with 16GB included
- 2-way audio with external speaker output



## DCS-2130

### HD Wireless Network Camera



- 1/4" 1 megapixel progressive scan CMOS lens
- Privacy Masks
- 2-way audio with built in microphone
- Motion detection, event recording and E-mail notification with snapshot
- MicroSD SDHC Storage Card Slot



## DCS-2132L

### HD Wireless Cloud Camera



- 1/4" 1 megapixel progressive scan CMOS lens
- Infrared-Cut Removable Filter with 5m IR Built-in
- Privacy Masks
- 2-way audio with built in microphone and speaker
- Motion detection, event recording and E-mail notification with snapshot



## DCS-2230

### Full HD Wireless Day/Night Cloud Camera



- 1/2.7" 2 megapixel progressive scan CMOS lens
- Infrared-Cut Removable Filter with 5m IR Built-in
- PIR (Passive Infrared) sensor
- Privacy Masks
- 2-way audio with built in microphone and speaker
- MicroSD SDHC Storage Card Slot and recording to a NAS device







Model	DCS-930L	DCS-932L	DCS-933L	DCS-942L	DCS-2130	DCS-2132L	DCS-2230
<b>Image Sensor</b>							
Type	1/5"VGA Scan CMOS Sensor	1/5" Progressive Scan CMOS	1/5" Progressive Scan CMOS	1VGA 1/5" CMOS sensor	1/4" 1 Progressive Scan CMOS	1/4" 1 Progressive Scan CMOS	1/2.7" Progressive Scan CMOS
Megapixel					•	•	•
Wide Dynamic Range (WDR)							
Maximum Video Resolution	640 x 480	640 x 480	640 x 480	640 x 480	1280 x 800	1280 x 720	1920 x 1080
<b>Lens</b>							
Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Focal Length	5.01 mm	5.01 mm	3.15 mm	3.15 mm	3.45 mm	3.45 mm	4.37 mm
F-Number	F2.8	F2.8	F2.8	F2.8	F2.0	F2.0	F2.0
Minimum Illumination (Lux)	1 Lux	0 Lux (with IR Illuminator)	1 Lux (colour) 0 Lux (B&W, IR-LED on)	1 Lux(colour) 0 Lux (with IR Illuminator)	1 Lux	1 Lux (colour) 0.5 Lux (B&W)	1 Lux(Colour) 0 Lux (with IR Illuminator)
Angle of View (Horizontal/Vertical)	45.3°/34.5°	45.3°/34.5°	45.3°/34.5°	45.3°/ 34.5°	57.8°/ 37.8°	57.8°/ 37.8°	67.4°/40.8°
Motorised Pan/Tilt							
Optical Zoom							
Privacy Masks					3 zones	3 zones	3 zones
<b>Day and Night</b>							
ICR Filter		•	•	•		•	•
Built in PIR				5m		5m	5m
IR Built-in		5m	5m	5m		5m	5m
<b>Audio</b>							
2-Way Audio				•	•	•	•
Built-in Microphone	•	•	•	•	•	•	•
External Microphone Input							
Built-in Speaker						•	•
External Speaker Output				•	•		
<b>Connectivity</b>							
Wired LAN	•	•	•	•	•	•	•
Wireless LAN	802.11 b/g/n						
802.3af PoE							
Digital Input/Output					DI x 1, DO x 1	DI x 1, DO x 1	DI x 1, DO x 1
Monitor Output							
External Card Slot				•	•	•	•
<b>Software Features</b>							
Video Format	MJPEG	MJPEG	H.264, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG
Multi-Stream			•		•	•	•
Multi-Profile			•				
Digital Zoom	4X	4X	4X	4X	10X	10X	10X
HTTP Secure (HTTPS)				•		•	•
Java Support	•	•	•				
Motion Detection	•	•	•	•	•	•	•
E-Mail Notification	•	•	•	•	•	•	•
Schedule Recording to Hard Drive					•	•	•
Recording to NAS					•	•	•
Audio Recording	•	•	•	•	•	•	•
Mobile Stream	•	•	•	•	•	•	•
UPnP Installation	•	•	•	•	•	•	•
DDNS Support	•	•	•	•	•	•	•
Enable/Disable LED Indicators		•	•	•		•	
D-ViewCam Compatible	•	•	•	•	•	•	•
<b>Physical and Environmental</b>							
Dimensions	27.2 x 60 x 96 mm	27.2 x 60 x 96 mm	80 x 115 x 80 mm	27.2 x 60 x 96 mm	95 x 58 x 30.7 mm	58 x 89 x 127.9 mm	95 x 58 x 38.7 mm
Weight	0.0769 kg	0.769 kg	96.2 gm	0.0769 kg	0.069 kg	0.116 kg	0.70 kg
Max. Power Consumption	5.5 W	2 W	4 W	5.5 W	2.5 W	3.65 W	2.5 W
Operating Temperature	0 to 40 °C	0 to 40 °C	0 to 40 °C	0 to 40 °C	0 to 40 °C	0 to 40 °C	0 to 40°C
Operating Humidity	20% to 80% RH Non-condensing	20% to 80% non-condensing	20% to 80% non-condensing	20 to 80% RH Non-Condensing	20% to 80% Non-Condensing	20% to 80% Non-Condensing	20% to 80% Non-Condensing

# Fixed Network Cameras (Wired-Indoor)

D-Link offers a wide range of fixed Network cameras to meet the surveillance requirements the indoor usage and from day to night monitoring. The fixed IP cameras are reliable, economical and of high-quality. The cameras can be connected to a network to provide a fixed viewing direction once they are mounted.

## DCS-2210

### Full HD PoE Day/Night Network Camera



- 1/2.7" 2 megapixel progressive scan CMOS lens
- Infrared-Cut Removable Filter with 5m IR Built-in
- PIR (Passive Infrared) sensor
- Privacy Masks
- 2-way audio with built in microphone and speaker
- Motion detection, event recording and E-mail notification with snapshot
- MicroSD SDHC Storage Card Slot and recording to a NAS device
- MJPEG, H.264 and MPEG-4 Video format



## DCS-3010

### HD PoE Fixed Network Camera



- 1/4" 1 megapixel progressive scan CMOS lens
- Privacy Masks
- 2-way audio with built in microphone
- 4x Digital Zoom
- Motion and Tamper Detection
- Event recording and E-mail notification with snapshot
- MicroSD SDHC Storage Card Slot and recording to a NAS device
- MJPEG, H.264 and MPEG-4 Video format



## DCS-3112

### HD PoE Day/Night Fixed Network Camera



- 1/4" 1.3 megapixel progressive scan CMOS (Sony Exmor) lens
- CS mount ,DC iris varifocal lens
- Infrared-Cut Removable Filter
- 2.3x Optical Zoom
- Privacy Masks
- Analogue Output
- 2-way audio with built in microphone
- SD SDHC Storage Card Slot and recording to a NAS device
- Motion detection, event recording and E-mail notification with snapshot



## DCS-3710

### HD WDR PoE Day/Night Fixed Network Camera



- 1/3" 1.3 megapixel WDR progressive scan CMOS (Sony Exmor) lens
- CS mount ,DC iris varifocal lens
- Wide Dynamic Range
- Infrared-Cut Removable Filter
- 2.8x Optical Zoom
- Privacy Masks
- Analogue Output
- SD SDHC Storage Card Slot and recording to a NAS device
- Motion detection, event recording and E-mail notification with snapshot



## DCS-3716

### Full HD WDR PoE Day/Night Fixed Network Camera



- 1/2.8" 3 megapixel WDR progressive scan CMOS (Sony Exmor) lens
- CS mount ,DC iris varifocal lens
- Wide Dynamic Range
- Infrared-Cut Removable Filter
- 2.6x Optical Zoom
- Privacy Masks
- Analogue Output
- SD SDHC Storage Card Slot and recording to a NAS device
- Motion detection, event recording and E-mail notification with snapshot





Model	DCS-2210	DCS-3010	DCS-3112	DCS-3710	DCS-3716
<b>Image Sensor</b>					
Type	1/2.7" 2 Progressive Scan CMOS	1/4" 1 megapixel progressive scan CMOS	Sony Exmor 1/4" 1.3 megapixel Progressive CMOS	1/3" 1.3 megapixel WDR Progressive Scan CMOS	1/2.8" 3 megapixel WDR progressive scan CMOS
Megapixel	•	•	•	•	•
Wide Dynamic Range (WDR)				•	•
Maximum Video Resolution	1920 x 1080	1280x720	1280 x 1024	1280 x 1024	2048 x 1536
<b>Lens</b>					
Type	Fixed	Fixed	Varifocal, DC-iris,	Varifocal, DC-Iris	Varifocal, DC-Iris
Focal Length	4.37 mm	4 mm	3.5 mm ~ 8 mm	2.9 ~ 8.2 mm	3.1 ~ 8.0 mm
F-Number	F2.0	F1.5	F1.4	F1.0	F1.2
Minimum Illumination (Lux)	0 Lux (with IR Illuminator) 1 Lux(colour)	1 Lux	0.4 Lux (Color); 0.04 Lux (B/W)	0.2 Lux (Colour) 0.02 Lux (B/W)	1 Lux 0.5 Lux (Colour); 0.05 Lux (B/W)
Angle of View (Horizontal/Vertical)	67.4°/40.8°	56.9°/ 35.9 °	35.4° ~ 77.6° / 26.6° ~ 57.6°	35.6° ~ 95° / 26.7° ~ 69°	38.7° ~ 95.9° / 29.1° ~ 71.0°
Motorised Pan/Tilt					
Optical Zoom			2.3X	2.8X	2.6X
Privacy Masks	3 Zones	3 Zones	3 Zones	3 Zones	3 Zones
<b>Day and Night</b>					
ICR Filter	•		•	•	•
IR Built-in	5m				
<b>Audio</b>					
2-Way Audio	•	•	•	•	•
Built-in Microphone	•	•			
External Microphone Input		•	•	•	•
Built-in Speaker	•				
External Speaker Output		•	•	•	•
<b>Connectivity</b>					
Wired LAN	•	•	•	•	•
Wireless LAN					
802.3af PoE	•	•	•	•	•
Digital Input/Output	DI x 1, DO x 1		DI x 2, DO x 1	DI x 2, DO x 1	DI x 2, DO x 1
Monitor Output			BNC Output	BNC Output	BNC Output
External Card Slot	•	•	•	•	•
<b>Software Features</b>					
Video Format	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	H.264, MJPEG, MPEG-4	H.264, MPEG-4, MJPEG
Multi-Stream	•	•	•	•	•
Multi-Profile	•	•	•	•	•
Digital Zoom	10X	4X	10X	10X	10X
HTTP Secure (HTTPS)	•	•	•	•	•
Java Support					
Motion Detection	•	•	•	•	•
E-Mail Notification	•	•	•	•	•
Schedule Recording to Hard Drive	•	•	•	•	•
Recording to NAS	•	•	•	•	•
Audio Recording	•	•	•	•	•
Video Output to 3GPP	•	•	•	•	•
UPnP Installation	•	•	•	•	•
DDNS Support	•	•	•	•	•
Enable/Disable LED Indicators		•	•	•	•
D-ViewCam Compatible	•	•	•	•	•
<b>Physical and Environmental</b>					
Dimensions	95 x 58 x 38.7 mm	147 x 61.9 x 39.2 mm	180.4 x 80.0 x 52.9 mm	140 x 80 x 53 mm	140 x 80 x 53 mm
Weight	0.069 kg	0.165 kg	0.560 kg	0.576 kg	0.580 kg
Max. Power Consumption	2 W	4.6 W	3.6 W	2 W	4 W
Operating Temperature	0 to 40 °C	0 to 40 °C (32 to 104 °F)	0 to 40 °C	0 to 40 °C	0 to 40 °C
Operating Humidity	20% to 80% Non-Condensing	20% to 80% Non-Condensing	20% to 80% Non-Condensing	20% to 80% Non-Condensing	20% to 80% Non-Condensing

# Fixed Network Cameras (Wired-Outdoor)

## DCS-2310L

### Outdoor HD PoE Day/Night Cloud Camera



#### Main Features

- 1/4"1 megapixel progressive scan CMOS lens
- Infrared-Cut Removable Filter with 5m IR Built-in
- PIR(Passive Infrared)Sensor
- Privacy Masks
- 2-way audio with built in microphone and speaker
- PoE enabled
- Micro SD SDHC Storage Card Slot and recording to a NAS device
- Motion detection,event recording and E-mail notification with snapshot
- MJPEG, H.264 and MPEG-4 Video format



## DCS-7010L

### Outdoor HD PoE Day/Night Fixed Mini Bullet Cloud Camera



#### Main Features

- 1/4"1 megapixel progressive scan CMOS lens
- Infrared-Cut Removable Filter with 10m IR Built-in
- Privacy Masks
- PoE enabled
- Micro SD SDHC Storage Card Slot and recording to a NAS device
- Motion detection,event recording and E-mail notification with snapshot
- MJPEG, H.264 and MPEG-4 Video format



## DCS-7110

### Outdoor HD PoE Day/Night Fixed Bullet Camera



#### Main Features

- 1/4"1 megapixel progressive scan CMOS lens
- Infrared-Cut Removable Filter with 15m IR Built-in
- Privacy Masks
- Analogue Output
- PoE enabled
- Motion and Tamper detection, event recording and E-mail notification with snapshot
- MJPEG, H.264 and MPEG-4 Video format



## DCS-7413

### Outdoor Full HD PoE Day/Night Fixed Bullet Network Camera



#### Main Features

- 1/2.7"2 megapixel progressive scan CMOS lens
- Infrared-Cut Removable Filter with 30m IR Built-in
- Privacy Masks
- Analogue Output
- PoE enabled
- SD SDHC Storage Card Slot and recording to a NAS device
- Motion detection,event recording and E-mail notification with snapshot
- MJPEG, H.264 and MPEG-4 Video format



## DCS-7513

### Outdoor Full HD WDR PoE Day/Night Fixed Bullet Network Camera



#### Main Features

- 1/2.8"2 megapixel WDR progressive scan CMOS (Sony Exmor) lens
- 3 to 9 mm motorised P-iris varifocal lens
- Infrared-Cut Removable Filter with 30m IR Built-in
- 3x Optical Zoom
- Privacy Masks
- Analogue Output
- PoE enabled
- SD SDHC Storage Card Slot and recording to a NAS device
- Motion detection,event recording and E-mail notification with snapshot
- MJPEG, H.264 and MPEG-4 Video format





Model	DCS-2310L	DCS-7010L	DCS-7110	DCS-7413	DCS-7513
<b>Image Sensor</b>					
Type	1/4" 1 megapixel Progressive CMOS	1/4" 1 megapixel progressive CMOS sensor	1/4" 1 megapixel Progressive CMOS	1/2.7" 2 megapixel progressive CMOS sensor	1/2.8" 2 megapixel progressive CMOS sensor
Megapixel	•	•	•	•	•
Wide Dynamic Range (WDR)					•
Maximum Video Resolution (Pixels)	1280 x 800	1280 x 800	1280 x 800	1920 x 1080	1920 x 1080
<b>Lens</b>					
Type	Fixed	Fixed	Fixed	Fixed	motorised P-iris varifocal lens
Focal Length	3.45 mm	4.3 mm	4 mm	4.3 mm	3 to 9 mm
F-Number	F2.0	F2.0	F1.5	F2.0	F1.2 -2.3
Minimum Illumination (Lux)	1 Lux (colour), 0.5 Lux (B&W) 0 Lux(B&W, IR-Led on)	1.5 Lux (colour) 0 Lux (B&W, IR-LED on)	0.26 Lux (colour) 0 Lux (B&W, IR-LED on)	1.5 Lux (colour) 0 Lux (B&W IR-LED on)	0.2 Lux (colour) 0 Lux (B&W, IR-LED on)
Angle of View (Horizontal/Vertical)	57.8°/ 37.8°	47°/ 43°	53.1°/33.7°	79°/ 43°	121.2° to 38.1°/ 62.1° to 21.3°
Motorised Pan/Tilt					
Optical Zoom					3X
Privacy Masks	3 Zones	3 Zones	3 Zones	3 Zones	3 Zones
<b>Day and Night</b>					
ICR Filter	•	•	•	•	•
IR Built-in	5m	10m	15m	30m	30m
<b>Audio</b>					
2-Way Audio	•	•		•	•
Built-in Microphone	•				
External Microphone Input		•		•	•
Built-in Speaker	•				
External Speaker Input		•		•	•
<b>Connectivity</b>					
Wired LAN	•	•	•	•	•
Wireless LAN					
802.3af PoE	•	•	•	•	•
Digital Input/Output		DI x 1, DO x 1	DI x 1, DO x 1	DI x 1, DO x 1	DI x 1, DO x 1
Monitor Output			BNC	BNC	BNC
External Card Slot	•	•		•	•
<b>Software Features</b>					
Video Format	H.264, MJPEG, MPEG-4	H.264, MJPEG, MPEG-4	H.264, MJPEG, MPEG-4	H.264, MJPEG, MPEG-4	H.264, MJPEG, MPEG-4
Multi-Stream	•	•	•	•	•
Multi-Profile					
Digital Zoom	10X	4X	4X	10X	10X
HTTP Secure (HTTPS)	•	•	•	•	•
Java Support	•				
Motion Detection	•	•	•	•	•
E-Mail Notification	•	•	•	•	•
Schedule Recording to Hard Drive	•	•	•	•	•
Recording to NAS	•	•	•	•	•
Audio Recording	•	•		•	•
Video Output to 3GPP	•	•	•	•	•
UPnP Installation	•	•	•	•	•
DDNS Support	•	•	•	•	•
Enable/Disable LED Indicators					
D-ViewCam Compatible	•	•	•	•	•
<b>Physical and Environmental</b>					
Dimensions	138.9 x 93 x 66 mm	176.5 x 80.5 x 65 mm	197 x 73 x 71 mm	316.5 x 249.1 x 97.5 mm	97.5 x 223.5 x 97.5 mm
Weight	0.235 kg	0.510 kg	0.783 kg	1.920 kg (with bracket and sun shield)	2.05 kg with bracket and sunshield (4.42 pounds)
Max. Power Consumption	5.3 W	5.4 W	6 W	11.2 W	11.02 W
Operating Temperature	-25 to 50 °C (-4 to 122 °F)	-25 to 50 °C (-13 to 122 °F)	-20 to 50 °C (-40 to 122 °F)	-40 to 50 °C (-40 to 122 °F)	-40 to 50 °C (-40 to 122 °F)
Operating Humidity	20% to 80% non-condensing	20% to 80% non-condensing	90% Non-Condensing	20% to 80% non-condensing	20% to 80% non-condensing

# 2-Megapixel Panoramic Wireless Cloud Camera (Wireless- Indoor)



## DCS-6010L

### 2-Megapixel Panoramic Wireless Cloud Camera



- 1/3.2" 2 megapixel progressive scan CMOS lens
- Fisheye distortion correction
- 2-way audio with built in microphone and speaker
- Privacy Masks
- Analogue Output
- MJPEG, H.264 and MPEG-4 Video format
- 10x Digital Zoom
- MicroSD SDHC Storage Card Slot and recording to a NAS device
- Motion detection, event recording and E-mail notification with snapshot



Model	DCS-6010L
<b>Image Sensor</b>	
Type	1/3.2" 2 megapixel CMOS progressive sensor
Megapixel	•
Wide Dynamic Range (WDR)	
Maximum Video Resolution (Pixels)	1600x1200
<b>Lens</b>	
Type	Fisheye
Focal Length	1.25mm
F-Number	F2.0
Minimum Illumination (Lux)	1Lux
Angle of View (Horizontal/Vertical)	180 ° /180 °
Motorised Pan/Tilt	
Optical Zoom	
<b>Day and Night</b>	
Dual-Band Filter	
ICR Filter	
IR Built-in	
<b>Audio</b>	
2-Way Audio	•
Built-in Microphone	•
External Microphone Input	•
Built-in Speaker	•
External Speaker Output	
<b>Connectivity</b>	
Wired LAN	•
Wireless LAN	802.11n/g/b
802.3af PoE	
Digital Input/Output	DI x 2, DI X 1
Monitor Output	
External Card Slot	•
<b>Software Features</b>	
Video Format	H.264, MPEG-4, MJPEG
Multi-Stream	•
Multi-Profile	•
Digital Zoom	10X
HTTP Secure (HTTPS)	•
Java Support	
Motion Detection	•
E-Mail Notification	•
Schedule Recording to Hard Drive	•
Recording to NAS	•
Audio Recording	•
Video Output to 3GPP	•
UPnP Installation	•
DDNS Support	•
Enable/Disable LED Indicators	
D-ViewCam Compatible	•
<b>Physical and Environmental</b>	
Dimensions	134.2 x 49.8 mm (Ø x H)
Weight	1920 g (with bracket and sun shield)
Max. Power Consumption	3.9W
Operating Temperature	0 to 40 °C (32 to 104 °F)
Operating Humidity	20% to 80% non-condensing

# Fixed Network Camera (Wireless - Outdoor)



## DCS-2332L

### Outdoor HD Wireless Day/Night Cloud Camera



- 1/4" megapixel progressive scan CMOS lens
- Infrared-Cut Removable Filter with 5m IR Built-in
- Privacy Masks
- PIR (Passive Infrared) sensor
- 2-way audio with built in microphone and speaker
- PoE enabled
- MJPEG, H.264 and MPEG-4 Video format
- 10x Digital Zoom
- MicroSD SDHC Storage Card Slot and recording to a NAS device
- Motion detection, event recording and E-mail notification with snapshot



Model	DCS-2332L
<b>Image Sensor</b>	
Type	1/4" 1 megapixel CMOS progressive sensor
Megapixel	•
Wide Dynamic Range (WDR)	
Maximum Video Resolution (Pixels)	1280x720
<b>Lens</b>	
Type	Fixed
Focal Length	3.45 mm
F-Number	F2.0
Minimum Illumination (Lux)	1 Lux(colour) , 0.5 Lux (B&W) , 0 Lux(B&W, IR-Led on )
Angle of View (Horizontal/Vertical)	57.8°/ 37.8°
Motorised Pan/Tilt	
Optical Zoom	
Privacy Masks	3 Zones
<b>Day and Night</b>	
ICR Filter	•
IR Built-in PIR	•
IR Built-in	5m
<b>Audio</b>	
2-Way Audio	•
Built-in Microphone	•
External Microphone Input	
Built-in Speaker	•
<b>Connectivity</b>	
Wired LAN	•
Wireless LAN	802.11n/g/b
802.3af PoE	
Digital Input/Output	
Monitor Output	
External Card Slot	•
<b>Software Features</b>	
Video Format	H.264, MJPEG, MPEG-4
Multi-Stream	•
Multi-Profile	
Digital Zoom	10X
HTTP Secure (HTTPS)	•
Java Support	•
Motion Detection	•
E-Mail Notification	•
Schedule Recording to Hard Drive	•
Recording to NAS	•
Audio Recording	•
UPnP Installation	•
DDNS Support	•
Enable/Disable LED Indicators	
D-ViewCam Compatible	•
<b>Physical and Environmental</b>	
<b>Dimensions</b>	
Weight	235g
Max. Power Consumption	5.3 W
Operating Temperature	-25 to 50 °C (-13 to 122 °F)
Operating Humidity	20% to 80% non-condensing

# Fixed Dome Network Cameras

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

## Indoor

### DCS-6113

#### Full HD PoE Day/Night Fixed Dome Network Camera



- 1/2.7" 2 megapixel progressive scan CMOS lens
- Infrared-Cut Removable Filter with 10m IR Built-in
- Privacy Masks
- Analogue Output
- Motion and Tamper detection
- MicroSD SDHC Storage Card Slot and recording to a NAS device
- MJPEG, H.264 and MPEG-4 Video format



## Outdoor

### DCS-6210

#### Outdoor Full HD Vandal resistant Mini Fixed Dome Network Camera



- 1/2.7" 2 megapixel progressive scan CMOS lens
- Privacy Masks
- Vandal Proof
- MicroSD SDHC Storage Card Slot and recording to a NAS device
- Motion detection, event recording and E-mail notification with snapshot



### DCS-6314

#### Full HD WDR Varifocal Day & Night Outdoor Dome Network Camera



- 1/2.8" 2 megapixel WDR progressive scan CMOS lens
- Varifocal Lens
- Infrared-Cut Removable Filter with 15m IR Built-in
- Wide Dynamic Range
- Optical Zoom of 4x
- Privacy Masks
- Vandal Proof
- MicroSD SDHC Storage Card Slot and recording to a NAS device



### DCS-6511

#### Outdoor PoE Vandal-resistant HD Fixed Dome Network Camera



- 1/3" 1.3 megapixel progressive scan CMOS lens
- Motorised varifocal Lens
- Infrared-Cut Removable Filter with 20m IR Built-in
- Wide Dynamic Range
- Optical Zoom of 3.6x
- Privacy Masks
- Analogue Output
- Vandal Proof
- SD SDHC Storage Card Slot and recording to a NAS device



### DCS-6513

#### Full HD WDR Day & Night Outdoor Dome Network Camera



- 1/2.8" 3 megapixel WDR progressive scan CMOS lens
- Motorised P-iris varifocal Lens
- Infrared-Cut Removable Filter with 15m IR Built-in
- Wide Dynamic Range
- Optical Zoom of 3x
- Privacy Masks
- Vandal Proof
- MicroSD SDHC Storage Card Slot and recording to a NAS device
- Motion detection, event recording and E-mail notification with snapshot







Model	DCS-6113	DCS-6210	DCS-6314	DCS-6511	DCS-6513
<b>Image Sensor</b>					
Type	1/2.7"2 Megapixel Progressive Scan CMOS	1/2.7"2 megapixel progressive CMOS sensor	1/2.8"2 Megapixel Progressive Scan CMOS	1/3 1.3" Progressive Scan CMOS	1/2.8" 3 megapixel WDR progressive scan CMOS
Megapixel	•	•		•	
Wide Dynamic Range (WDR)			•	•	•
Maximum Video Resolution (Pixels)	1920 x 1080	1920x1080	1920 x 1080	1280 x 1024	1920 x 1080
<b>Lens</b>					
Type	Fixed	Fixed	Varifocal	Motorised Varifocal	Motorised P-Iris Varifocal
Focal Length	4.0 mm	4.3 mm	2.8 ~ 12 mm	3.3 ~12 mm	3 ~ 9 mm
F-Number	F1.5	F2.0	F1.4	F1.4-3.6	F1.2 ~ 2.3
Minimum Illumination (Lux)	0.12 lux (colour) 0 lux (B&W, IR-LED on)	1 Lux	0.2 Lux (colour), 0 Lux (B&W, IR-LED on)	0.1 Lux (colour), 0 Lux (B&W, IR-LED on)	0.5 Lux (colour), 0 Lux (B&W, IR-LED on)
Angle of View (Horizontal/Vertical)	77.4° /45.1	79 ° /43 °	96.5°~31.2°/ 64.5°~17.8°	23°~ 89°/ 63°~ 17°	96.4°~31.6°/ 51.2°~17.7°
Motorised Pan/Tilt			•		•
Optical Zoom			4x	3.6X	3x
Privacy Masks	5 Zones	3 Zones	3 Zones	3 Zones	3 Zones
<b>Day and Night</b>					
ICR Filter	•		•	•	•
IR Built-in	10m		15m	20m	20m
<b>Audio</b>					
2-Way Audio	•		•	•	•
Built-in Microphone	•	•			
External Microphone Input	•		•	•	•
Built-in Speaker					
External Speaker Output	•			•	
<b>Connectivity</b>					
Wired LAN	v	•	•	•	•
Wireless LAN					
802.3af PoE		•	•	•	•
Digital Input/Output	DI x 1, DO x 1		•	DI x 1, DO x 1	•
Monitor Output	BNC Output			BNC Output	
External Card Slot	Micro SD	•	•	SD Card	•
<b>Software Features</b>					
Video Format	H.264, MPEG-4, MJPEG	MJPEG, MPEG-4, H.264	H.264, MPEG-4, MJPEG	MJPEG, MPEG-4, H.264	H.264, MPEG-4, MJPEG
Multi-Stream	•	•	•	•	•
Multi-Profile		•	•	•	•
Digital Zoom	16X	10X	•	10X	•
HTTP Secure (HTTPS)	•	•		•	
Java Support			•		•
Motion Detection	•	•	•	•	•
E-Mail Notification	•	•	•	•	•
Schedule Recording to Hard Drive	•	•		•	
Recording to NAS	•	•	•	•	•
Audio Recording	•	•	•	•	•
Video Output to 3GPP	•	•	•	•	•
UPnP Installation	•	•	•	•	•
DDNS Support	•	•	•	•	•
Enable/Disable LED Indicators			•	•	•
D-ViewCam Compatible	•	•	•	•	•
<b>Physical and Environmental</b>					
Dimensions	130 x 97.80 mm (Ø x H)	115.52 x 106.75 x 51.59 mm	123x 113.7x 128 mm	127 x 151.79 x 191.8 mm	151.79x 191.3 x127 mm
Weight	0.472 kg	0.4122 kg	1.112 Kgs	1.030 kg	1.53 kg
Max. Power Consumption	5.3 W	7.8 W	10.5 watts ± 5%		10.5 watts ± 5%
Operating Temperature	0 to 40°C (32 to 104 °F)	-25 to 50 °C (-13 to 122 °F)	-30 to 50 °C	-40 to 50 °C (-40 to 122 °F)	-40 to 50 °C
Operating Humidity	90% Non-Condensing	20% to 80% Non-Condensing	20% to 80% non-condensing	20% to 80% Non-Condensing	20% to 80% non-condensing
<b>Accessories</b>					
Mounting Options				DCS-34-1 (Included) DCS-34-2 DCS-34-3	

# Pan, Tilt, Zoom (PTZ) Network Cameras

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

## Indoor

### DCS-5020L

#### Wireless N Day & Night Pan/Tilt Cloud Camera



- 1/5" megapixel Progressive scan CMOS lens
- Infrared-cut Removable filter with 8m IR-Built in
- Passive Infrared (PIR) Sensor
- Motorised Pan/Tilt with 360° (endless) Pan range and +170° to -170° Tilt range
- Built-in wireless extender
- Motion detection, event recording and E-mail notification with snapshot
- MJPEG and H.264 and MPEG-4



### DCS-5222L

#### Pan/Tilt/Zoom Cloud Camera



- 1/4" megapixel Progressive scan CMOS lens
- Infrared-cut Removable filter with 5m IR-Built in
- Passive Infrared (PIR) Sensor
- Motorised Pan/Tilt with 360° (endless) Pan range and +170° to -170° Tilt range
- MicroSD SDHC Storage Card Slot and recording to a NAS device
- Motion and Sound detection
- MJPEG, H.264 and MPEG-4 Video format



### DCS-6616

#### 12x Speed Dome IP Camera



- 1/4" CCD (Sony Super HAD-II) lens
- Motorised varifocal
- Infrared-cut Removable filter
- Wide Dynamic Range
- 12x Optical Zoom
- Motorised Pan/Tilt with 360° (endless) Pan range and 10° to 170° Tilt range
- Presets and 16 zone auto cruise available
- Privacy Masks
- Analogue Output



## Outdoor

### DCS-6815

#### 18x Speed Dome Camera



- 1/4" CCD (Sony Super HAD-II) lens
- Motorised varifocal
- Infrared-cut Removable filter
- Wide Dynamic Range
- 18x Optical Zoom
- Motorised Pan/Tilt with 360° (endless) Pan range and -10° to 190° Tilt range
- Presets and 16 zone auto cruise available
- Privacy Masks
- Analogue Output
- Vandal Proof



### DCS-6915

#### Outdoor 20X Full HD WDR Speed Dome Network Camera



- Sony Exmor 1/2.8" progressive 3 megapixel CMOS sensor
- Motorised varifocal
- Infrared-cut Removable filter
- WDR image enhancement
- 20x Optical Zoom
- Motorised Pan/Tilt with 360° (endless) Pan range and -10° to 190° Tilt range
- Up to 400° per second rotation with 256 preset points
- Privacy Masks
- Vandal-proof and weatherproof
- Weather and vandal-proof enclosure (IP66 & IK-10)





Model	DCS-5020L	DCS-5222L	DCS-6616	DCS-6815	DCS-6915
<b>Image Sensor</b>					
Type	1/5"VGA progressive CMOS sensor	1/4" megapixel Progressive scan CMOS	Sony Super HAD-II 1/4" CCD	1/4" Sony Exview CCD	Sony Exmor 1/2.8" progressive 3 Megapixel CMOS sensor
Megapixel	•	•	•	•	•
Wide Dynamic Range (WDR)			•	•	•
Maximum Video Resolution	640 x 480	1280 x 720	NTSC: 720 x 480 PAL: 720 x 576	NTSC: 720 x 480 PAL: 720 x 576	1920 x 1080
<b>Lens</b>					
Type	Fixed	Fixed	Varifocal	motorised varifocal	motorised varifocal
Focal Length	2.2 mm	4.57 mm	3.8 to 45.6 mm	3.4 ~61.2 mm	4.7 to 94 mm
F-Number	F 2.0	F1.9	F1.6 ~ F2.7	F1.4 ~ F3.0	F1.6 ~ 3.5
Minimum Illumination (Lux)	"1 Lux (colour) 0 Lux (B&W, IR-LED on)"	1 Lux (Colour) 0 Lux (B&W, IR-LED on)	0.1 Lux (Colour) 0.01 Lux (B/W)	0.01 Lux (Colour) 0.01 Lux (B/W)	0.1 lux (Colour); 0.01 Lux (B/W)
Angle of View (Horizontal/Vertical)	66.22 ° /43 °	45.7° / 29.5°	4.49° to 52.8° / 3.40° to 39.7°	60.8°~ 3.6° / -	52.27° to 4.07° / 33.4° to 2.33°
Motorised Pan/Tilt	•	•	•	•	•
Optical Zoom			12X	18X	20x
Privacy Masks		3 Zones	•	16 Zones	16
<b>Day and Night</b>					
ICR Filter	•	•	•	•	•
IR Built-in	8m	5 m			•
<b>Audio</b>					
2-Way Audio	•	•	•	•	•
Built-in Microphone		•			
External Microphone Input			•	•	
Built-in Speaker		•			
External Speaker Output			•	•	
<b>Connectivity</b>					
Wired LAN	•	•	•	•	•
Wireless LAN	802.11b/g/n	802.11n, 802.11g			
802.3af PoE					
Digital Input/Output		DI X1, DO X 1	DI x 8, DO x 1	DI x 8, DO x 1	
Monitor Output			BNC Output	BNC Output	
External Card Slot		•			•
<b>Software Features</b>					
Video Format	H.264, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	MJPEG, MPEG-4	H.264 and MJPEG
Multi-Stream	•	•	•	•	•
Multi-Profile	•	•	•		•
Digital Zoom	4x	16X	12X	12X	10X
HTTP Secure (HTTPS)		•			
Java Support	•				
Motion Detection	•	•	•	•	•
E-Mail Notification	•	•	•	•	•
Schedule Recording to Hard Drive		•	•		•
Recording to NAS		•	•		
Audio Recording			•	•	
Video Output to 3GPP	•	•	•		•
UPnP Installation	•	•	•		•
DDNS Support	•	•	•	•	•
Enable/Disable LED Indicators	•				
D-ViewCam Compatible	•	•	•	•	•
<b>Physical and Environmental</b>					
Dimensions	10235 x 101.27 x 133.6 mm	114 x 125 mm (Ø x H)	131 x 205 mm (Ø x H)	190 x 302.5 mm (Ø x H)	282.11 x 191.97 mm
Weight	292.4 gm	0.540 kg	1.2 kg	2.6 kg	2.32 kg
Max. Power Consumption	8.64 W	9 W	14 W	65 W	Max 65 W with heater on
Operating Temperature	0 to 40 °C	0 to 40°C	0 to 40 °C	-40 to 50°C	-40 to 50 °C (-40 to 122 °F)
Operating Humidity	20% to 85% non-condensing	20% to 80% Non-Condensing	20% to 80% Non-Condensing	20% to 80% Non-Condensing	20% to 80% non-condensing
<b>Accessories</b>					
Mounting Options				DCS-32-1, DCS-32-2, DCS-32-4	
Other				DCS-80-6 (Outdoor PSU)	

# Video Management Software (VMS)



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

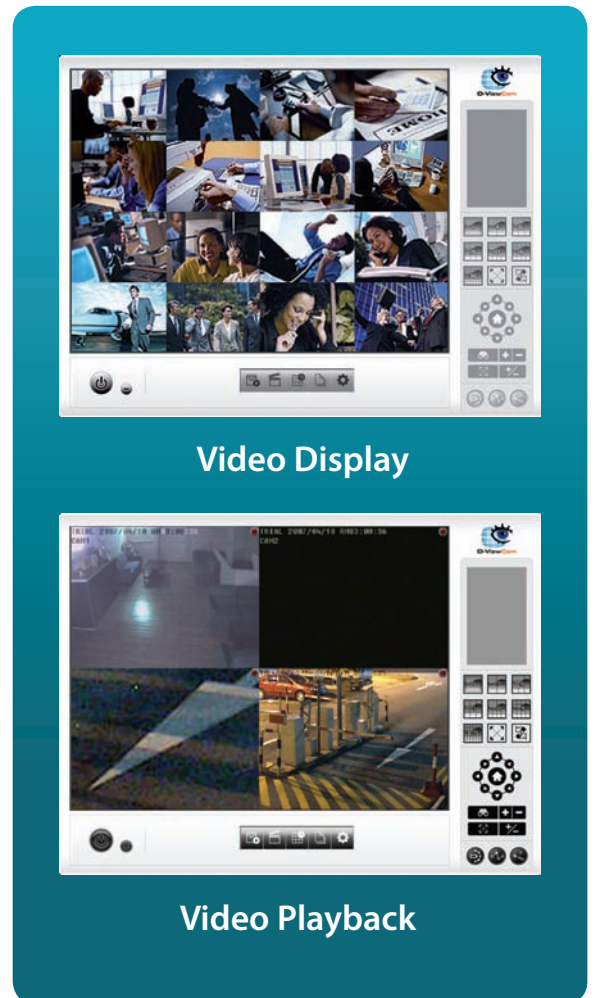
D-ViewCam Standard network camera surveillance software (DCS-100) is bundled with D-Link network cameras and is a comprehensive surveillance system designed to centrally manage multiple IP cameras for Home, Small Office Home Office (SOHO), or Small and Medium Business (SMB) users. Supporting up to 32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

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

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

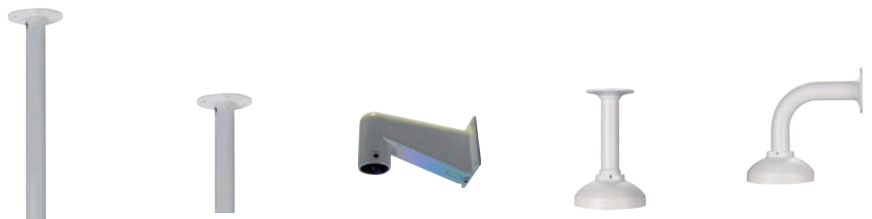
Event action configuration provides users with optimal surveillance and security by detecting motion occurring on the cameras or through added devices such as smoke detectors, magnetic door sensors, emergency buttons, card readers and other I/O devices. By attaching these devices to a compatible D-Link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

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



## Camera Accessories

Brackets, PSU



Model		DCS-32-1	DCS-32-2	DCS-32-4	DCS-34-2	DCS-34-3
Mounting Options	Type	Straight Tube (Long)	Straight Tube (Short)	Mini Pendant	Pendant Mount	Bent Mount
	Compatible With	DCS-6815 DCS-6818	DCS-6815 DCS-6818	DCS-6815 DCS-6818	DCS-6511	DCS-6511



Model		DCS-80-6
Power Supplies	Input Power	220~230 V AC
	Output	24V DC
	Protection	IP66
	Compatible With	DCS-6815 DCS-6818

# Video Encoders

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

These video encoders are the ideal choice for businesses where surveillance equipment is already installed and functioning. The alarm handling features provide alerts in the event of loss of video or loss of network connection. Motion alarms with configurable detection areas allow for effective surveillance and help to mitigate the need for constant human supervision. A buffer system allows the server to capture images to the built-in SD card slot both before and after an event occurs.

## What is a Video Encoder?

Video encoders, also known as video servers, enable an existing analogue CCTV video surveillance system to be integrated with a network video system. Video encoders play an important role in installations where many analogue cameras are to be maintained.

A video encoder makes it possible for an analogue CCTV system to migrate to a network video system. It provides the benefits of network video without having to discard existing analogue equipment such as analogue CCTV cameras and coaxial cabling.

## How does it work?

A video encoder connects to an analogue video camera via a coaxial cable and converts analogue video signals into digital video streams that are then sent over a wired or wireless IP-based network (e.g. LAN, WLAN or Internet). To view and/or record the digital video, computer monitors and PCs can be used instead of DVRs or VCRs and analogue monitors.

By using video encoders, analogue video cameras of all types, such as fixed, indoor/outdoor, dome, pan/tilt/zoom, and other specialist cameras can be remotely accessed and controlled over an IP network.

## What are the benefits of a Video Encoder?

A video encoder also offers other benefits such as event management and advanced video and security functionalities. In addition, it provides scalability and ease of integration with other security systems.

## DVS-310-1

### H.264 PoE Video Encoder



- H.264/MPEG4/MJPEG Dual Codec
- 2-Way Audio
- Motion Detection
- 1-Channel BNC Input
- SD Card Slot\*
- PoE Support
- Digital Input x 2
- Digital Output x 1
- RS-485 Interface
- Audio Line In/Out

SD Card not included\*

Model	DVS-310-1	
Network Specifications	Connection	1 x 10/100BASE-TX
	802.3af PoE Compatible	•
	Network Protocols	IPv4, DHCP, ARP, DNS, TCP/IP, DDNS (D-Link), HTTP, HTTPS, UPnP™, Port Forwarding, Samba, SMTP, PPPoE, NTP (D-Link), FTP, RTP, RTSP, UDP, RTCP, ICMP, 3GPP
Video Specifications	Video Format	MJPEG, MPEG-4, H.264
	Bit Rate	64 Kbps to 4 Mbps
	Supported Resolutions	PAL: D1 (720x576), CIF (352x288), QCIF (176x144) NTSC: D1 (720x480), CIF (352x240), QCIF (176x120)
	Video Input	1CH, NTSC/PAL, BNC Connector, 1.0Vp-p with 75 Ω Loading
	Video Recording	Instant Local Video Recording
Audio	Video Buffer	Pre/Post Buffer for Image/Video Capture
	Bidirectional Audio	•
	Audio Connector	3.5 mm Stereo Input/Output
	Audio Input	8 KHz Sample Rate, ADPCM
	Audio Output	8 KHz Sample Rate, ADPCM
Pan/Tilt/Zoom	Audio Codec	G.726
	PTZ Connection	RS-485
	PTZ Protocols	PelcoP, PelcoD, Merit Lirin, Visca, DynaColour, Transparent
Digital I/O	Baud Rate	1200, 1800, 2400, 4800, 9600, 19200
	Number of Inputs	2
Alarm Handling	Number of Outputs	1
	Loss Detection	Video and Network Loss Detection
	Motion Detection	Hardware Based, Multiple Detection Areas
	Event Handler	Alerts by FTP and Email
Storage	Local Storage	SD Card
Video Management Software	D-ViewCam	Compatible
Physical and Environment	Dimension (L x W x H)	90 x 78 x 36 mm
	Weight	232 g
	Operating Temperature	0 to 40°C
	Operating Humidity	20% to 80% Non-Condensing

# Network Video Recorders

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

## DNR-322L

### Cloud Network Video Recorder



- Accesible from the Internet with mydlink™
- USB port for UPS status update
- 2 bays for SATA HDD
- Device lock hole
- 9 channel IP camera recording
- 1 channel playback
- RAID 0/1 and JBOD
- HD recording (720p)
- Configurable Recording Schedules
- Supports D-Link IP cameras



## DNR-326

### 2-Bay Professional Network Video Recorder



- Two bays for SATA hard disks (Not Included) with optional RAID 1 protection
- USB port for UPS status update
- Support for all D-Link cameras as well as 3rd party cameras (Axis, Panasonic, Sony, Mobotix, Cisco, etc)
- Monitor and record up to 9 Cameras Simultaneously using MJPEG, MPEG4 or H.264
- SmartSearch Technology to simplify event investigation
- Full HD recording (1080p)
- Digital watermark to prevent tampering on recorded files



## DNR-2060-08P

### JustConnect Multifunctional Network Video Recorder



- Six bays for SATA hard disk drives
- HDMI and VGA dual display output
- Front panel controls
- Auto discovery and auto configuration
- Up to 8-channel IP camera recording
- Built-in PoE+ switch
- Local HDMI and VGA display output
- Front panel controls
- Supports D-Link IP Cameras





Model		DNR-322L	DNR-326	DNR-2060-08P
Hardware Specification	IEEE Standard	802.3/u/z	IEEE 802.3/u/z	IEEE 802.3/u/z/at
	Network Port	1 x Gigabit Ethernet port	1 x Gigabit Ethernet port	1 x Gigabit Ethernet port 8 x Fast Ethernet PoE+ ports
	Universal Serial Bus (USB)	1 x USB Port for UPS Status Update	1 x USB port for UPS Status Update	3 x USB port for local controls and external storage
	Memory	Flash ROM: 128 MB	Flash ROM: 32 MB; RAM: 128 MB DDR	Flash ROM: 128 MB; RAM: 512 MB DDR II
	Hard Disk Drive (HDD)	Two SATA II 3.5" HDD bays with support for RAID 0/1 and JBOD	Two SATA II 3.5" HDD bays with support for RAID 0/1 and JBOD	Eight SATA II 3.5" HDD bays
	Reset to Factory Default	Hardware Reset Button Reset Button in Firmware GUI	Hardware Reset Button Reset Button in Firmware GUI	Hardware Reset Button Reset Button in Firmware GUI
	Device Security	Device Lock Hole	Front Panel Lock; Device Lock Hole	
Firmware Specification	Operating System	Linux	Linux	Linux
	Supported Network Cameras	Supports all D-Link IP Cameras (Only) and Auto Discovery Function Include 1.3 Megapixel and HD Resolution	D-Link, Axis, Panasonic, Sony, Mobotix, Arecont Vision, IQinVision, Cisco, Acti	Supports all D-Link IP Cameras (Only) and Auto Discovery Function Include Full HD Resolution
	Recording Performance	Up to 270 Frames at HD (1280x720) (around 810 frames at D1)	Max. capacity (NVR mode only): - H.264 1080P (Bitrate): 90 Mbps - H.264 720P (Bitrate): 90 Mbps - MJPEG 1080P (frame rate): 90 fps - MJPEG 720P (frame rate): 192 fps Max. capacity (NVR+File Server mode): - H.264 1080P (Bitrate): 68 Mbps - H.264 720P (Bitrate): 68 Mbps - MJPEG 1080P (frame rate): 70 fps - MJPEG 720P (frame rate): 150 fps	Maximum frame rate for H.264 recording per channel at standard quality: 1080P @ 30 fps Maximum frame rate for MJPEG recording per channel at standard quality: 1080P @ 10 fps, 720P @ 15 fps
	Camera Search	Universal Plug-and-Play (UPnP)	Universal Plug-and-Play (UPnP)	Universal Plug-and-Play (UPnP)
	Audio and Video Recording	Synchronised Audio and Video Recording	Synchronised Audio & Video Recording	Synchronised Audio & Video Recording
	Compression Format	H.264, MPEG-4, M-JPEG (for supported cameras)	H.264, MPEG-4, M-JPEG (for supported cameras)	H.264, M-JPEG (for supported cameras)
	Video Setting	Resolution, Quality, Frame Rate, Enable Audio, Go to Camera Interface	Resolution, Quality, Frame Rate, Enable Audio, Go to Camera Interface	Resolution, quality, frame rate, enable audio, go to camera interface
	Recording Type	Record by Schedule, Manual Record, Event Record (Motion Detection)	Recording by Schedule, Manual and Event (DI Trigger, Motion Detection from Camera)	Continuous, Schedule, Event (Motion, Alarm & Video Loss)
	Remote Live View	Via Internet Explorer Remote Live Viewer Maximum 9 Simultaneous Channels	Supported via IE Remote Live Viewer Maximum 9 Simultaneous Channels	Supported via IE Remote Live Viewer Maximum 8 Simultaneous Channels
	Remote Live View Control	Live View, Preset/Go, Patrol, Focus, PTZ Functions, Snapshot, Full Screen, Auto Scan, Digital Zoom (Zoom in and Zoom out)	Live View, Preset/Go, Patrol, Focus, PTZ Functions, Snapshot, Full Screen, Digital Zoom	Live View, Preset/Go, Patrol, Focus, PTZ Functions, Snapshot, Full Screen, Digital Zoom
	Remote Playback	Internet Explorer and NVR Client Playback System with Timeline GUI, Search by Event, Area, Camera, Date and Time Support One-Channel Playback Digital Zoom to Specific Area	Supported via IE and NVR Client Playback system with Timeline GUI, Search by Event, Area, Cameras, Date, and Time IE & NVR Client Support Four Channel Simultaneous Playback	Supported via IE Playback system with timeline GUI, search by event, area, cameras, date and time, text Support Eight Channel Simultaneous Playback
	Remote Playback Control	Playback with Normal, Fast Forward/Backward and Step Forward/Backward	Playback with Normal, Fast Forward/Rewind and Step Forward/Rewind Smart Search Intelligent Detection Function: General Motion, Missing Object, Foreign Object, Camera Occlusion, Lose Focus	Playback with normal, fast forward/backward and step forward/backward
	Overwrite Recording	Automatic Recycling when Disk Storage is Full	Automatic Recycling when Disk Storage is Full	Automatic Recycling when Disk Storage is Full
	File Export	Export Videos to "AVI" or "ASF" file (ASF with Timestamp) Export Images to "BMP" or "JPG" File	Export Videos to "AVI" or "ASF" file (ASF with Timestamp) Export Images to "BMP" or "JPG" File	Export video to "AVI" or "ASF" file Export Image to "BMP" or "JPG" file
	User Account	Additional Accounts can be Created to Allow User Access to the System and Specify Authorisation for Camera Channels, PTZ, etc	Additional Accounts can be Created to Allow User Access to the System and Specify Authorisation for Camera Channels, PTZ, etc	Additional accounts can be created to allow user access to the system And specify authorization for camera channel, PTZ, etc.
	Dynamic Domain Name System (DDNS)	D-Link DDNS Server	D-Link DDNS Server Support	D-Link DDNS server support
	System Time	Set System Time (D-Link NTP, Input Time, Synch with Computer, Daylight Savings Time)	Set System Time (D-Link NTP, Input Time, Sync with Computer, Daylight Saving Time)	Set the system time (D-Link NTP, Input time, Synch with computer, Daylight Saving's Time)
	Remote Backup	Remote Software can Backup Raw Data to Redundant Storage	Remote Software can Backup Raw Data to Redundant Storage. Backup Recorded Data to Remote FTP Site by Daily Schedule	Remote software can backup raw data to redundant storage
	System Status	Camera Status, System Status	Camera Status; System Status	Camera status, System status
	Network Service Protocol	IPv4, ARP, TCP, UDP, ICMP, DHCP Server, DHCP Client, NTP Client (D-Link), DNS Client, DDNS Client (D-Link), SMTP Client, HTTP Server, PPPoE, UPnP, IP Filtering, Samba Server	IPv4, ARP, TCP, UDP, ICMP, DHCP Server, DHCP Client, NTP Client (D-Link), DNS Client, DDNS Client (D-Link), SMTP Client, HTTP Server, PPPoE, UPnP, IP Filtering, Samba Server	IPv4, ARP, TCP, UDP, ICMP, DHCP Server, DHCP Client, NTP Client (D-Link), DNS Client, DDNS Client (D-Link), SMTP Client, HTTP Server, PPPoE, UPnP, IP filtering, Samba Server
User Interface	HTTP Web Browser, Internet Explorer v7 or later, NVR Search Utility, Multiple Language GUI	HTTP Web Browser, Internet Explorer v7 or later, NVR Search Utility, Multiple Language GUI	HTTP Web browser, Internet Explorer v7 or later, NVR Search utility	
Physical and Environment	Dimension (W x D x H)	115 x 178 x 146 mm	115 x 146.4 x 178.5 mm	440.4 x 450.9 x 90.4 mm
	Weight	0.8751 Kg	0.875 Kg	9.02 kg
	Power Input	External Power Adapter	External Power Adapter	Internal
	Max. Power Consumption	25.20 W	25.20 W	200 W
	Operating Temperature	0° to 55° C	0 to 55° C	0 to 40° C
	Storage Temperature	-20° to 70° C	-20 to 70° C	-20 to 70° C
Operating Humidity	5% to 90% (Non-Condensing)	5% to 90% (Non-Condensing)	10% to 90% (Non-Condensing)	

# Network Storage









Every business requires a reliable way of storing and backing up their data. D-Link provides a range of simple and cost-effective network storage products to meet any data management challenges. Products under this category include Storage Area Network Arrays (IP SAN) and Network Attached Storage (NAS) devices such as the Cloud enabled ShareCenter™ 2-Bay and 4 Bay Storage Network Enclosures with which you can share, download, delete or upload documents, files and media content such as photos, presentations and videos on a network or remotely over the Internet via the mydlink™ portal or using the mydlink™ app available for iPhone, iPad and Android.



# Range Overview




## Network Attached Storage (NAS)

4-BAY	 DNS-345			
2-BAY	 DNS-320	 DNS-320L/DNS-320LW	 DNS-325	 DNS-327L
1-BAY	 DNS-315			

## Storage Area Network Arrays (IP SAN)

12-BAY	 Scales to 60 drives	 DSN-6110	 DSN-6120
		 DSN-6410	 DSN-6420

## Unified Storage Appliances

5-BAY	 DNS-1200-05	
4-BAY	 DNS-1100-04	 DNS-1550-04

# Storage Area Network Arrays (iSCSI SAN)

D-Link's Storage Area Network Arrays (iSCSI SAN) are designed to provide a reliable network data storage solution for entry-level and SMB segments. These storage arrays can be easily implemented in Virtualised Server environments, nearline storage or as a supplement to the primary backup and recovery devices.

## DSN-6110

### 12-Bay 2U Rackmount iSCSI SAN Array with Single Controller



- 12 x 3.5" SAS/SATA-II Bays
- 4x Gigabit Ethernet ports
- Single RAID Controller
- RAID 0/1/1+0/5/6/50/60 JBOD N\_way mirror"
- SAS/SATA-II



## DSN-6120

### 12-Bay 2U Rackmount iSCSI SAN Array with Dual Controllers



- 12 x 3.5" SAS/SATA-II Bays
- 8x Gigabit Ethernet ports
- Dual RAID Controller
- RAID 0/1/1+0/5/6/50/60 JBOD N\_way mirror"
- SAS/SATA-II



## DSN-6410

### 12-Bay 2U Rackmount iSCSI SAN Array with Single Controller



- 12 x 3.5" SAS/SATA-II Bays
- 2x 10GbE ports
- Single RAID Controller
- RAID 0/1/1+0/5/6/50/60 JBOD N\_way mirror"
- SAS/SATA-II



## DSN-6420

### 12-Bay 2U Rackmount iSCSI SAN Array with Dual Controller



- 12 x 3.5" SAS/SATA-II Bays
- 2x 10GbE ports
- Dual RAID Controller
- RAID 0/1/1+0/5/6/50/60 JBOD N\_way mirror"
- SAS/SATA-II



## DSN-6020

### 12-Bay 2U Rackmount Expansion Enclosure for DSN-6000 Series



- 12 x 3.5" SAS/SATA-II Bays
- 4x SAS Ports
- SAS/SATA-II





Model		DSN-6110	DSN-6120	DSN-6410	DSN-6420	
Storage Features	Number of Bays	12	12	12	12	
	Cache Memory	4 GB Standard	4 GB Standard	4 GB Standard	4 GB Standard	
	Cache Battery Backup	Module (72 hours)				
	Bandwidth	500 Mbps	900 Mbps	650 Mbps	1300 Mbps	
	Max Capacity	48 TB*	48 TB*	48 TB*	48 TB*	
iSCSI	Drive Type	SAS SATA-II				
	iSCSI Network Interface	4 x Gigabit Ports	4 x Gigabit Ports	2 x 10 GbE Ports	4 x 10 GbE Ports	
	Host Interface					
	Max Hosts	16,384				
	CHAP Authentication	•	•	•	•	
	Management Access Control	•	•	•	•	
	iSCSI/TCP/IP Full Hardware Offload	•	•	•	•	
	Jumbo Frame	•	•	•	•	
	802.3ad Link Aggregation	4 Ports	4 Ports	2 Ports	2 Ports	
	VLAN Support	•	•	•	•	
Volume and RAID	RAID Controller	Single (Module)	Dual (Modules)	Single (Module)	Dual (Modules)	
	RAID Support	0, 1, 1+0, 3, 5, 6, 10, 30, 50, 60				
	Volumes					
	Target Nodes					
	Online Capacity Expansion	•	•	•	•	
	Hot-Swappable Drives	•	•	•	•	
	Instant Volume Access	•	•	•	•	
	Free Space Defragmentation	•	•	•	•	
	Failed Drive Auto-Detection	•	•	•	•	
	Spare Drive Auto-Rebuild	•	•	•	•	
	RAID Level Migration	•	•	•	•	
	Drive Roaming in Power Off	•	•	•	•	
	Micro Rebuilds	•	•	•	•	
	Storage Management	Web-Based GUI				
		Firmware Upgradeable	•	•	•	•
Physical and Environmental	Supply Type	2 x 500 W (Redundant)				
	Dimensions	442.8 x 500.6 x 88.0 mm				
	19" Rack Space	2U	2U	2U	2U	
	Operating Temperature	5% to 95% (Non-Condensing)				

\* Max capacity can be increased with future firmware upgrades

# Network Attached Storage (NAS)



D-Link's Network Attached Storage solutions are designed to provide simple, reliable network storage for businesses of all sizes. These NAS devices can be easily deployed to provide centralised file sharing and protect data on any network.

## DNS-315

### ShareCenter™ 1-Bay Network Storage Enclosure



- 1 X 3.5" Internal SATA I/II Hard Drive bays - up to 4TB
- Schedule local and remote backup and also backup from PC to NAS
- Apple Time Machine support
- Cloud storage backup (Amazon S3)
- USB backup
- Using the integrated iTunes server, stream your iTunes media files to Apple devices such as the iPhone, iPod, and iPad
- D-Link Green eco-friendly design incorporating hard disk



## DNS-320

### ShareCenter™ 2-Bay Network Storage Enclosure



- 2 X 3.5" Internal SATA I/II Hard Drive bays - up to 8TB
- Disks can be configured for separate access, JBOD or RAID 0/1 depending on redundancy or performance requirements"
- Easy installation and setup of hard disk drives
- USB Port for printer sharing and external backup disk attachment plus UPS monitoring
- Download movies, music and photos to you iOS or Android devices to view later
- Stream digital content to compatible DLNA media players such as Play Station 3, Microsoft Xbox 360™ or directly to a smart TV

## DNS- 320L/LW

### ShareCenter™ 2-Bay Cloud Network Storage Enclosure



- 2 X 3.5" Internal SATA I/II Hard Drive bays - up to 8TB
- Disks can be configured for separate access, JBOD or RAID 0/1 depending on redundancy or performance requirements
- Standalone device that connects directly to your router.
- USB port for printer sharing and external backup disk attachment plus UPS monitoring
- Access your files from anywhere with mydlink™ Cloud Services



## DNS-325

### ShareCenter™+ 2-Bay NAS with mydlink™ Cloud



- 2x 3.5" internal SATA I/II hard disks - up to 3TB
- Disks can be configured for separate access, as a JBOD array or with RAID 0/1 protection
- Network file sharing on mixed Windows, Mac OS and Linux networks
- Integrated backup support, bundled Windows desktop backup software, Apple Time Machine support for Mac backup
- USB port for printer sharing, flash drive and external backup disk attachment plus UPS monitoring
- Remotely Access, Stream and Sync your digital data via the mydlink™ Cloud Portal
- Support for up to 4 x D-Link IP cameras
- Remote access via the D-Link cloud App



## DNS-327L

### ShareCenter™+ 2-Bay Cloud Network Storage Enclosure



- 2X 3.5" Internal SATA I/II Hard Drive bays - up to 8TB
- Disks can be configured for separate access, JBOD or RAID 0/1 depending on redundancy or performance requirements
- Stream digital content to compatible DLNA media players such as Boxee Box by D-Link, Play Station 3, Microsoft Xbox 360 or directly to a smart TV
- USB 3.0 port to connect additional external storage or multifunction printer
- Includes smart library applications that allow you to organise your music and photos effortlessly
- Remotely manage data or built-in applications from anywhere using the mydlink™ mobile device app or on a PC through the mydlink™ portal



## DNS-345

### ShareCenter™+ 4-Bay NAS with mydlink™ Cloud



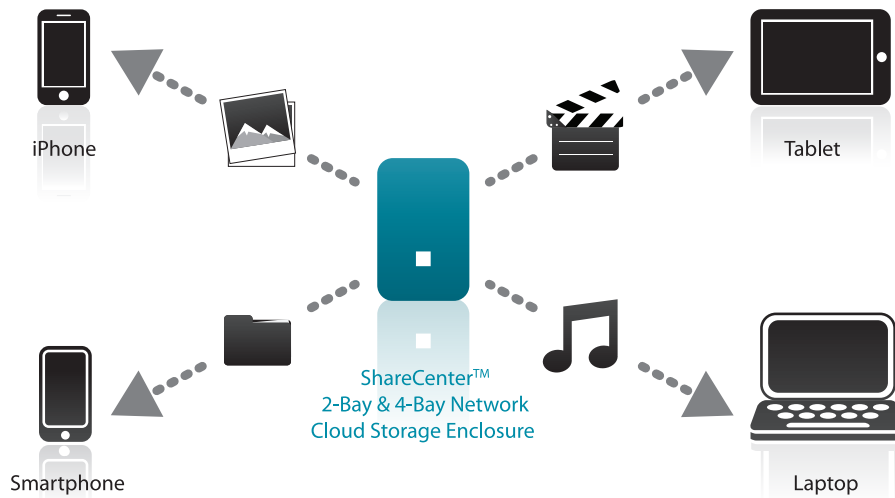
- 4x 3.5" internal SATA I/II hard disks - up to 3TB
- Disks can be configured for separate access, as a JBOD array or with 0/1/10/5/5 + hot spare protection
- Network file sharing on mixed Windows, Mac OS and Linux networks
- Integrated backup support including backup to the cloud (Amazon S3), bundled Windows desktop backup software, Apple Time Machine support for Mac backup
- Remotely Access, Stream and Sync your digital data via the mydlink™ Cloud Portal
- Support for up to 4 x D-Link IP cameras





Model		DNS-315	DNS-320	DNS-320L/LW	DNS-325	DNS-327L	DNS-345
Storage Features	Number of Bays	1	2	2	2	2	4
	Max Capacity	4 TB*	8 TB*	8 TB*	8 TB*	up to 8 TB	16 TB*
	Drive Type	3.5 inch SATA I/II					
Network	Interfaces	1 x Gigabit Port 1 x USB Port	1 x Gigabit Port 1 x USB Port	1 x Gigabit Port 1 x USB Port	1 x Gigabit Port 1 x USB Port	1 x Gigabit Port 1 x USB 3.0 host port	2 x Gigabit Ports 1 x USB Ports
	802.3ad Link Aggregation						
	iSCSI						
	File System	CIFS/NFS/Web File Manager/AFP/WebDAV	CIFS/NFS/Web File Manager/AFP/WebDAV	CIFS/NFS/Web File Manager/AFP/WebDAV	CIFS/NFS/Web File Manager/AFP/WebDAV	CIFS/SMB, NFS, AFP	CIFS/NFS/DFS/Web File Manager/AFP/WebDAV
	Active Directory						•
	VLAN Support						•
	Media Server	•	•	•	•	•	•
	FTP Server	•	•	•	•	•	•
	User/Group Quotas	•	•	•	•	•	•
	Dynamic DNS	•	•	•	•	•	•
	USB Drive Support	•	•	•	•	•	•
	USB Print Server Support	•	•	•	•	•	•
	USB UPS Monitoring	•	•	•	•	•	•
	Volume and RAID	RAID Controller		Single (Integrated)	Single (Integrated)	Single (Integrated)	Single
RAID Support			RAID 0/1, JBOD, Standard	RAID 0/1, JBOD, Standard	RAID 0/1, JBOD, Standard	RAID 0/1, JBOD, Standard	RAID 0, 1, 5, 10, 5+Hot Spare, JBOD, Standard
Target Nodes							
Hot-Swappable Drives							
Free Space Defragmentation							
S.M.A.R.T.		•	•	•	•	•	•
Thin Provisioning							
Volume Snapshots							
Storage Management	Virtual Disks						
	Web-Based GUI	HTTP	HTTP, HTTPS	HTTP, HTTPS	HTTP	HTTP, HTTPS	HTTP, HTTPS
	Easy Search Utility	•	•	•	•	•	•
	Firmware Upgradable	•	•	•	•	•	•
	Email Alerts	•	•	•	•	•	•
Physical and Environmental	SNMP						•
	Display						•
	Power Supply Type	External	External	External	External	External	External
	Dimensions	50 x 141.3 x 173 mm	90 x 144.3 x 193.3 mm	90 x 144.3 x 193.3 mm	104 x 198 x 132 mm	90 x 144.3 x 195.3 mm	128 x 200 x 178 mm
	Operating Temperature	0 to 40 °C (32 to 104 °F)	0 to 40 °C (32 to 104 °F)	0 to 40 °C (32 to 104 °F)	0 to 40 °C (32 to 104 °F)	0 to 40 °C w(32 to 104 °F)	0 to 40 °C (32 to 104 °F)
Operating Humidity	10% to 85% (Non-Condensing)	5% to 90% (Non-Condensing)	5% to 90% (Non-Condensing)	5% to 90% (Non-Condensing)	5% to 90% non-condensing	5% to 90% (Non-Condensing)	

\* Max capacity can be increased with future firmware upgrades



# Unified Storage Appliances with NAS and iSCSI



Unified appliances offer all the benefits of NAS in terms of server-like network file sharing with management via an easy to use browser interface. In addition, however, they can also be used to provide block-level access to storage in the appliance using the iSCSI protocol.

## DNS-1100-04

### Unified Storage Appliance



- 12TB and above in four hot-swap 3.5in drive bays
- Standard JBOD array or 0/1/5/6 RAID protection
- Network file sharing on mixed Windows, Mac OS and Linux networks"
- Virtual disks with thin provisioning and volume snapshot facilities
- Two auto-sensing Gigabit Ethernet ports with link aggregation
- Two USB ports for printer, flash drive and external disk attachment plus UPS monitoring
- Integrated backup tools, client software for backup of network PCs
- HTTP/S and FTP support plus DDNS for simplified remote access
- Block level iSCSI data transfers with support for up to 64 iSCSI targets



Windows Server 2008

## DNS-1200-05

### ShareCenter™ Pro 1200 Storage Appliance with RAID 6 availability



- 15TB and above in five hot-swap 3.5in drive bays
- RAID 5 with hot-spare plus RAID 6 to protect against two drive failures at once
- Network file sharing on mixed Windows, Mac OS and Linux network
- Virtual disks with thin provisioning and volume snapshots
- Two auto-sensing Gigabit Ethernet ports with link aggregation
- Two USB ports for printer, flash drive and external disk attachment plus UPS monitoring
- Integrated backup tools plus client software for backup of network PCs
- HTTP/S and FTP support plus DDNS for simplified remote access
- Block level iSCSI data transfers with up to 64 iSCSI targets
- Power management features including scheduled scheduled
- Power on/off, disk hibernation and SMART health scan"



Windows Server 2008

## DNS-1550-04

### ShareCenter™ Pro 1550 Rack-mount unified appliance



- 1U rack-mount format
- Hot-swap 3.5in drive bays
- Redundant hot-swap power supplies
- Dual-core processor plus 2GB RAM
- RAID 6 to protect against two drive failures at once
- Network file sharing on mixed Windows, Mac OS and Linux networks
- Virtual disks with thin provisioning and up to 32 volume snapshots
- HTTP/S and FTP support plus DDNS for simplified remote access
- Block level iSCSI data transfers with up to 64 iSCSI targets
- Two auto-sensing Gigabit Ethernet ports with link aggregation and automatic failover/failback
- Five USB ports for printer, flash drive and external disk attachment plus UPS monitoring
- Integrated backup support including backup to the Cloud
- Bundled client software for backup of Windows PCs plus Apple Time Machine support





Model		DNS-1100-04	DNS-1200-05	DNS-1550-04
Storage Features	Number of Bays	4	5	4
	Max Capacity	16 TB*	20 TB*	12 TB
	Drive Type	3.5 / 2.5 inch SATA I/II		
Network	Interfaces	2 x Gigabit Ports 2 x USB Ports	2 x Gigabit Ports 2 x USB Ports	2 x Gigabit Ports 5 x USB Ports
	802.3ad Link Aggregation	•	•	•
	iSCSI	•	•	•
	File System	CIFS/SMB, NFS, DFS	CIFS/SMB, NFS, DFS	CIFS/SMB, NFS, DFS, AFP
	Active Directory	•	•	•
	VLAN Support	•	•	•
	Media Server			•
	FTP Server			•
	User/Group Quotas	•	•	•
	Dynamic DNS			•
	USB Drive Support	•	•	USB 2.0 Ports x 5
	USB Print Server Support	•	•	•
USB UPS Monitoring	•	•	•	
Volume and RAID	RAID Controller	Single (Integrated)	Single (Integrated)	Single (Module)
	RAID Support	0,1,10,5 or JBOD	0, 1, 5, 5+Spare, 6	0, 1, 5, 6, 10, and JBOD
	Target Nodes	64	64	64
	Hot-Swappable Drives	•	•	•
	Free Space Defragmentation	•	•	•
	S.M.A.R.T.	•	•	•
	Thin Provisioning	•	•	•
	Volume Snapshots	•	•	•
Storage Management	Virtual Disks	•	•	•
	Web-Based GUI	HTTP, HTTPS	HTTP, HTTPS	HTTP, HTTPS
	Easy Search Utility	•	•	•
	Firmware Upgradable	•	•	•
	Email Alerts	•	•	•
Physical and Environmental	SNMP	•	•	•
	Display	•	•	
	Power Supply Supply Type	External	Internal	Internal, 226 Ws (Redundant, 80 PLUS Certified)
	Dimensions	205 x 162 x 258 mm	273 x 167 x 260 mm	429 x 442 x 44 mm
	Operating Temperature	0 to 40 °C (32 to 104 °F)	0 to 40 °C (32 to 104 °F)	5 to 35 °C (41 to 95 °F)
Operating Humidity	5% to 90% (Non-Condensing)	5% to 90% (Non-Condensing)	10% to 85% (Non-Condensing)	

\* Max capacity can be increased with future firmware upgrades

# D-Link Assist



Expect instant help if the unexpected happens

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

## Comprehensive cover available across all D-Link business products

D-Link Assist can be purchased together with any D-Link business product. So whether you're buying switching, wireless, storage, security or IP Surveillance equipment from D-Link, your peace of mind is guaranteed.

D-Link Assist also offers installation and configuration services to get your new hardware working quickly and correctly.

As standard, when you purchase a D-Link product we will exchange it should something go wrong.<sup>1</sup>

## Convenient choice of three service levels to suit your needs

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

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

**D-Link Assist Bronze** - for guaranteed next business day response

## Peace of mind from our award-winning support services

Plug into our network of highly trained specialists who will act quickly to diagnose your problem and take instant corrective action.

## Choose the enhanced service level that is right for you

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

## Get expert help with your installation and configuration

Available on selected products, D-Link Assist can help you get your new hardware up and running with the minimum of fuss.

Installation services include unpacking, quality inspection, interconnection with host server, and installation and integration of software.<sup>2</sup>



<sup>1</sup> Only for the duration of the hardware warranty for as long as the original buyer owns the product. Original proof of purchase may be required.

<sup>2</sup> D-Link products only.



## Benefit from D-Link's global reach and local support

Established in 1986 D-Link has evolved to become a billion dollar global enterprise with 160 offices across 71 countries

With highly trained technicians on standby across Europe you can be sure of the very best in local support, wherever you are

## Dare to compare

D-Link Assist offers remarkable value, service of the highest quality at a very reasonable price. We challenge you to find a more competitive technical support solution

## Why D-Link?

D-Link is one of the world's leading network infrastructure companies, providing a complete end-to-end solution including Switching, Storage, IP Surveillance, Wireless and Security ensuring interoperability, from one vendor, with award winning support.

For nearly 27 years, D-Link has designed, developed and manufactured award winning products. It prides itself on consistently delivering innovative, high performing and intuitive products for businesses.

With D-Link technology you can increase network performance and cut operational costs.

D-Link delivers its extensive range of networking products to organisations and consumers through its global network of channel partners and service providers. It understands the significance of accessing, managing, securing and sharing data and digital content, and has pioneered many IP technologies to deliver a fully integrated Digital Home and business network experience.



### for comprehensive 24-hour support

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



### for prompt same-day assistance

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



### for guaranteed response on the next business day

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

## Longer warranty for longer life. For extra reassurance, D-Link Assist gives you the option of extending warranties on any D-Link business products that you purchase by three years.

D-Link assist is currently available in the following countries: Austria, Belgium, Czech Republic, Denmark, Finland\*, France, Germany, Hungary, Republic of Ireland, Italy\*, Luxembourg, Monaco, The Netherlands, Norway\*, Poland, Portugal\*, San Marino\*, Spain\*, Sweden\*, Switzerland\*, United Kingdom and Vatican.

\* Partial coverage available.

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[www.dlink.com](http://www.dlink.com)

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