

DWL-3140AP
(Sold Separately)



DES-1228P

High-Performance Switching:

- + 24 10/100Mbps Ethernet Ports with 802.3af PoE
- + D-Link Safeguard Engine
- + Unified Wireless Switching
- + IGMP Snooping Support
- + 802.1D Spanning Tree
- + LAG (6 groups / 8 ports)
- + Multi port Port Mirroring
- + 256 802.1Q VLANs
- + 802.1p QoS (4 queues)
- + Broadcast Storm Control
- + 802.1x Port based Authentication
- + Static MAC
- + SNMP v1
- + Smart Console Utility Management
- + GUI Management
- + Manual Port configuration
- + DHCP Client
- + 802.1ab LLDP

Wireless Features

- + WEP, WPA™, WPA2™
- + Access Point Group Management
- + Centralized Firmware Upgrade
- + Access Point Monitoring Alert
- + Access Point Load Balancing
- + Access Point Autodiscovery
- + 802.11g Wireless Connectivity
- + Supports 802.3af PoE
- + Up to 108Mbps (Turbo Mode)
- + WLAN Partition

Web Smart 24-Port 10/100 PoE Wireless Switch, 4 Gigabit Copper, 2 Combo SFP

The DES-1228P Web Smart Switch is a cost-effective solution for small and medium businesses that require basic management features, showcased in a low cost, easy to configure, and GUI managed 'smart' business solution. The DES-1228P comes with 24 10/100BASE-TX Fast Ethernet ports, 4 1000BASE-T copper interfaces for uplinking to Storage Area Network (SAN) devices, servers, or core switching solutions, and 2 combo SFP fiber slots for long haul uplinking via optional 100BASE-FX or 1000BASE-X transceivers. The DES-1228P is more versatile than ever with integrated wireless switching features. Whether the end nodes are a wired PC workstation or a wireless client, such as the Web Smart DWL-3140AP, the entire network can be managed via a single unified wired/wireless platform.

Security

The DES-1228P incorporates advanced mechanisms to detect attacks against the central processing unit of the switch and to take corrective action on the attacking interface. When a Denial of Service attack is waged against the DES-1228P, the D-Link Safeguard Engine prevents overload of the central processor, thus insuring network integrity and maintaining open network bandwidth channels. The DES-1228P also supports 802.1x Authentication, which provides a secure means to allow users to log onto your network. When used in conjunction with a RADIUS server, 802.1x requires each user workstation attached to the DES-1228P to provide a username and password before gaining access to the local area network.

Unified Wireless and Wired¹

Without additional costs or licensing, the administrator of the switch can monitor wired or wireless end nodes via a central web interface. Supporting WEP, WPA, WPA2 authentication, DES-1228P can manage up to 24 access points and up to 200 clients. The unified web smart switch facilitates access point deployment by allowing a set of templates to be created, then distributing the same template to multiple access points via a simple click of a button. With no additional license purchase necessary, the Web Smart Switch supports the

802.11g Web Smart Access Point DWL-3140AP, which has a discrete smoke detector (ceiling-mount) form factor that facilitates deployment. All DWL-3140AP and additional D-Link Web Smart switches can be automatically discovered, allowing network topology and layout to be generated in seconds.

Link Aggregation

The DES-1228P supports static port trunking of up to 6 groups of 8 ports per device. Ports can be combined together to create a fat pipe to a server or a network backbone. To expand the network, you can also make use of link aggregation eliminating bottlenecks between cascaded switches.

802.1Q VLANs

The DES-1228P provides support for 802.1Q VLANs improving security and bandwidth utilization. VLANs work by segmenting broadcast domains, thus reducing network congestion due to constant network broadcasting. In addition, VLANs provide a means of securing each broadcast domain from all others. This in turn prevents users on one VLAN from gaining access to resources on another VLAN.

802.1p Priority Tagging

For mission critical packets, the DES-1228P supports 802.1p priority tagging to ensure expedited delivery. This feature differs from Port-Based QoS in that 802.1p priority tagging allows the administrator to assign and designate the priority of traffic. 802.1p support is ideal for applications such as voice or video traffic so that it is delivered clean and jitter free.

SNMP Management & 802.1D Spanning Tree

The DES-1228P supports SNMPv1. SNMP is a useful tool in managing and controlling SNMP supported network devices. SNMP enables the DES-1228P to be polled to provide valuable information about the status of the unit and send traps on abnormal events. This sharing of vital management information saves time and money. Furthermore, the DES-1228P supports Spanning Tree Protocol, which



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provides protection from unintentional cabling loops forming within a network infrastructure. Loops are dangerous in that they create an unending circle where broadcast and multicast traffic propagate across the network in an endless loop. This creates a storm of traffic that overwhelms the network and brings traffic to a crawl. 802.1D Spanning Tree detects and breaks these loops ensuring network uptime.

IGMP Snooping

IGMP Snooping enables the forwarding of multicast packets such as streaming audio and video without increasing network broadcast congestion. By snooping IGMP registration information within a frame, a list of workstations that have joined the multicast group is created. This list then allows the switch to intelligently forward packets to only the appropriate member workstations.

Smart Console Utility

Included with every DES-1228P is a D-Link exclusive software utility that allows all D-Link smart switches and DWL-3140AP to be discovered automatically with one click of the button.

Managing the DES-1228P has never been easier. Using its built-in browser-based management interface, configuring the switch takes only minutes. With full color graphic pictures, diagrams and easy to understand navigation menus, configuring the DES-1228P with the features you require is as easy as surfing the net. The DES-1228P supports many of today's most sought after features like 802.1P Priority Queuing, 802.1Q VLANs, Port Trunking, 802.1x Authentication, Port Mirroring, SNMP, 802.1d Spanning Tree, Link Aggregation, IGMP Snooping, Broadcast Storm Control, and more.

Technical Specifications

Product Specifications

Switching Capacity	12.8Gbps
Number of PoE Ports	24
Forwarding Mode	Store and Forward
Packet Buffer memory	1MB
SDRAM for CPU	8MB
Flash Memory	Prom 2MB
MAC Address	8K MAC Address Table
IGMP Snooping	Supports 64 multicast groups. Support default flooding for non-joined multicast traffic
802.1D Spanning Tree	Supports per device STP & BPDU forwarding
Static Port Trunk	Supports max 6 groups per device and 8 ports per group
Flow Control	Enabled and disabled
Port Mirroring	Support one-to-one or many-to-one port mirroring
802.1Q	Support 256 static VLAN groups
VLAN Group	Be able to configure VID from 1-4094
802.1p support	4 Queues
802.1x Port-based Access Control	Default 802.1x forwarding
Broadcast Storm Control	Allow specifying the per device threshold in terms of 8Kb ~ 4096Kb per second
Static Mac	Support 256 Static Mac entries
D-Link Safeguard Engine	Protect CPU from Broadcast/Multicast/Unicast flooding
Web-based GUI	Compatible with IE, Netscape, Mozilla, Firefox, Opera, Safari browsers
SNMP v1	Configurable Community setting, SNMP Trap
DHCP client	Supports DHCP IP Address for System Interface



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802.1ab LLDP	Enabled and disabled
Switch Discovery	Up to 256 agents/switches
Port Setting	Can set Speed, Duplex mode, Flow Control
Configuration Backup/Restore	Via Web GUI
Reboot	Via Web GUI

Wireless Switching Features

Central AP Management	Monitor AP status and wired ports in the same graphic interface
AP Group Management	Maintain a set of setting templates that simplify the task to assign the same settings to multiple APs
Log	System log; Operator action log; SNMP trap log of AP and switch
Syslog Alert	BSD syslog client; adjust send syslog frequency and syslog condition
Central Firmware Upgrade	Select multiple APs and upgrade their firmware at the same time
Alert	Summarize abnormal status in the alert window
AP Topology Monitor	List monitored devices; periodic update on device status
Zero Configuration	One-click technology to restore broken AP's setting onto its replacement AP
AP Life Check	Real time tracking monitors APs status
AP User Statistics	Maintain all wireless clients connection history and depict statistics in diagrams
AP Traffic Statistics	Maintain all APs traffic history and depict statistics in diagrams
AP Load Balance	Allow to set a group of managed APs to share their loading
WLAN Partition	If enabled, WLAN clients are not allowed to exchange data through the DWL-3140AP

Interface Options

RJ-45 (24 x 10/100BaseT ports & 4 1000Base-T ports)	IEEE 802.3 compliance
	IEEE 802.3u compliance
	IEEE 802.3x Flow Control support for Full-Duplex mode, Back Pressure when in Half-Duplex mode
SFP LC	IEEE 802.3z compliance

Network Management

In & Out of Band	HTTP, SNMP v1
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Physical & Environment

AC Input	100-240 VAC, 50/60Hz Internal universal power supply
Operation Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	14°F to 158°F (-10°C to 70°C)
Humidity	Operation: 10% ~ 90% RH Storage: 5% ~ 90% RH
Power consumption	222 Watts Maximum
PoE Budget	170 Watts Maximum
Heat Dissipation	757.51 btu/hr Max



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Dimension	19-inch, 1U Rack-mount size 17in x 4.25in x 1.73in (440 mm x 140 mm x 44mm)
Emission (EMI) and Safety Certifications	
EMI-EMC Compliance:	FCC class A, CE Class A,VCCI Class A
Safety Compliance	cUL, UL
Warranty Information	
Warranty	Limited Lifetime ²
Ordering Information	
<i>Part Number</i>	<i>Description</i>
DES-1228P	Web Smart 24-Port 10/100 PoE Wireless Switch 4 Gigabit Copper, 2 Combo SFP
DEM-310GT	1000Base-LX SFP Module up to 10km
DEM-311GT	1000Base-SX SFP Module up to 550m
DEM-211	100BASE-FX Multi/Mode LC SFP Transceiver, up to 2km

¹ Firmware v.1.20.08 and later

² Limited Lifetime Warranty available only in the USA and Canada