

Trap & Logs

- SNMP Trap supports link and STP state change
- Trap for SmartConsole Utility

Online Help

- Link to local support web site
- Downloadable user guide
- Real-time manual checks

16/24/48-Port Web Smart Switch

Versatile Management

The DGS-1210 series provides a SmartConsole utility and a web-based management interface that enables administrators to remotely control their network down to the port level. The SmartConsole easily allows customers to discover multiple D-Link Web Smart Switches within the same L2 network segment. With this utility, users do not need to change the IP address of their PC and it also provides an easy initial setting of the Smart Switches. Switches within the same L2 network segment that are connected to the user's PC are displayed on screen for instant access. This allows extensive switch configuration settings and basic configuration of discovered devices such as password changes and firmware upgrades. The DGS-1210 Series also supports D-View 6.0 and

Compact Command Line Interface (CLI) through Telnet. D-View 6.0 is a Network Management System that allows for the central management of critical network characteristics such as availability, reliability, resilience, and security in a consistent way. CLI management of the switches is possible via Telnet. This makes the adjustment of basic settings like password changes or firmware and configuration file uploads possible.



16/24/48-Port Web Smart Switch

Technical Specifications

General

Port Standards & Functions	▪ IEEE 802.3 10BASE-T Ethernet (twisted-pair copper) ▪ IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper) ▪ IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper) ▪ Auto-negotiation ▪ IEEE 802.3x Flow Control
Number of Ports	▪ DGS-1210-16: 12 10/100/1000Mbps, 4 combo 10/100/1000BASE-T/SFP ▪ DGS-1210-24: 20 10/100/1000Mbps, 4 combo 10/100/1000BASE-T/SFP ▪ DGS-1210-48: 44 10/100/1000Mbps, 4 combo 10/100/1000BASE-T/SFP
Network Cables	▪ UTP Cat. 5, Cat. 5e (100 m max.) ▪ EIA/TIA-568 100-ohm STP (100 m max.)
Full/Half Duplex	▪ Full/half duplex for 10/100Mbps speeds ▪ Full duplex for Gigabit speed
Media Interface Exchange	Auto MDI/MDIX adjustment for all twisted-pair ports

Performance

Switching Capacity	▪ DGS-1210-16: 32Gbps ▪ DGS-1210-24: 48Gbps ▪ DGS-1210-48: 96Gbps
Transmission Method	Store-and-forward
MAC Address Table	8K entries per device
MAC Address Update	▪ Up to 256 static MAC entries ▪ Enable/disable auto-learning of MAC addresses
Maximum 64 bytes packet forwarding rate	▪ DGS-1210-16: 23.8 Mpps ▪ DGS-1210-24: 35.7 Mpps ▪ DGS-1210-48: 71.4 Mpps
RAM Buffer	▪ DGS-1210-16: 512KB per device ▪ DGS-1210-24: 512KB per device ▪ DGS-1210-48: 1MB per device

Physical & Environmental

AC Input	100 to 240 VAC 50/60Hz internal universal power supply
Maximum Power Consumption	▪ DGS-1210-16: 17.4W ▪ DGS-1210-24: 24.1W ▪ DGS-1210-48: 59.1W
Standby Power Consumption	▪ DGS-1210-16: 4.9W/110V, 5W/240V ▪ DGS-1210-24: 6W/110V, 6.2W/240V ▪ DGS-1210-48: 19.2W/110V, 20.1W/240V
Fan Quantity	▪ DGS-1210-16: 0 ▪ DGS-1210-24: 0 ▪ DGS-1210-48: 2 smart fans (default fan speed is low, fans switch to high speed automatically at 33 degrees Celsius ambient temperature)
Acoustics	▪ DGS-1210-16: 0dBA ▪ DGS-1210-24: 0dBA ▪ DGS-1210-48: 46.2dBA (max.)



16/24/48-Port Web Smart Switch

Heat Dissipation	▪ DGS-1210-16: 59.23 BTU/hr ▪ DGS-1210-24: 82.23 BTU/hr ▪ DGS-1210-48: 201.65 BTU/hr
Operating Temperature	0° to 40° C
Storage Temperature	-10° to 70° C
Operating Humidity	10% to 95% non-condensing
Storage Humidity	5% to 95% non-condensing
Dimensions	▪ DGS-1210-16: 440 mm x 210 mm x 44mm ▪ DGS-1210-24: 440 mm x 210 mm x 44mm ▪ DGS-1210-48: 440 mm x 250 mm x 44 mm ▪ 19-inch standard rack mounting width, 1U height
Weight	▪ DGS-1210-16: 2.87 kg ▪ DGS-1210-24: 2.97 kg ▪ DGS-1210-48: 4.04 kg
Diagnostic LEDs	▪ Power (Per device) ▪ Fan error (Per device, optional) ▪ Link/Activity/Speed (Per 10/100/1000Mbps port) ▪ Link/Activity/Speed (Per SFP port)
Emission (EMI)	▪ FCC Class A ▪ CE Class A ▪ IC Class A ▪ VCCI Class A ▪ C-Tick
MTBF	▪ DGS-1210-16: 799,491 hrs ▪ DGS-1210-24: 410,948 hrs ▪ DGS-1210-48: 322,402 hrs
Safety	cUL, LVD

Software Features

L2 Features

- MAC Address Table
 - DGS-1210-16: 8K
 - DGS-1210-24: 8K
 - DGS-1210-48: 8K
- Flow Control
 - 802.3x Flow Control
 - HOL Blocking Prevention
- IGMP Snooping
 - IGMP v1/v2 Snooping
 - Support 256 IGMP groups
 - Supports at least 64 static multicast addresses
 - IGMP per VLAN
 - Supports IGMP Snooping Querier
- Spanning Tree Protocol
 - 802.1D STP

- 802.1w RSTP
- Loopback Detection
- 802.3ad Link Aggregation
 - DGS-1210-16: Max. 8 groups per device/8 ports per group
 - DGS-1210-24: Max. 8 groups per device/8 ports per group
 - DGS-1210-48: Max. 8 groups per device/8 ports per group
- Port Mirroring
 - One-to-One
 - Many-to-One
 - Supports Mirroring for Tx/Rx/Both
- Cable Diagnostics
- Configurable Auto MDI/MDIX
- Multicast Filtering

- Forwards all unregistered groups
- Filters all unregistered groups

VLAN

- 802.1Q
- VLAN Group
 - Max. 256 static VLAN groups
 - Max. 4094 VIDs
- Management VLAN
- Asymmetric VLAN
- Auto Voice VLAN
 - Max. 10 user defined OUI
 - Max. 8 default OUI

QoS (Quality of Service)

- 802.1p Quality of Service



16/24/48-Port Web Smart Switch

- 4 queues per port
- Queue Handling
 - Strict
 - Weighted Round Robin (WRR)
- CoS based on
 - 802.1p Priority Queues
 - DSCP
- Bandwidth Control
 - Port-based (Ingress/Egress, min. granularity 64Kb/s)

Access Control List (ACL)

- Max. 50 profiles
- Max. 240 rules shared by profiles
- ACL based on
 - MAC Address
 - IPv4 Address (ICMP/IGMP/TCP/UDP)
 - VLAN ID
 - 802.1p Priority
 - DSCP
- ACL Actions
 - Permit
 - Deny

Security

- 802.1X
- Port Security
 - Supports up to 64 MAC addresses per port
- Broadcast/Multicast/Unicast Storm Control
- Static MAC
- D-Link Safeguard Engine
- DHCP Server Screening*
- ARP Spoofing Prevention*
 - Max. 64 entries

- SSL*
 - Supports v1/v2/v3
 - Supports IPv4

MIB

- 1213 MIB II
- 1493 Bridge MIB
- 1907 SNMP v2 MIB
- 1215 Trap Convention MIB
- 2233 Interface Group MIB
- D-Link Private MIB

RFC Standard Compliance

- RFC 768 UDP
- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 826 ARP
- RFC 854 Telnet Server
- RFC 855 Telnet Server
- RFC 856 Telnet Binary Transmission
- RFC 858 Telnet Server
- RFC 896 Congestion Control in TCP/IP Network
- RFC 903 Reverse Address Resolution Protocol
- RFC 951 BootP Client
- RFC 1155 MIB
- RFC 1157 SNMP v1
- RFC 1191 Path MTU Discovery
- RFC 1212 Concise MIB Definition
- RFC 1213 MIB II, IF MIB
- RFC 1215 Traps for use with the SNMP
- RFC 1239 Standard MIB
- RFC 1350 TFTP

- RFC 1493 Bridge MIB
- RFC 1519 CIDR
- RFC 1945 HTTP/1.0
- RFC 2131 DHCP
- RFC 2132 DHCP Options and BOOTP Vendor Extensions
- RFC 2138 Radius Authentication
- RFC 2233 Interface MIB
- RFC 2578 Structure of Management Information Version 2 (SMIv2)
- RFC 2647 802.1p
- RFC 3416 SNMP
- RFC 3417 SNMP

Management

- Web-based GUI
- Compact CLI through Telnet
- Telnet Server
- TFTP Client
- SNMP
 - Supports v1/v2/v3*
- SNMP Trap
- Trap for SmartConsole Utility
- System Log
 - Max. 500 log entries
 - Supports IPv4 log server
- BootP/DHCP Client
- Time Setting
 - SNTP

* Available in future release



16/24/48-Port Web Smart Switch

Optional Products

Optional SFP Transceivers

DEM-310GT	1000BASE-LX, Single-mode, 10km
DEM-311GT	1000BASE-SX, Multi-mode, 550m
DEM-312GT2	1000BASE-SX, Multi-mode, 2km
DEM-314GT	1000BASE-LX, Single-mode, 50km
DEM-315GT	1000BASE-LX, Single-mode, 80km
DEM-210	100BASE-FX, Single-mode, 15km
DEM-211	100BASE-FX, Multi-mode, 2km

Optional WDM SFP Transceivers

DEM-220R	100BASE-BX, Wavelength Tx:1550nm Rx:1310nm, Single-mode, 20km
DEM-220T	100BASE-BX, Wavelength Tx:1550nm Rx:1310nm, Single-mode, 20km
DEM-330T	1000BASE-LX, Wavelength Tx:1550nm Rx:1310nm, Single-mode, 10km
DEM-330R	1000BASE-LX, Wavelength Tx:1310nm Rx:1550nm, Single-mode, 10km

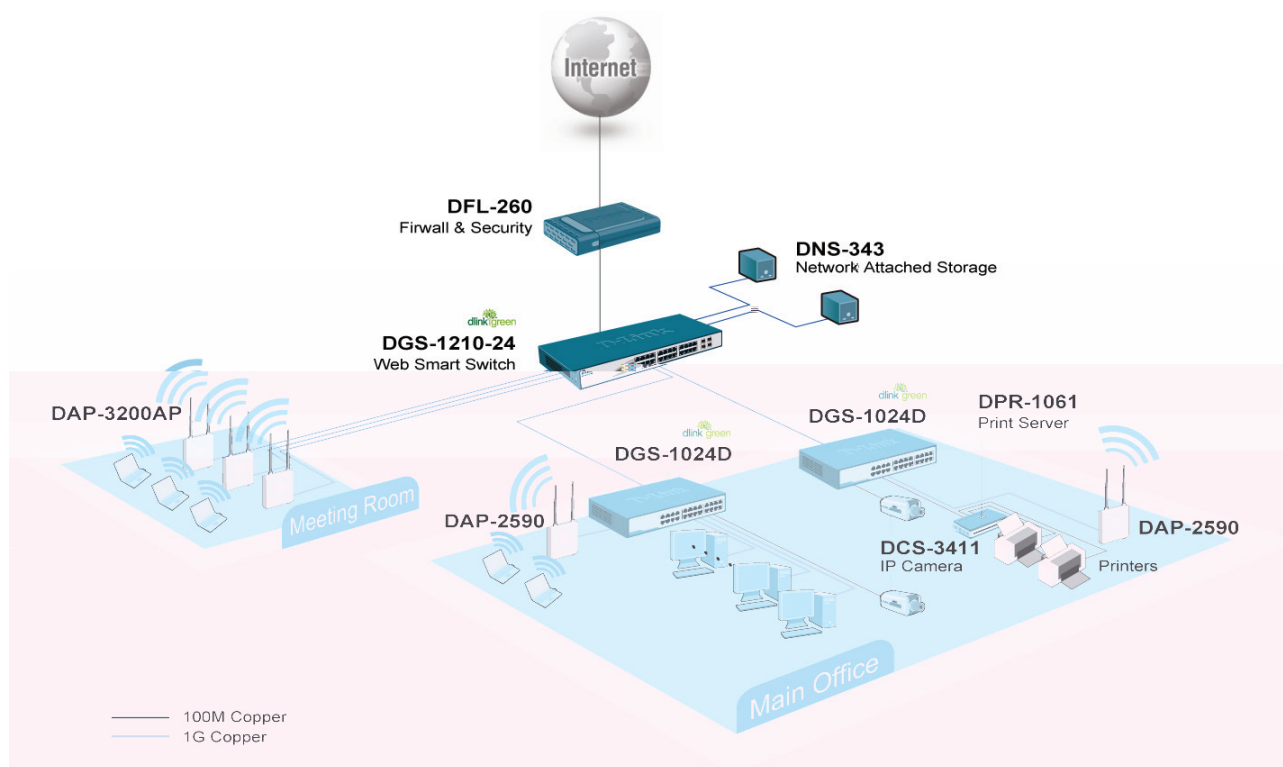
DEM-331T

1000BASE-LX, Wavelength Tx:1550nm
Rx:1310nm, Single-mode, 40km

DEM-331R

1000BASE-LX, Wavelength Tx:1310nm
Rx:1550nm, Single-mode, 40km

Deploying the DGS-1210 Series in an Office Environment



D-Link Corporation
No. 289 Xinhua 3rd Road, Neihu, Taipei 114, Taiwan
Specifications are subject to change without notice.
D-Link is a registered trademark of D-Link Corporation and its overseas subsidiaries.
All other trademarks belong to their respective owners.
©2009 D-Link Corporation. All rights reserved.
Release 01 (December 2009)