

DIGISOL L2 Gigabit Dual Stack Intelligent Switches

DG-GS4200 Series

Key Features:-

- · Green Energy
- · Simple and Flexible Operation and Maintenance
- · Enhanced Security
- · High Reliability
- · High adaptability VLAN Features
- · Abundant Multicast Features



Introduction:-

DIGISOL DG-GS4200 Series switches are cost effective series of Layer 2 Gigabit intelligent switches. It supports comprehensive QoS, enhanced VLAN functions (VLAN, VPN, Voice VLAN, QinQ, N:1 VLAN Translation etc), Ethernet Ring Protection Protocol (G.8032), classified bandwidth control, intelligent security control, OAM(Operations, Administration and Maintenance), manageability functions and Triple-Play services which fulfill enterprise-class campus or branch applications.

DG-GS4200 Series switch offers green features like IEEE 802.3az (Energy Efficient Ethernet), Fan-less design feature, which can dramatically lower power consumption, achieve green energy and save the cost for the users.

DG-GS4200 Series have 2 types including DG-GS4228 and DG-GS4228P equipped with the full GE ports and 4 SFP uplink ports, the series integrates advanced management and security functions to provide performance and scalability.

Key Features and Benefits:-

Green Energy

DG-GS4200 series comply with IEEE 802.3az (Energy-Efficient Ethernet) standard, dramatically lower power consumption. With Innovative port-LED Shut-off function, the user can automatically set the switch port-LED UP or DOWN at a specified time period according to their needs to achieve functional, energy-saving correct results. DG-GS4200 uses Fan-less Design and Smart fan strategies to real-time temperature monitoring system, and reduce the noise pollution.

· Simple and Flexible Operation and Maintenance

VCT (Virtual Cable Test), DDM (Digital Diagnostic Monitoring) and other features achieve rapid detection of the network failures; reduce operation and maintenance difficulty.

Enhanced Security

DG-GS4200 series provide a variety of security mechanisms like SYN Flood, Land, ICMP Flood attack prevention and other DOS class technology, BPDU Guard and Root Guard which avoid accidental topology loops and preventillegal edge devices become root to cause unnecessary flapping.

IEEE 802.1X port-based access control ensures all users are authorized before being granted access to the network. User authentication is carried out using any standard-based RADIUS server.

 $Access \, Control \, Lists \, (ACLs) \, can \, be \, used \, to \, restrict \, access \, to \, sensitive \, network \, resources \, by \, denying \, packets \, and \, forward \, by \, different \, policies. \, User-defined \, ACL \, provides \, more \, flexible \, access \, control \, for \, users.$

DG-GS4200 series support DHCP snooping, which prevents DHCP attacks and illegal DHCP SERVER by setting trust ports and untrust ports. With DHCP Snooping binding and option82 enabled, it can combine modules like dot1x and ARP, or implement user-access-control independently.

DG-GS4200 series support much more L2 security features such as ARP guard, Anti-ARP scanning, and other ARP and MAC Security technology to protect network security and reliability.



Key Features and Benefits:-

· High Reliability

DG-GS4200 series support 4 Gigabit uplink ports, which could be designed to offer redundant uplinks with various ring protection applications, effectively raised the expansibility and performance of network.

DG-GS4200 series support G.8032 v2 and can be deployed in a variety of complex network topologies.

High adaptability VLAN Features

DG-GS4200 series support 802.1Q and port based VLAN as well as MAC based VLAN, Voice VLAN and Protocol VLAN.

Abundant QinQ technology including Normal QinQ, Selective QinQ, and Flexible QinQ, gives users maximum freedom to configure QinQ policy.

N:1 VLAN Translation feature can translate multiple VLAN tags in the frames from access ports into one specified VLAN Tag. It provides a strong technical support for QoS policy convergence.

Abundant Multicast Features

DG-GS4200 series also support MVR (Multicast VLAN Register), selectively allows traffic to cross between different VLANs for bandwidth and security reasons.

DG-GS4200 series could prevent multicast traffic from flooding via IGMP Snooping, while multicast traffic is only forwarded to ports associated to multicast devices.

Hardware Features

ITEM	DG-GS4228	DG-GS4228P
Ports	24 x 10/100/1000Base-T + 4 x 100/1000Base-X (SFP)	24 x 10/100/1000Base-T + 4 x 100/1000Base-X (SFP)
Performance		
Switching Capacity	56Gbps	56Gbps
Throughtput	41.7Mpps	41.7Mpps
Flash	32MB	32MB
RAM	256MB	256MB
MAC address	8K	8K
Jumbo Frame	10K	10K
ACL Table	1408	1408
Queues per port	8	8
VLAN Table	4K	4K
Physical		
Dimension (WxHxD) mm	440 x 43.6 x 160	440 x 43.6 x 260
Power Input	100~240VAC, 50~60Hz	100~240VAC, 50~60Hz
Power Consumption	20W	250W
PoE	NA	IEEE 802.3af POE(15.4W) IEEE 802.3at POE+(30W) PoE Budget: 200W
Operating Temperature	0°C to 50°C	
	-40°C to 70°C	
Relative Humidity	5% to 95% , non-condensing	



Technical Specifications:-

MAIN FEATURES

Forwarding

- Store and Forward

VLAN

- Port-based VLAN, IEEE802.1Q,
 Private VLAN, Protocol VLAN,
 Voice VLAN, MAC VLAN
- Normal QinQ, Selective QinQ, Flexible QinQ
- VLAN Translation, N:1 VLAN
 Translation

DHCP

- IPv4/IPv6 DHCP Client, IPv4/IPv6 DHCP Relay
- Option 82, Option 37/38
- IPv4/IPv6 DHCP Snooping, IPv4/IPv6 DHCP Server

Reliability

- 802.1D STP, 802.1W RSTP, 802.1S MSTP
- Root Guard, BPDU Guard, BPDU Forwarding

LACP

- 8 groups / 8 ports

L2 Ring Protection

- MRPP
- ERPS(G.8032)
- Loopback Detection
- Fast Link

Security

- IP ACL, MAC ACL, MAC-IP ACL, User-Defined ACL
- Time Range ACL
- ACL on VLAN interface
- Storm Control based on packets and bytes
- Port Security, MAC Limit based on VLAN and Port
- Anti-ARP-Spoofing, Anti-ARP-Scan, ARP Binding
- ND Snooping
- DAI
- IEEE 802.1x
- Authentication, Authorization, Accounting
- Radius, TACACS+

Multicast

- IGMP v1/v2/v3 snooping, IGMP Fast leave
- MVF
- MLD v1/v2 snooping
- IPv4/IPv6 DCSCM

QoS

- 8 Queues Per Port
- Bandwidth Control
- Flow Redirect
- Classification based on ACL, VLAN ID, COS, TOS, DSCP,
- Policing Based on Port and VLAN
- Single Rate single barrel double color for Policing

- Remark DSCP, COS/802.1p, Precedence, TOS
- SP, WRR, SWRR, DWRR for Scheduling
- Match the IP fragmentation of message

Maintenance and Operation Management

- TFTP/FTP
- CLI, Telnet, Console
- Web/SSL (IPv4/IPv6)
- SSH (IPv4/IPv6)
- SNMPv1/v2c/v3
- SNMP Trap
- Public & Private MIB interface
- RMON 1,2,3,9
- Ping, Trace Route
- Radius Authentication
- Syslog (IPv4/IPv6)
- SNTP/NTP (IPv4/IPv6)
- Multiple Configuration Files
- Port Mirror, CPU Mirror, RSPAN
- VCT, DDM
- ULDP
- LLDP/LLDP MED

Green Energy

- IEEE 802.3az (Energy Efficient Ethernet)
- Fanless design
- LED Shut-off











Ordering Information:-

DG-GS4228: L2 Gigabit Intelligent Ethernet Switch with 24x10/100/1000Base-T and 4*100/1000Base-SFP ports DG-GS4228P: L2 Gigabit Intelligent Ethernet PoE Switch with 24x10/100/1000Base-T and 4*100/1000Base-SFP ports

 $*Warranty shall be subject to terms and conditions specified in the {\tt DIGISOLPRODUCTWARRANTY} displayed on the {\tt website} of the company.$

 $DIGISOL\,Logos\,are\,trade marks\,and/or\,registered\,trade marks\,of\,DIGISOL\,SYSTEMS\,LIMITED.\,Other\,trade marks, product, service\,and\,company\,names\,mentioned\,are\,the\,property\,of\,their\,respective\,owners.\,Information\,is\,subject to\,change without notice.\,The\,actual\,product\,appearance\,may\,differ\,from\,the\,one\,shown\,here.\,©\,2022\,DIGISOL\,SYSTEMS\,LIMITED.\,\,All\,rights\,reserved.$

DIGISOL is a Subsidiary of Smartlink Holdings Limited







