SWITCHING SOLUTIONS

DIGISOL Data Center Switches Family

DG-GS4900SE Series

5 YEARS WARRANTY

Key Features:-

- Performance and Scalability
- Rich L3 Features
- Strong Multicast
- Comprehensive QoS
- Enhanced Security

Introduction:-

DIGISOL DG-GS4900SE series next-generation Layer 3 switch from DIGISOL with advanced architecture and, built-in modular 1+1 redundant power supplies. These switches provide high availability, scalability, security, energy efficiency, and ease of operation with innovative features such as VSF, IEEE 802.3at optional, redundant power supplies and OpenFlow. It is ideal for high-density aggregation or core layer as its high performance, availability and reliability.

Performance and Scalability

With high switching capacity, DG-GS4900SE series support wire-speed L2/L3 forwarding and high routing performance for IPv4 and IPv6 protocols. The 10 Gigabit Ethernet connectivity is achieved using optional hot-pluggable 10 Gigabit SFP+ transceivers DG-GS4900SE series support modular redundant AC and DC power supplies.

Rich L3 Features

DG-GS4900SE series supports high-performance hardware based IP routing including RIP, OSPF and BGP .

Strong Multicast

DG-GS4900SE series supports multicast features such as IGMPv1/v2/v3 snooping, fast leave, IGMPv1/v2/v3, PIM-DM, PIM-SM, PIM-SSM and even MSDP. With Multicast VLAN Register (MVR), multicast receiver/sender control and illegal multicast source detect functions; DG-GS4900SE series provides great application experience for customer.

Comprehensive QoS

With 8 queues per port, DG-GS4900SE series enable differentiated management of up to 8 traffic types. The traffic is prioritized according to IEEE802.1p, DSCP, IP precedence and TCP/UDP port number, giving optimal performance to real-time applications such as voice and video. DG-GS4900SE series also supports Bi-directional rate-limiting, per port or traffic class, preserves network bandwidth and allows full control of network resources.

Enhanced Security

IEEE 802.1X port-based access control and MAC-based access control ensure all users are authorized before being granted access to the network. Ingress/Egress Access Control Lists (ACLs) can be used to restrict access to sensitive network resources by denying packets based on L2/L3/L4 headers information.

Technical Specifications:–

HARDWARE FEATURES:

	DG-GS4928SE	DG-GS4952SE	DG-GS4928HPSE2	DG-GS4952HPSE	DG-GS4928FSE
Physical Ports	20 x 10/100/1000BaseT + 4 x GE Combo(GT/SFP) + 4 x 10GE(SFP+)	48 x 10/100/1000BaseT + 4 x 10GE(SFP+)	20 x 10/100/1000BaseT + 4 x GE Combo(GT/SFP) + 4 x 10GE(SFP+)	48 x 10/100/1000BaseT + 4 x 10GE(SFP+) + 2 x Dedicated Stacking port	16 x GE Combo(GT/SFP) + 8 x GE(SFP) + 4 x 10GE(SFP+) + 2 x Dedicated Stacking port
Management Port	10/100/1000Mbps RJ45 Ethernet Management port				
	1 Console port (Micro USB for DG-GS4952HPSE / RJ45 for others)				
	USB2.0 interface				
Performance					
Switching Capacity	128Gbps	176Gbps	128Gbps	256Gbps	208Gbps
Throughtput	95Mpps	131Mpps	95Mpps	191Mpps	155Mpps
MAC Address	16K	16K	16K	32K (upto 64K)	32K (upto 64K)
Routing Table	Max 13K	Max 13K	Max 13K	16K	16K
L3 Interface	Max 1K	Max 1K	Max 1K	Max 1K	Max 1K
Physical					
Dimension (W*H*D)	440 x 44 x 350 (mm)	440 x 44 x 350 (mm)	440 x 44 x 350 (mm)	440 x 44 x 350 (mm)	440 x 44 x 350 (mm)
Relative Humidity	10%~90% non-condensing				
Temperature	Working 0°C~50°C, storage -40°C~75°C				
Power Supply	2 power slots, 1+1 Modular Redundant				
PoE	NA	NA	IEEE 802.3af (15.4W) IEEE 802.3at (30W) Total PoE power: 370W	IEEE 802.3af (15.4W) IEEE 802.3at (30W) IEEE 802.3bt (60W) (up to 8 ports) Total PoE power: 740W	NA

MAIN FEATURES:

L1, L2 Features
- IEEE802.3(10Base-T),
- IEEE802.3u(100Base-TX),
- IEEE802.3z(1000BASE-X),
- IEEE802.3ab(1000Base-T),
- IEEE802.3ae(10GBase), IEEE802.3x,
- IEEE802.3ak(10GBASE-CX4)
- Port loopback detection
- LLDP and LLDP-MED
- UDLD
- 802.3ad LACP, max 128 group trunks with max 8 ports for each trunk
- LACP load balance
- N:1 Port Mirroring
- RSPAN
- ERSPAN
- IEEEE802.1d(STP)
- IEEEE802.1w(RSTP)
- IEEEE802.1s(MSTP)
- Root Guard
- BPDU Guard
- BPDU Tunnel
- 802.1Q, 4096 VLAN

- MAC VLAN, Vocie VLAN, PVLAN, Protocol VLAN, Multicast VLAN
- QinQ, Selective QinQ, Flexible QinQ
- GVRP
- N:1 VLAN Translation
- Broadcast/Multicast/Unicast Storm Control
- IGMP v1/v2/v3 Snooping & L2 Query
- ND Snooping
- MLDv1/v2 Snooping
- Port Security
- Flow Control: HOL, IEEE802.3x
- Bandwidth Control

L3 Features
- Static Routing, RIPv1/v2, OSPFv2, BGP4
- OSPFv3, BGP4+
- OSPF multiple process
- LPM Routing
- Policy-based Routing(PBR) for IPv4 and IPv6
- VRRP

- URPF
- ECMP
- BFD
- IGMP v1/v2/v3, IGMP Proxy,
- DVMRP, PIM-DM, PIM-SM, PIM-SSM, Any Cast RP, MSDP
- Static Multicast Route
- Multicast Receive Control
- Illegal Multicast Source Detect
- ARP Guard, Local ARP proxy, Proxy ARP, ARP Binding, Gratuitous ARP, ARP Limit
- Anti ARP/NDP Cheat, Anti ARP/NDP Scan
- DNS Client, DNS Relay
- GRE Tunnel

IPv6
- 6to4 Tunnel, Configured Tunnel, ISATAP Tunnel, GRE Tunnel
- ICMPv6, ND, DNSv6
- IPv6 LPM Routing,IPv6 Policy-based Routing(PBR)

Technical Specifications:-

- IPv6 VRRPv3, IPv6 URPF, IPv6 RA
- RIPng, OSPFv3, BGP4+
- MLD Snooping,IPv6 Muticast VLAN
- MLDv1/v2, PIM-SM/DM for IPv6,
- IPv6 Any Cast RP, IPv6 ACL, IPv6 QoS

QoS

- 8 Queues
- SP, WDRR, SWDRR, WRED
- Traffic Classification Based on 802.1p COS, ToS, DiffServ DSCP, ACL, Port number
- Traffic Policing
- PRI Mark/Remark

ACL

- IP ACL, MAC ACL, IP-MAC ACL
- Standard and Expanded ACL Based on source/destination IP or MAC, IP Protocol, TCP/UDP port, DSCP, ToS, IP Precedence, VLAN, Tag/Untag, CoS

- REDIRECT and Accounting based ACL
- Rules can be configured to port, VLAN, VLAN routing interfaces
- Time Ranged ACL

Security

- 802.1x AAA
- Port, MAC based authentication
- Accounting based on time length & traffic
- Guest VLAN and auto VLAN
- RADIUS for IPv4 and IPv6
- TACACS+ for IPv4 and IPv6
- MAB

DHCPv4/v6

- DHCP Server/Client for IPv4/IPv6
- DHCP Relay/Option 82
- DHCP Snooping/Option 82

Traffic Monitor

- sFlow Traffic Analysis
- IPFIX

Security Network Management

- CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6
- Syslog and external Syslog Server
- HTTP SSL
- SNMP MIB, SNMP TRAP
- FTP/TFTP
- SNTP/NTP
- RMOM 1,2,3,9
- Authentication by Radius/TACACS
- SSH v1/v2
- Dual firmware images/ Configuration files
- 802.3ah OAM, 802.1ag OAM

Data Center Features

- VSF(Virtual Switch Framework)*
- Openflow1.0*

The contents marked with "*" need future upgrade or are under development

Ordering Information:-

DG-GS4928SE-B2: DIGISOL 24 Port 10/100/1000Mbps Layer 3 Switch includes 4 Gigabit Combo ports , additional 4 x 1G/10G SFP+ ports. Default 2 Fixed AC Power Supply. Supports OSPFv2/v3,BGP4+,VRRP

DG-GS4952SE-B2: DIGISOL 48 Port 10/100/1000Mbps Layer 3 Switch with additional 4 x 1G/10G SFP+ ports. Default 2 Fixed AC Power Supply. Supports OSPFv2/v3, BGP4+, VRRP

DG-GS4928HPSE2-B1: DIGISOL 24 Port 10/100/1000Mbps Layer 3 PoE Switch includes 4 Gigabit Combo ports , additional 4 x 1G/10G SFP+ ports. Default 1 AC Power Supply (340W). Supports OSPFv2/v3,BGP4+,VRRP

DG-GS4952HPSE-B1: DIGISOL 48 Port 10/100/1000Mbps Layer 3 PoE Switch includes 4 Gigabit Combo ports , additional 4 x 1G/10G SFP+ ports. Default 1 Fixed AC Power Supply (740W). Supports OSPFv2/v3,BGP4+,VRRP

DG-GS4952HPSE-B2: DIGISOL 48 Port 10/100/1000Mbps Layer 3 PoE Switch includes 4 Gigabit Combo ports , additional 4 x 1G/10G SFP+ ports. Default 2 Fixed AC Power Supply (740W). Supports OSPFv2/v3,BGP4+,VRRP

DG-GS4928FSE-B1: DIGISOL 24 Port 1000Mbps SFP Layer 3 Switch includes 16 Gigabit Combo ports, additional 4 x 1G/10G SFP+ ports, 2 x 20G stacking ports. Supports Dual Hotswappable Power Supplies. (Default Shipped with Single Power Supply) . Supports OSPFv2/v3,BGP4+,VRRP

DG-GS4928FSE-B2: DIGISOL 24 Port 1000Mbps SFP Layer 3 Switch includes 16 Gigabit Combo ports, additional 4 x 1G/10G SFP+ ports, 2 x 20G stacking ports. Supports Dual Hotswappable Power Supplies. (Default Shipped with Dual Power Supply) . Supports OSPFv2/v3,BGP4+,VRRP

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