

DIGISOL 24/ 48 Port Gigabit Ethernet Access Layer 3 Switch

DG-GS4600SE2 Series

Key Features:-

- Green Energy
- High Reliability & Advanced Security Features
- Ethernet Ring Protection Protocol
- Multicast Features



Introduction:-

DIGISOL DG-GS4600SE2 series next-generation 10G stackable routing switch has advanced hardware and software architecture design. These switches provide high availability, scalability, security, energy efficiency, and ease of operation with innovative features such as VSF, IEEE 802.3at. It is ideal for aggregation or access layer as its high performance, availability and reliability.

Key Features and Benefits:-

Performance and Scalability

With high switching capacity, DG-GS4600SE2 series support wire-speed L2/L3 forwarding and high routing performance for IPv4 and IPv6 protocols.

• VSF(Virtual Switch Framework)

Virtual Switch Framework can virtualize multiple switches into one logical device, achieving the sharing of information and data tables between different switches. The performance and ports density of virtualized device are greatly enlarged by times under VSF. VSF also simplifies management work for network administrator and provides more reliability.

Rich L3 Features

DG-GS4600SE2 series delivers high-performance, hardware based IP routing. RIP, OSPF and BGP provide dynamic routing by exchanging routing information with other Layer 3 switches and routers. With DG-GS4600SE2 series, customers could easily achieve Policy based Route (PBR), which is important when they need multi exit application.

Strong Multicast

DG-GS4600SE2 series supports abundant multicast features. In Layer 2, such as IGMPv1/v2/v3 snooping and fast leave. L3 multicast routing protocols such as PIM. With Multicast VLAN Register (MVR), multicast receiver/sender control an illegal multicast source detect functions; DG-GS4600SE2 series provides great application experience for customer.

Comprehensive QoS

With 8 queues per port, DG-GS4600SE2 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-GS4600SE2 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 (ACL's) can be used to restrict access to sensitive network resources by denying packets based on L2/L3/L4 headers information. And for some services are based on time, the product can support time based ACL to match the requirement. Secure Shell (SSH) encrypts network management information via Telnet providing secure network management. RADIUS Authentication enables centralized control of the switch and restricts unauthorized users from altering the configuration of the switch. SWITCHING SOLUTIONS

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Hardware Features

	DG-GS4628SE2	DG-GS4652SE2	DG-GS4628HPSE2	DG-GS4652HPSE
Physical Ports	24 x10/100/1000BaseT	48 x10/100/1000BaseT	20 x10/100/1000BaseT	48 x10/100/1000BaseT
Management Ports	1 x RJ45 Ethernet Management port			
	1 x Console port			
	1 x USB2.0 interface			
Switching Capacity	128Gbps	176Gbps	128Gbps	176Gbps
Throughtput	95Mpps	131Mpps	95Mpps	131Mpps
MAC address	16K	16K	16K	16K
Jumbo Frame	10K	10K	10K	10K
ARP Table	4K	4K	4K	4К
Routing Table	1K	1K	1K	1K
ACL Table	1K	1K	1K	1K
Dimension (WxHxD) mm	440 x 44 x 240	440 x 44 x 240	440 x 44 x 320	440 x 44 x 320
Power Consumption	<30 W	<50 W	<440 W	<897 W
Power Supply				AC: 100~240VAC, 50~60Hz + 48VDC RPS
PoE	NA	NA	IEEE 802.3af IEEE 802.3at Total PoE Power: 370 W	IEEE 802.3af IEEE 802.3at Total PoE Power: 740 W
Operating Temperature	0°C to 50°C			
Storage Temperature	-40°C to 70°C			
Relative Humidity (non-condensing)	10% to 90%, Storage 95%			

Technical Specifications:-

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

- IP Source Guard
- MRPP
- 802.1Q, 4K VLAN
- MAC VLAN, Voice 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 and 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,
- 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. Dynamic ARP Inspection (DAI)
- 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)

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Technical Specifications:-

- IPv6 VRRPv3,IPv6 URPF,IPv6 RA
- RIPng,OSPFv3,BGP4+
- MLD Snooping, IPv6 Multicast VLAN
- MLDv1/v2, IPv6 ACL, IPv6 QoS

QoS

- 8 Queues
- SP, WDRR, SWDRR
- 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 authenticationAccounting based on time length
- and traffic
- Guest VLAN and auto VLAN
- RADIUS for IPv4 and Ipv6
- TACACS+ for IPv4 and Ipv6
- MAB

DHCPv4/v6 Traffic Monitor

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

Traffic Monitor

- sFlow Traffic Analysis

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)

GREEN Features

- IEEE 802.3az
 - (Energy Efficient Ethernet)
- Auto FAN Speed Control,
- Temperature Alarm
- LED Shut-Off
- * Feature available in Future Upgrade



Ordering Information:-

DG-GS4628SE2: DIGISOL 24 Port Gigabit Ethernet Access Layer 3 Switch DG-GS4652SE2: DIGISOL 48 Port Gigabit Ethernet Access Layer 3 Switch DG-GS4628HPSE2: DIGISOL 24 Port Gigabit Ethernet PoE Access Layer 3 Switch DG-GS4652HPSE: DIGISOL 48 Port Gigabit Ethernet PoE Access Layer 3 Switch, AC+48VDC RPS

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