DIGISOL
SWITCHING SOLUTIONS

1st INDIAN BRAND IN IT NETWORKING

DIGISOL 48 Port Gigabit Ethernet Access Layer 3 PoE Switch with 4 10 Gigabit SFP+ Uplink Ports

DG-GS4652HPSE

5 YEARS WARRANTY*

Key Features:-

- Green Energy
- High Reliability & Advanced Security Features
- Ethernet Ring Protection Protocol
- Multicast Features
- 10G SFP+ Support
- 19" Rack Mountable

Introduction:-

DIGISOL DG-GS4652HPSE 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-GS4652HPSE 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-GS4652HPSE 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-GS4652HPSE, customers could easily achieve Policy based Route (PBR), which is important when they need multi exit application.

- **Strong Multicast**
  DG-GS4652HPSE 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-GS4652HPSE2 provides great application experience for customer.

- **Comprehensive QoS**
  With 8 queues per port, DG-GS4652HPSE 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-GS4652HPSE 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.

Hardware Features

	DG-GS4652HPSE
Physical Ports	48 x10/100/1000BaseT + 4 x 10GE (SFP+)
Management Ports	1 x RJ45 Ethernet Management port
	1 x Console port
	1 x USB2.0 interface
Switching Capacity	176Gbps
Throughtput	131Mpps
MAC address	16K
RAM	512MB
Flash	32MB SPI + 128MB NAND
Jumbo Frame	10K
ARP Table	4K
Routing Table	1K
ACL Table	1K
Dimension (WxHxD) mm	440 x 44 x 320
Power Consumption	<897 W
PoE	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)

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
- SWRR, SP, DWRR, SDWRR
- 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 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

PoE HP | 1000 Mbps | S-flow | IPV6 | L3

Rear View :

Ordering Information:-

DG-GS4652HPSE: DIGISOL 48 Port Gigabit Ethernet PoE Access Layer 3 Switch with 4 10 Gigabit SFP+ Uplink.
Power supply AC + 48V DC, PoE: 740W

DIGISOL is a Subsidiary of Smartlink Holdings Limited