

DIGISOL Data Center Switches Family

DG-GS4928FSE-B2

Key Features:-

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



Introduction:-

DIGISOL DG-GS4928FSE-B2 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, 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-GS4928FSE-B2 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-GS4928FSE-B2 support modular redundant AC powersupplies.

Rich L3 Features

 ${\sf DG-GS4928FSE-B2} \ supports \ high-performance \ hardware \ based \ IP\ routing\ including\ RIP, OSPF and\ BGP.$

Strong Multicast

DG-GS4928FSE-B2 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-GS4928FSE-B2 provides great application experience for customer.

Comprehensive QoS

With 8 queues per port, DG-GS4928FSE-B2 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-GS4928FSE-B2 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-GS4928FSE-B2	
Physical Ports	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 (RJ45)	
	USB2.0 interface	
Performance		
Switching Capacity	208Gbps	
Throughtput	154.75Mpps	
MAC Address	32K (upto 64K)	
Routing Table	16K	
L3 Interface	Max 1K	
Physical		
Dimension (W*H*D)	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	

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)
- 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



Technical Specifications:-

QoS

- 8 Queues
- SWRR, SP, DWRR, SDWRR, 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

Rear View













Ordering Information:-

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

*Warranty shall be subject to terms and conditions specified in the DIGISOL PRODUCT WARRANTY displayed on the website of the company.

DIGISOL Logos are trademarks and/or registered trademarks of DIGISOL SYSTEMS LIMITED. Other trademarks, 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. © 2023 DIGISOL SYSTEMS LIMITED. All rights reserved.

DIGISOL is a Subsidiary of Smartlink Holdings Limited





