



DIGISOL®

SWITCHING SOLUTIONS

DIGISOL 100G Datacenter Switch

DG-CS4554FF-28/IS

Key Features:-

- High Performance and scalability
- High Reliability
- VSF (Virtual Switch Framework)
- Flex Resource
- Rich L3 Features
- MPLS/VPLS
- Abundant IPv6 Support
- Strong Multicast
- 19 inch rack mount model
- 5+1 redundant fans
- 1+1 modular hot redundant power supplies



Introduction:-

DIGISOL DG-CS4554FF-28/IS datacentre 100G switch uses advanced hardware and software architecture design, support built-in modular 1+1 redundant power supplies, 5+1 redundant fans DG-CS4554FF-28/IS is ideal for cloud computing datacenter TOR or spine switches of datacenter. For campus or other large network, DG-CS4554FF-28/IS could also be deployed at aggregation or core layer as its high performance and reliability. Switch maintains a track of the records, logs in the NVRAM trace area for problem analysis to help diagnose the fault in the system through comprehensive debugging features. Built in power on diagnostics system is used to detect failures in hardware if any.

High Performance and scalability

With high switching capacity, DG-CS4554FF-28/IS supports wire-speed and Non-blocking L2/L3 forwarding and high routing performance for IPv4 and IPv6 protocols. The 25G/10G Ethernet connectivity of DG-CS4554FF-28/IS is accomplished via a hot-pluggable 25G/10G SFP28/SFP+

High Reliability

DG-CS4554FF-28/IS support modular 1+1 redundant power supplies and 5+1 redundant fans. Business won't be interrupted in case replacing power supplies and fans. System supports dual images. Even though the primary image was destroyed, system will still boot via backup image normally.

VSF (Virtual Switch Framework)

As new generation data centre switch, DG-CS4554FF-28/IS supports VSF which not only guarantees the flexibility, but also enhanced the scalability of datacentre network. Stacking of 2 units on either 40G or 100G ports. VSF Stacking bandwidth of upto 80Gbps. A single IP can be used to manage upto 30 switching in a single stack.

Flex Resource

Flex Resource is able to allocate, recover and reallocate hardware resource dynamically according to demand. It can increase the utilization of the hardware resource. Switch will support online configuration for L2 features taking effect without having to reboot the switch.

Rich L3 Features

DG-CS4554FF-28/IS 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-CS4554FF-28/IS, customers could easily achieve Policy based Route (PBR), which is important when they need multi exit application. Supports IPv4/v6 dual stack.

MPLS/VPLS

DG-CS4554FF-28/IS supports MPLS, L3VPN/MPLS L2 VPN(VPLS) and helps customer to construct more secure/extendable network. With max.255 VRF instances, DG-CS4554FF-28/IS switch could be deployed as P & PE devices, guarantees the variety of services.



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Abundant IPv6 Support

DG-CS4554FF-28/IS supports IPv6 switching and routing based on hardware for maximum performance. With increased network devices growing and the need for larger addressing and higher security becomes critical, DG-CS4554FF-28/IS will be a right product to meet the requirement.

Strong Multicast

DG-CS4554FF-28/IS supports abundant multicast features such as IGMPv1/v2/v3 snooping and fast leave and 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 detection functions, DG-CS4554FF-28/IS provides great application experience for customer.

Technical Specifications:-

Item	DG-CS4554FF-28/IS
Physical port	48 x 25G/10G (SFP28) + 6x 100G QSFP28 Auto-MDIX
	Console port RJ45
Management port	100/1000Mbps RJ45 Ethernet Management port USB2.0 Management port
LED indicators	Power, Link, Activity (Different color indications for different data transfer speeds - 10G/ 25G/ 40G/ 100G)
Standards supported	IEEE 802.3ae(10GBase), IEEE802.3x, IEEE 802.3bj, IEEE 802.3ak(10GBASE-CX4), IEEE802.3ba, 802.3ax, 802.3ad
Performance	
Switching Capacity	3.6Tbps
Forwarding Rate	2.6Bpps
MAC Address	8K min./104K max with more than 128 con-current. 96K(standard)/32K(route)/288K(bridge)
ARP Table	8K min./32K max.
Multicast MAC Table	8K Self-learning of unicast and multicast addresses and associated vlans
Routing Table	8K min./128K max.
Physical	
Dimension(W*H*D)	438mm*44mm*473mm
Relative Humidity	5%~95% non-condensing
Temperature	Working 0°C~45 °C, storage -40°C~70 °C
Power Input	AC: 100~240V,50~60 Hz
Power Supply	1+1 Modular Redundant AC
Main Features	
L1, L2 Features	Port Loopback Detect
	LLDP and LLDP-MED
	UDLD
	12000 bytes Jumbo frame
	802.3ad LACP, 16 groups
	LACP Load Balance
	N:1 Port Mirroring
	RSPAN
	ERSPAN
	IEEE802.1d(STP)
	IEEE802.1w(RSTP)
	IEEE802.1s(MSTP)
	Root Guard
	BPDUGuard



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Technical Specifications:-

Item	DG-CS4554FF-28/IS
	BPDU Tunnel
	802.1Q, 4096 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,
	DVMRP, PIM-DM, PIM-SM, PIM-SSM, any cast RP, MSDP
	Static Multicast Route Multicast Receive Control
	Illegal Multicast Source Detection
	ARP Guard, Local ARP Proxy, Proxy ARP, ARP Binding, Gratuitous ARP, ARP Limit
	Anti ARP Cheat, Anti ARP Scan
	DNS Client
	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 multicast VLAN
	MLDv1/v2, PIM-SM/DM for IPv6, IPv6 Anycast RP, IPv6 ACL, IPv6 QOS
MPLS	MPLS, VRF, LDP
	MPLS L3 VPN, MPLS L2 VPN(VPLS), VPWS
QoS	8 Queues
	SWRR, SP, WRR, DWRR, SDWRR, WRED
	Traffic Classification Based on 802.1p CoS, ToS, DiffServ DSCP, ACL, port number Traffic Shaping
	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



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Technical Specifications:-

Item	DG-CS4554FF-28/IS
Security	REDIRECT and accounting-based ACL
	Rules can be configured to port, VLAN Time ranged ACL
	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
DHCPv4/v6	MAB
	DHCP Server/Client for IPv4/IPv6 DHCP Relay/Option 82
Traffic Monitor	DHCP Snooping/Option 82
	sFlow Traffic Analysis
	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 RMON 1,2,3,9
Security Network Management	Authentication by radius SSH v1/v2
	Multiple privilege level to control CLI and Telnet access
	Interface-wise error statistics
	Detailed view of ARP / MAC tables
	Dual firmware images/ Configuration files
	802.3ah OAM, 802.1ag OAM
MIBs	MIBs: All standard MIBs
Data Center Features	VXLAN MLAG
	Telemetry Netconf
	VSF (Virtual Switch Framework)



Rear View

Ordering Information:-

DG-CS4554FF-28/IS : DIGISOL 100G Datacenter Switch (48*25G/10GbE (SFP28) +6*100GbE (QSFP28)), redundant and modular design, high performance. Full L3 features, Default with two hot-swap AC power supply, Default with 6 (5+1) fans

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

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