DH-S5500-24GF4XF-E

·Intelligent Resilient Framework 2 (IRF2)

·Comprehensive security control policies

·Excellent manageability

·High availability

System Overview

DH-S5500-24GF4XF-E switch is a simple, cost-effective and easy-to-deploy layer 2+ access switching solution. It offers enhanced security, high-density GE and 10GE uplinks, static route, RIP, OSPF and IRF, flexible management, which meet the requirements of SME access, enterprise desktop access and high density campus access.

Functions

Intelligent Resilient Framework 2 (IRF2)
IRF2 provides the following benefits:

High scalability: Plug-n-play device aggregation can be achieved by adding one or more switches into the IRF2 stack and enabling IRF2 stacking on the new device. New devices can be managed with a single IP, and upgraded at the same time to reduce network expansion cost.

High reliability: The IRF2 1:N backup technology allows each sub device in the IRF2 stack to serve as the backup of the main device, creating control and data link redundancy.

Availability: DH-S5500-24GF4XF-E implements IRF2 through standard Gigabit Ethernet (1GE) ports or Ten Gigabit Ethernet (10GE) ports which allocates bandwidth for business and application access and reasonably splits local traffic and upstream traffic. IRF2 rules not only able to be obeyed within and across the rack, but also across the LAN.

Abundant QoS
DH-S5500-24GF4XF-E supports packet filtering at layer 2 through layer 4, and traffic classification based on source MAC addresses, destination MAC addresses, source IP addresses, destination IP addresses, TCP/UDP port numbers, protocol types, and VLANs. It supports flexible queue scheduling algorithms based on ports and queues, including strict priority (SP), weighted round Robin (WRR) and SP+WRR. The DH-S5500-XF-E switch series enables committed access rate (CAR) with the minimum granularity of 8 kbps. It supports port mirroring in the outbound and inbound directions, to monitor the packets on the specific ports, and to mirror the packets to the monitor port for network detection and troubleshooting.

High Availability
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Comprehensive Security Control Policies
DH-S5500-24GF4XF-E supports innovative single-port multi-authentication function, and the access authentication modes supported by different clients are different.

DH-S5500-24GF4XF-E supports SSH V2 (Secure Shell V2) to secure information security, and strong authentication protect the Ethernet network switch from attacks such as IP address spoofing and clear text interception.

ARP attack and ARP virus are major threats to LAN security, so DH-S5500-24GF4XF-E comes with diverse ARP protection functions such as ARP Detection to challenge the legitimacy of client, validate the ARP packets, and set a speed limit for ARP to prevent ARP swarm attacks from targeting CPU.

Technical Specification

Hardware Feature

Ethernet Port	8 x 10/100/1000 Mbps ports (combo)
Optical Port	16 x 100/1000 Mbps Base-X ports + 8 x 100/1000 Mbps Base-X ports (combo) 4 x 1/10 Gbps Base-X ports
Console Port	1
Power Supply	Included
	Single Power
	100–240V AC 50–60 Hz (internal)
Power Consumption	Idling: 18W Full load: 48W (single power) Idling: 23W Full load: 55W (dual power)
Operating Temperature	0°C to 45°C (32°F to 113°F)
Operating Humidity	5%RH–95%RH
Storage Temperature	−40°C to 70°C (−40°F to 158°F)

Performance

Layer	Layer 2+
Managed	Yes
Switching Capacity	336 Gbps
Packet Forwarding Rate	96Mpps
Packet Buffer Memory	12 Mbit
MAC Table Size	16K
VLAN Amount	4094 Entries
ARP Table	1K Entries
IPv4 Routing Table	1024 Entries
QoS Queue	8 Entries
Jumbo Frame	10,000 Byte
ACL Table	1024 Entries (IPV4) 512 Entries (IPV6)

Features

VLAN	Port-based VLAN MAC-based VLAN Protocol-based VLAN QinQ and selective QinQ VLAN mapping Voice VLAN GVRP
Ring Network Protocol	STP/RSTP/MSTP/PVST Smart Link RRPP G.8032 ERPS
DHCP	DHCP client DHCP snooping DHCP snooping option82 DHCP relay DHCP server DHCP auto-config

Port Aggregation	1GE/10GE port aggregation Dynamic aggregation Static aggregation Cross-device aggregation
Mirroring	Port mirroring RSPAN
Multicast	IGMP Snooping/MLD Snooping Multicast VLAN
IRF	Distributed device management, distributed link aggregation, and distributed resilient routing Stacking through standard Ethernet interfaces Local device stacking and remote device stacking
Security	Hierarchical user management and password protection AAA authentication support RADIUS authentication HWTACACS SSH2.0 Port isolation 802.1X authentication, centralized MAC authentication Port security IP Source Guard HTTPs
ACL/QoS	Port rate limit (receiving and transmitting) Packet redirection Committed access rate (CAR) Eight output queues on each port Flexible queue scheduling algorithms based on ports and queues, including SP, WRR and SP+WRR 802.1p DSCP remarking
System Maintenance	Debugging information output Ping, Tracert Telnet remote maintenance NQA DLDP Virtual cable test
Network Management	Command line interface (CLI) configuration Telnet remote configuration Configuration via console port SNMP V1/V2/V3 WEB network management System log Power, fan, temperature alarm

General

Thunderproof	Common mode: 2kV Differential mode: 1kV
Net Weight	6 kg (13.23 lb)
Gross Weight	6.45 kg (14.24 lb)
Product Dimensions	440 mm × 360 mm × 43.6 mm (17.32" × 14.17" × 1.72")
Packaging Dimensions	580 mm × 562 mm × 125 mm (22.83" × 22.12" × 4.92")

Ordering Information

Type	Model	Description
SFP Module	PFT3950	1.25 G 850 nm, 500 m, LC, Multi-mode [optional]
	PFT3960	1.25 G 1310/1550 nm,20 km, LC, Single-mode [optional]
	PFT3970	1.25 G 1550/1310 nm, 20km, LC, Single-mode [optional]
	PFTOTSFP-1270R-20-SMF	10 G 1310/1270 nm,20 km, LC, Single-mode [optional]
	PFTOTSFP-1270T-20-SMF	10 G 1270/1310 nm, 20km, LC, Single-mode [optional]
	PFTOTSFP-850-MMF	10 G 850 nm, 20 km, LC, Multi-mode [optional]