

DH-S5500-48GT4XF-E



- Intelligent Resilient Framework 2 (IRF2)
- Comprehensive security control policies
- Excellent manageability
- High availability

System Overview

DH-S5500-48GT4XF-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-S5500-48GT4XF-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-S5500-48GT4XF-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-S5500-48GT4XF-E supports innovative single-port multi-authentication function, and the access authentication modes supported by different clients are different.

DH-S5500-48GT4XF-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-S5500-48GT4XF-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 | 48 x 10/100/1000 Mbps ports |
| Optical Port | 4 x 1/10 Gbps Base-X ports |
| Console Port | 1 |
| Power Supply | One power included |
| | Support single power |
| | 100–240V AC 50–60 Hz (internal) |
| Power Consumption | Idling: 19W Full load: 44W |
| 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 | 132Mpps |
| Packet Buffer Memory | 24 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 | 802.1p/DSCP priority marking Packet filtering function SP/WRR/SP + WRR queue scheduling Port-based speed limit Stream-based redirection Time period |
| 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 | 3.5 kg (7.72 lb) |
| Gross Weight | 4.40 kg (9.70 lb) |
| Product Dimensions | 440 mm x230 mmx43.6 mm(17.32" x 9.06" x 1.72") |
| Packaging Dimensions | 540 mmx 340 mmx90 mm (21.26" x 13.39" x 3.54") |

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] |