DH-S5600-48GT4XF

- · Rich layer 3 features
- · High availability
- · Excellent manageability
- · Power saving design
- · Comprehensive security control policies
- · Support Intelligent Resilient Framework
- · Reliable hardware design with modular dual power supply
- · High-density 10/100/1000Base-T autosensing Ethernet ports and GE/10GE SFP + fiber ports onboard

System Overview

DH-S5600-48GT4XF is an enterprise-level L3 switch based on industry-leading high-performance hardware architecture.
DH-S5600-48GT4XF realizes port high density of 1U device and adopts pluggable dual power structure design, and the host solidifies 4 ports 10 Gigabit optical. The device supports IRF, link aggregation, RRPP and STP to ensure high network stability. It also supports a abundant of security control strategies to ensure overall network security. The device has excellent management capabilities and supports multiple management interfaces, including the console port, micro USB port, and out-of-band management Ethernet port.

Functions

Virtualization Technologies - IRF2

DH-S5600-48GT4XF is pre-built with Intelligent Resilient Framework 2 (IRF2). IRF2 provides the following benefits:
High scalability: With IRF2, plug-n-play device aggregation can be achieved by adding one or more switches into the IRF2 stack and enabling IRF2 to stack on the new device. New devices can be managed with a single IP, and upgraded at the same time to reduce network expansion cost.
Load balancing: IRF2 supports cross-device link aggregation, upstream and downstream can be connected to more than one physical link, which creates another layer of network redundancy and boosts the network resource utilization.
Availability: Through standard 10 Gigabit Ethernet (10 GE) ports, IRF2 allocates bandwidth for business and application access and reasonably splits local traffic and upstream traffic. IRF2 rules not only can be obeyed within and across the rack, but also across the LAN.

High Availability

The switch supports 1+1 power module redundancy. When a power or temperature event occurs, the switch generates alarms.
In addition to hardware redundancy, the switch provides a variety of node and link redundancy and protection mechanisms, including:
Ethernet link aggregation, including LACP.
Spanning tree protocols, such as including STP, RSTP and MSTP.
Smart Link, which protects faster link switchover for dual uplink network.
Rapid Ring Protection Protocol (RRPP).

Outstanding Management Capacity

The switch provides a variety of management features and is easy to be managed. It offers the following device management features:
Provides multiple management interfaces, including the console port, micro USB port, and out-of-band management Ethernet port.
To help customers gain visibility into network application traffic, the switch provides a variety of traffic monitoring and analytic tools, including local port mirroring and layer 2 remote port mirroring. With these tools, customers can specify multiple monitor ports and collect network traffic data to evaluate network health status, create traffic analysis reports, perform traffic engineering, and optimize resource allocation.

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 × RJ45 console port 1 × Micro-USB port
Power Supply	Two powers included
	Supports dual power
	100-240V AC 50-60 Hz (Internal)
Power Consumption	Idling: 25W Full load: 49W (Single Power) Idling: 30W Full load: 56W (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 3
Managed	Yes
Switching Capacity	598 Gbps
Packet Forwarding Rate	132 Mpps
Packet Buffer Memory	24 Mbit
MAC Table Size	16K
VLAN Amount	4094 Entries
ARP Table	4K Entries
IPv4 Routing Table	12K Entries
QoS Queue	8 Entries
Jumbo Frame	10000 Byte
ACL Table	6K Entries (IPV4) 1.5K Entries (IPV6)

Features

VLAN	Port-based VLAN MAC-based VLAN Protocol-based VLAN IP subnet based VLAN QinQ and flexible QinQ VLAN mapping Voice VLAN MVRP
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	GE/10GE port aggregation Dynamic aggregation Static aggregation Cross-device aggregation
IP Routing	12K IPV4 routing entries Static routing RIP v1/v2 and RIPng OSPF v1/v2/v3 BGP and BGP4+ for IPv6 IS-IS VRRP/VRRPv3
Port Features	802.3x flow control (full-duplex) Storm suppression based on port bandwidth percentage Storm suppression based on PPS Storm suppression based on BPS
IPV6	Neighbor Discovery (ND) PMTU IPv6-Ping, IPv6-Tracert, IPv6-Telnet, and IPv6-TFTP IPv6 host management
Mirroring	Flow mirroring N:4 port mirroring Local port mirroring and remote port mirroring
Multicast	IGMP snooping v1/v2/v3 and MLD snooping v1/v2 PIM snooping MLD proxy Multicast VLAN IGMP v1/v2/v3 and MLD v1/v2 PIM-DM, PIM-SM, and PIM-SSM MSDP and MSDP for IPv6 MBGP and MBGP for IPv6
IRF	IRF2 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 Hierarchical user management and password protection 802.1X authentication and centralized MAC address authentication Guest VLAN RADIUS authentication SSH 2.0 Port isolation Port security Portal authentication DHCP snooping Dynamic ARP detection BPDU guard and root guard uRPF IP/Port/MAC binding Plaintext authentication and MD5 authentication for OSPF and RIPv2 packets Public Key Infrastructure (PKI)

ACL/QoS	Layer 2 to layer 4 packet filtering Traffic classification based on source MAC, destination MAC, source IP, destination IP, TCP/UDP port number, and VLAN Time range-based ACL Bi-directional ACLs (inbound and outbound) VLAN-based ACL issuing Rate limit for receiving and transmitting packets (a minimum CIR of 8 Kbps) Packet redirection 802.1p priority and DSCP priority Committed Access Rate (CAR) Eight queues per port (including the CPU port) Flexible queue scheduling algorithms based on both port and queue, including SP, WRR, WFQ, SP+WRR, and WDRR
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	8.2 kg (18.30 lb)
Gross Weight	8.5 kg (18.74 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, 20 km, 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, 20 km, LC, Single-mode [optional]
	PFTOTSFP-850-MMF	10 G 850 nm, 20 km, LC, Multi-mode [optional]
	QSFP-40G-CSR4-MM850	40 G 850 nm, 300 m, CSR4, Multi-mode [optional]