

DH-S5600-48GT4XF



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.

- · 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
- \cdot High-density 10/100/1000Base-T autosensing Ethernet ports and GE/10GE SFP + fiber ports onboard

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.

Hardware Feature History 1				
Part	Technical Specificat	tion		
Console Port			DHCP	DHCP snooping option82
Port Aggregation Start Marcouncing port	Ethernet Port	48 x 10/100/1000 Mbps ports		
Console Port 1 x Must CMS port Fort Aggregation State aggregation Power Supply Two powers included 2 x Must CMS (and the present control of the present co	Optical Port	4 x 1/10 Gbps Base-X ports		
Power Supply Supports dual prover included Supports dual prover Supports dual prove	Console Port	·	Port Aggregation	Static aggregation
Power Supply		Two powers included	IP Routing	Static routing RIP v1/v2 and RIPng OSPF v1/v2/v3 BGP and BGP4+ for IPv6 IS-IS
Boding	Power Supply	Supports dual power		
Power Consumption Full Loads 4-SW (Single Power) England 4-SW (Single Power) England 5-SW (Public de SW) (Load Power)		100-240V AC 50-60 Hz (Internal)		
Poperating Humidity SNRH-95/KRH PMT	Power Consumption	Full load: 49W (Single Power) Idling: 30W	Port Features	Storm suppression based on port bandwidth percentage Storm suppression based on PPS
Operating Humidity 556RH IPV6 PMTU (PMS-Ping, IPV6-Tracert, IPV6-Telnet, and IPV6-TFP (PMS-Ping, IPV6-Tracert, IPV6-Telnet, and IPV6-TFP (IPV6 host management) Performance Layer 3 Mirroring N-4 port mirroring and remote port mirroring (PMS and port mirroring) Managed Yes IMMS and MLD shooping v1/v2/v3 and MLD v1/v2/v3 and MLD v1/v2/v3/v3 and MLD v1/v2/v3/v3/v3 and MLD v1/v2/v3/v3/v3/v3/v3/v3/v3/v3/v3/v3/v3/v3/v3/	Operating Temperature	0°C to 45°C (32°F to 113°F)		
Performance Layer Layer 3 Managed Yes Switching Capacity 598 Gbps Multicast 1 Multicast VLAN Packet Forwarding Rate 132 Mpps Packet Buffer Memory 24 Mbit WLAN Amount 4094 Entries 16K Strities 16K VLAN Amount 4094 Entries 18F ARP Table ARC Table 12K Entries 1000 Byte ACL Table 6K Entries (IPV4) 1.5K Entries (IPV6) Perturns Port-based VLAN Non Amount 1000 Byte ACL Table Port-based VLAN ACL Table Port-based VLAN Non Amount 1000 Byte ACL Table ACL Table Port-based VLAN Non Amount 1000 Byte ACL Table ACL Tabl	Operating Humidity	5%RH-95%RH	IDV6	PMTU
Layer Layer 3 Layer 3 Layer 3 Lord Profit Pr	Storage Temperature	-40°C to 70°C (-40°F to 158°F)	IPv6 host management	
Layer Laye	Performance		Mirroring	N:4 port mirroring
Managed Yes	Layer	Layer 3		
Packet Forwarding Rate 132 Mpps Multicast IGMP v1/v2/2 and MLD v1/v2 PiA-DM, PIM-SM, and PIM-SSM MSDP and MSDP for IPv6 MBGP for IPv6 MBGP and MSDP for IPv6 MBGP for IPv6	Managed	Yes	PIM snooping MLD proxy Multicast VLAN IGMP v1/v2/v3 and PIM-DM, PIM-SM,	PIM snooping
Packet Buffer Memory 24 Mbit MSDP for IPv6 MBGP and MBGP for IPv6 Distributed device management, distributed link aggregation, and distributed resilient routing Stacking through standard Ethernet interfaces Local device stacking and remote device stacking ARP Table 4K Entries 4K Entries 4K Entries 4K Entries 4K Entries 4K Entries 4E Entries 4K Entries 4D Port Security Port isolation support AAA authentication support AADIUS authentication, centralized MAC authentication HWTACACS SSH2.0 Port isolation Port security Poortee guard HTTPs Hierarchical user management and password protection BO2.1X authentication and centralized MAC authentication Guest VLAN MAC-based VLAN MAC-based VLAN MAC-based VLAN Protocol-based VLAN MAC-based VLAN VLAN mapping MVRP ASSEL D Port isolation DHCP snooping Dynamic ARP detection BPDU guard and root guard URPF IPPort/MAC binding Plaintext authentication and MDS authentication for G8032 ERPS	Switching Capacity	598 Gbps		Multicast VLAN IGMP v1/v2/v3 and MLD v1/v2 PIM-DM, PIM-SM, and PIM-SSM
MAC Table Size IRF2 Distributed device management, distributed link aggregation, and distributed resilient routing stacking through standard Ethernet interfaces Local device stacking and remote device stacking ARP Table 4K Entries ARP Table 2K Entries IPv4 Routing Table 12K Entries 2S Queue 8 Entries Bentries ACL Table ACL Table 6K Entries (IPv4) 1.5K Entries (IPv4) 1.5K Entries (IPv6) Features Port-based VLAN MAC-based VLAN MAC-based VLAN Oliqu and flexible Qinq VLAN mapping Voice VLAN MVRP Ring network protocol STP/RSTP/MSTP/PVST Smart Link RRPP G. 8032 ERPS IRF2 Distributed device management, distributed link aggregation, and distributed resilient routing stacking through standard Ethernet interfaces Local device stacking and remote device stacking authentication support RADIUS authentication support RADIUS authentication, centralized MAC authentication RO2.1X authentication, centralized MAC authentication RO2.1X authentication and centralized MAC address authentication Guest VLAN RADIUS authentication Guest VLAN RADIUS authentication Port security Ports occurity Port socior SH 2.0 Port isolation Port security Port security Port socior SH 2.0 Port socior SH 2.0 Port socior Port security Port socior SH 2.0 Port socior SH 2.0 Port socior Port security Port socior Port socior Port security Port socior Port security Port socior	Packet Forwarding Rate	132 Mpps		
VLAN Amount 4094 Entries IRF aggregation, and distributed link aggregation, and distributed link aggregation, and distributed resilient routing Stacking through standard Ethernet interfaces Local device stacking and remote device stacking ARP Table 4K Entries Hierarchical user management and password protection AAA authentication support RaDius authentication Port security Port security Port security Prosurce guard HTTPs Hierarchical user management and password protection 802.1X authentication and centralized MAC address authentication and centralized MAC address authentication and centralized MAC address authentication SSH 2.0 Port isolation SSH 2.0 Port isolation Port security Portal authentication DHCP snooping Dynamic ARP detection BPDU guard and root guard uter support supp	Packet Buffer Memory	24 Mbit		
ARP Table 4KEntries 4KEntries 4KEntries 4KEntries 4KEntries 12KEntries	MAC Table Size	16K	IDE	Distributed device management, distributed link
Pv4 Routing Table 12K Entries 12K Entr			INF	Stacking through standard Ethernet interfaces
QoS Queue 8 Entries Jumbo Frame 10000 Byte ACL Table 6K Entries (IPV4) 1,5K Entries (IPV6) Features Port-based VLAN MAC-based VLAN Protocol-based VLAN QinQ and flexible QinQ VLAN mapping Voice VLAN MVRP Ring network protocol Ring network protocol Ring network protocol Ring network protocol 8 Entries 8 Entries AAA authentication support RADIUS authentication BACL Table AAA authentication support RADIUS authentication RADIUS authentication, centralized MAC authentication Port security Prot security Security Security Security Security Security Security AAA authentication support RADIUS authentication, centralized MAC authentication Port security Guest VLAN RADIUS authentication and centralized MAC address authentication Guest VLAN RADIUS authentication Guest VLAN RADIUS authentication Port security Port isolation Port security Port authentication DHCP snooping Dynamic ARP detection BPDU guard and root guard uRPF IP/Port/MAC binding Plaintext authentication and MDS authentication for OSPF and RIPv2 packets	ARP Table	4K Entries		
Jumbo Frame 10000 Byte 6K Entries (IPV4) 1.5K Entries (IPV6) Features Port-based VLAN MAC-based VLAN Protocol-based VLAN QinQ and flexible QinQ VLAN mapping Voice VLAN MVRP Ring network protocol Ring network protocol SEntries Find the second of t	IPv4 Routing Table	12K Entries		AAA authentication support
Jumbo Frame 10000 Byte ACL Table 6K Entries (IPV4) 1.5K Entries (IPV6) Features Port security IP source guard HTTPs Hierarchical user management and password protection 802.1X authentication, centralized MAC authentication and centralized MAC address authentication and centralized MAC address authentication and centralized MAC address authentication 802.1X authentication and centralized MAC address authentication and centralized MAC address authentication 802.1X authentication and centralized MAC address authentication and centralized MAC address authentication 802.1X authentication and centralized MAC address authentication and centralized MAC address authentication 802.1X authentication and Centralized MAC address authentication and Centralized MAC address authentication 802.1X authentication and Centralized MAC address authentication and	QoS Queue	8 Entries	HWTACACS SSH2.0 Port isolation 802.1X authentication, centralized MAC auther Port security IP source guard	
ACL Table ACL Table Compare (IPV4) 1.5K Entries (IPV6) 1.	Jumbo Frame	10000 Byte		
Features Port-based VLAN Port-based VLAN Protocol-based VLAN Protocol-based VLAN QinQ and flexible QinQ VLAN mapping Voice VLAN MVRP Ring network protocol Ring network protocol Ring network protocol Port-based VLAN Security ADIUS 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	ACL Table	in the second se		
Port-based VLAN MAC-based VLAN Protocol-based VLAN QinQ and flexible QinQ VLAN mapping Voice VLAN MVRP STP/RSTP/MSTP/PVST Smart Link RRPP G.8032 ERPS Security Security Security Port security 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	Features			protection
Ring network protocol Smart Link RRP RRP RRP G.8032 ERPS URPF IP/Port/MAC binding Plaintext authentication and MD5 authentication for OSPF and RIPv2 packets	VLAN	MAC-based VLAN Protocol-based VLAN IP subnet based VLAN QinQ and flexible QinQ VLAN mapping Voice VLAN	Security 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 OSPF and RIPv2 packets	authentication Guest VLAN RADIUS authentication SSH 2.0 Port isolation Port security Portal authentication DHCP snooping Dynamic ARP detection
	Ring network protocol	Smart Link RRPP		uRPF IP/Port/MAC binding Plaintext authentication and MD5 authentication for OSPF and RIPv2 packets

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				
Туре	Model	Description		
	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]		
SFP Module	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]		