

DH-AS5500-48GF4XF



- Powerful L2 and L3 Features
- Enterprise-level Connectivity
- Intelligent Resilient Framework 2 (IRF2)

System Overview

Dahua AS5500 Switch Series are high performance Gigabit Ethernet switches with full L2 and L2+ features, enterprise-level Quality of Service (QoS), enhanced security control and a bundle of ISP features.

Functions

Intelligent Resilient Framework 2 (IRF2)

IRF2 is the stacking technology used in conjunction with the spare ports on the panel. It offers the flexibility to stack over longer distances, such as hundreds of meters across buildings or several kilometers between sites, using long-range transceivers.

Enterprise-level Connectivity

For connectivity, fixed 1U models are offered and are ideal for branch offices or small to large enterprise environments. Each switch includes four high-speed built-in 10GbE uplinks for non-blocking transmission. PoE models can carry up to 600W to power end devices.

Powerful L2 and L3 Features

This series supports a large range of L2 features such as 802.1Q VLAN, Port Mirroring, STP/RSTP/MSTP, Link Aggregation Control Protocol, and the 802.3x Flow Control function. It also supports multiple L3 features, including OSPF and RIP, addressing enterprise access and aggregation service demands.

Scene

It can meet the needs of digital transformation and network construction, and is ideal for small and medium-sized enterprises, chain businesses, branches, the government, schools and hotels.

Technical Specification

Hardware

Included Power Adapter	Yes
PoE	No
Optical Port	48 × SFP 100/1000 Mbps
Optical Port Speed	1 Gbps
Optical Port Uplink Speed	1/10 Gbps
Description of Function Slots	Port 1-48: 48 × SFP 100/1000 Mbps; Port 47-48: 2 × RJ-45 10/100/1000 Mbps (Combo); Port 49-52: 4 × SFP+ 1/10 Gbps
Management port	1 × Micro-USB port 1 × Console port
Power Supply	Built-in dual power supplies: 100–240 VAC, 50/60 Hz, 2.5 A
Operating Temperature	–5 °C to +45 °C (+23 °F to +113 °F)
Operating Humidity	5%–95% (RH)
Storage Temperature	–40 °C to +70 °C (–40 °F to +158 °F)
Storage Humidity	5%–95% (RH)
Fanless Design	No
Power Consumption	Idling: 25 W Full load: 69 W (Single Power) Idling: 27 W Full load: 72 W (Dual Power)

Performance

Layer	L3
Management Type	Yes
MTBF	125.56 years
Switching Capacity	176 Gbps
Packet Forwarding Rate	130.952 Mpps
Packet Buffer Size	24 Mbit

Jumbo Frame	10K Byte
MAC Table Size	16K
VLAN Number	4K
IPv4 Routes	1K
Dynamic ARP	1K
Communication Standard	802.3x; 802.3ad; 802.1p; 802.1q; 802.1x; 802.1d; 802.1w; 802.1s

Features

Ring Network Protocol	STP/RSTP/MSTP PVST RRPP
Routing	Static routing IPv6 policy routing RIPv1/v2/ng OSPFv2/v3 Policy based routing
VLAN Function	Port-based VLAN MAC-based VLAN Protocol-based VLAN Subnet-based VLAN QinQ, flexible QinQ VLAN Mapping Voice VLAN MVRP
Link Aggregation	Static link aggregation Dynamic link aggregation Cross-device link aggregation Gigabit Ethernet port aggregation 10 Gigabit Ethernet port aggregation
IEEE 802.3x Flow Control	Yes
Multicast	IGMP Snooping PIM Snooping IGMP v1/v2/v3
Reliability	VRRP; DLDP; IRF
ARP	ARP, Gratuitous ARP Dynamic ARP Inspection ARP anti-attack ARP source suppression ARP Detection
DHCP Function	DHCP Client DHCP Snooping DHCP Relay DHCP Server DHCP Snooping option 82 DHCP Relay option 82
Security	802.1X, centralized MAC address authentication Guest VLAN SSH 2.0 Port isolation Port security DHCP Snooping, preventing DHCP spoofing Dynamic ARP detection, preventing man-in-the-middle attack and ARP denial-of-service IP/Port/MAC binding
QoS/ACL	Packet filtering (Layer 2 to Layer 4) Source MAC-, destination MAC-, Source IP (IPv4/IPv6)-, destination IP (IPv4/IPv6)-, TCP/UDP port number-, VLAN-based traffic classification Time-based ACL Two-way ACL policy (ingress and egress) VLAN-based ACL application

IPv6	ND IPv6-Ping IPv6-Tracert IPv6-Telnet
Equipment Management	Load update files and update using FTP Configure through CLI, Telnet, and Console port SNMPv1/v2/v3 NTP Ping and Tracert LLDP Port loopback detection

General

Statics Protection	Air discharge: 8 kV Contact discharge: 6 kV
Lighting Protection	Common mode: 1 kV Differential mode: 0.5 kV
Net Weight	6.5 kg (14.3 lb)
Gross Weight	7.0 kg (15.4 lb)
Product Dimensions	440 mm × 360 mm × 43.6 mm (17.32" × 14.17" × 1.72") (L × W × H)
Packaging Dimensions	562 mm × 550 mm × 125 mm (22.13" × 21.65" × 4.92") (L × W × H)
Casing Material	Sheet metal
Installation	Desktop mount; rack mount
Certifications	CE; FCC

Dimensions (mm[inch])

