

HS4412-8ET-96

12-Port Hardened Managed Switch with 8-Port PoE



Series Overview

Hardened PoE Switch is a managed switch with a high-performance switch engine and large cache. It provides smooth transmission of video streams. With its full metal and fanless design, the switch has great heat dissipation and can operate in temperatures ranging -30°C to 65°C. It offers EMC and has protection against overvoltage, overcurrent, static electricity, lightning strikes, pulses and other types of interference. The redundant power supply ensures that the switch performs stably, and the red port provides up to 90 W. The switch supports long distance PoE, intelligent PoE and PoE watchdog, meeting the needs of security monitoring. It also offers powerful network management functions such as IGMP snooping, link aggregation, QoS, LLDP, STP, RSTP and web management.

Functions

BT 90W (Red Port)

The red ports support IEEE802.3af, IEEE802.3at, IEEE802.3bt and Hi-PoE standards, with a maximum output power consumption of 90W per port. Suitable for powering high-power devices.

Long Distance PoE

The transmission distance of a PoE port can be up to 250 m, meeting the requirement of wired transmission (bandwidth reduced to 10 Mbps).

PoE Watchdog

Adopts the innovative PoE Watchdog. PoE Watchdog can be switched on by dialing/turning on the WEB page switch. It enables the switch to automatically detect port status and restart the failed ports to recover connection in case of IPC connection exception. This enables intelligent operation and maintenance management in its true sense and effectively reduces manual maintenance costs.

- Comes with 8 × 10/100 Mbps PoE ports and 4 × SFP 1000 Mbps uplink ports.
- Meets the requirements of IEEE 802.3af and IEEE 802.3at power supply standards. The red port complies Hi-PoE/IEEE 802.3bt standard, orange port complies Hi-PoE standard.
- PoE watchdog monitor the real time status of the end device.
- Power consumption management.
- Fanless design.
- Supports desktop mount and guide rail mount.



Intelligent PoE

Provides power consumption control and real-time monitoring to guarantee priority of power supply for important ports and prevent malfunctioning caused by power consumption change. Supports ultra wide power supply, able to adapt to IPC power fluctuation.

Spanning Tree Protocol (STP)

Uses algorithms that calculate the best loop-free path through a Layer 2 network while providing path redundancy to prevent the occurrence of broadcast storms and enhance the stability of operations and services.

Wide Operating Temperature (-30 °C to +65 °C)

Supports working at ambient temperatures of -30 °C to +65 °C, and has built-in professional lightning-proof circuits that effectively reduce the impact of thunderstorms on network systems and improve system robustness, allowing the device to adapt to harsh environments.

Scene

Suitable for scenes such as intersections, expressways and industrial zones.

Technical Specification	
Hardware	
Included Power Adapter	Yes
PoE	Yes
Ethernet Port	8
Ethernet Port Speed	10/100 Mbps
Optical Port Speed	1000 Mbps
Optical Port Uplink Speed	1 Gbps
Description of Function Slots	Port1-8 : 8×RJ45 10/100Mbps (PoE) ; Port9-12 : 4× SFP 1000Mbps (Uplink)
Reset Button	1
Power Supply	External power supply: 48–57 VDC
Operating Temperature	−30 °C to +65 °C (+22 °F to +149 °F)
Operating Humidity	10%–95% (RH), non-condensing
Storage Temperature	−40 °C to +75 °C (−40 °F to +167 °F)
Storage Humidity	5%–95% (RH), non-condensing
Power Consumption	Idling: ≤6 W Full load: 96 W

Performance	
Layer	Layer 2
Management Type	Yes
Switching Capacity	9.6 Gbps
Packet Forwarding Rate	7.1424 Mpps
Packet Buffer Size	4.1 Mbit
MAC Table Size	8K
VLAN Number	4094
VLAN Interface	10
IPv4 Routes	1
Communication Standard	IEEE802.3; IEEE802.3u; IEEE802.3x; IEEE802.3ab; IEEE802.3az

Feature	
PoE Protocol	IEEE802.3af; IEEE802.3at; Hi-PoE; IEEE802.3bt
PoE Power	port1-2<=90W,port3-8<=30W,total<=96W
PoE Power Consumption Management	Yes
PoE Pin Assignment	1,2,4,5 (V+) ,3,6,7,8 (V-)
Long Distance PoE Transmission	Yes
Spanning Tree Protocol	STP/RSTP/ERPS
VLAN Function	Yes
Link Aggregation	Yes
IEEE 802.3x Flow Control	Yes
Multicast	IGMP snooping

DHCP Function	DHCP client
Security	IEEE 802.1x
Equipment Management	SNMPv1/v2/v3

General	
Statics Protection	Air discharge: 8 kV, Contact discharge: 6 kV
Lighting Protection	Common mode: 4 kV Differential mode: 2 kV
Product Dimensions	152.9 mm × 110.4 mm × 42.0 mm (6.02" × 4.35" × 1.65") (L × W × H)
Packaging Dimensions	254.0 mm × 243.0 mm ×86.0 mm (10.00" × 9.57" × 3.39") (L × W × H)
Casing Material	Iron
Installation	Desktop mount; DIN-Rail mount

Ordering Information		
Type	Part Number	Description
Ethernet Switch	DH-HS4412-8ET-96	12-Port Hardened Managed Switch with 8-Port PoE

