

DH-S4220-16GT-190

20-Port Managed Desktop Gigabit Switch with 16-Port PoE



- Layer 2 network management PoE switch.
- Supports web, and network management software based on SNMP.
- Network redundancy: STP/RSTP.
- Supports PoE power consumption management, PoE power off management.
- Supports IEEE802.3af, IEEE802.3at.
- Port 1 and port 2 support IEEE802.3bt, and are compatible with Hi-PoE.
- Supports PoE watchdog.
- Supports 250 m long-distance transmission mode.



System Overview

Equipped with a high performance switching engine, the 16-Port PoE All-Gigabit Managed Switch performs optimally. It has low transmission delay, large buffer and is highly reliable. It also has a strong switching capability and optimizes transmission performance when accessing Ultra HD videos. With its full metal design, the device has great heat dissipation and is low power consumption, working in environments ranging from -10°C to 55°C ($+14^{\circ}\text{F}$ to $+131^{\circ}\text{F}$). With protection against overvoltage, EMC and overcurrent from power input terminals, the switch effectively resists interference from static electricity, lightning, and pulses. It also has powerful network management functions, supporting various types of web and network management software based on SNMP.

Functions

All-Gigabit Ports

Designed with large buffer memory and all-gigabit ports, enabling high-definition access of large stream.

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.

Wide Operating Temperature

Supports working at ambient temperatures of -10°C to $+55^{\circ}\text{C}$, 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.

Non-blocking Video Transmission

Large buffer memory can increase concurrent data processing capacity, and guarantee real-time video transmission in regardless of transient large video stream.

Minimal WEB

Designed with a minimalist graphical WEB, easy to operate, which improves configuration efficiency.

Red Port 90W

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.

Specification

Hardware

Included Power Adapter	Yes
PoE	Yes
Ethernet Port	18
Optical Port	2
Ethernet Port Speed	10/100/1000 Mbps
Optical Port Speed	1000 Mbps
Description of Function Slots	Port 1-16: 16 × RJ45 10/100/1000 Mbps(PoE) Port 17-18: 2 × RJ45 10/100/1000 Mbps Port 19-20: 2 × SFP 1000 Mbps
Debugging	Console × 1
Reset Button	1
Power Supply	100-240 VAC, 50/60 Hz, 3.5 A
Operating Temperature	-10°C to 55°C (+14°F to +131°F)
Operating Humidity	5%–95% (RH)
Power Consumption	Idling load: ≤ 20 W; Full load: 190 W

Performance

Management Type	Yes
MTBF	467125.73 hours
Switching Capacity	56 Gbps
Packet Forwarding Rate	29.76 Mpps
Packet Buffer Size	4.1 Mbit
Jumbo Frame	10K Byte
MAC Table Size	8K
VLAN Number	4K
VLAN Interface	10
Dynamic ARP	512
Communication Standard	IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3ad

Feature

PoE Protocol	IEEE802.3af (PoE); IEEE802.3at (PoE+); Hi-PoE; IEEE802.3bt (PoE++)
PoE Power	Port 1-2: ≤ 90 W Port 3-16: ≤ 30 W Total: ≤ 190 W
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
VLAN Function	Yes
Link Aggregation	Static link aggregation; LACP

IEEE 802.3x Flow Control	IEEE 802.3X-based flow control (full-duplex)
Multicast	IGMP Snooping
DHCP Function	DHCP client DHCP-Server DHCP-Snooping
Security	IEEE 802.1x ACL
Equipment Management	WEB(http and https) SNMP V1/V2C/V3

General

Statics Protection	Air discharge: 8 kV; Contact discharge: 6 kV
Lighting Protection	Common mode: 4 kV; Differential mode: 2 kV
Net Weight	3.405 kg (7.51 lb)
Gross Weight	4.51 kg (9.94 lb)
Product Dimensions	440 mm × 300 mm × 44 mm (17.32" × 11.81" × 1.73")
Packaging Dimensions	525 mm × 410 mm × 110 mm (20.67" × 16.14" × 4.33")
Certifications	CE, FCC

Transmission Performance:

Switch power supply voltage 53V.
CAT5E/CAT6. Max. DC resistance < 10Ω/100m

Cable(m)	Load Capacity(W)	Bandwidth(Mbps)
IEEE802.3bt 90W		
100	71.3	1000
150	62	10
200	51	10
250	40	10

Hi-PoE 60W

100	53	1000
150	50	10
200	47	10
250	37	10

IEEE802.3at 30W

100	25.5	1000
150	25.5	10
200	25.5	10
250	25.5	10

Note: Data from this table was collected by Dahua test lab and is for reference only. The actual transmission distance may vary due to power consumption of connected devices or the cable type and status.

Ordering Information

Type	Model	Description
SFP module	GSFP-1310T-20-SMF	1.25G 1310/1550nm,20km,LC, Single-mode
	GSFP-1310R-20-SMF	1.25G 1550/1310nm,20km,LC, Single-mode
	GSFP-1310-20-SMF	1.25G 1310nm,20km,LC, Single-mode
	GSFP-850-MMF	1.25G 850nm,550m,LC, Multi-mode

Dimensions (mm[inch])

