

DH-S5452-48GT4XF-400

52-Port L2+ Managed Switch with 48-Port PoE



System Overview

The device is an 10 Gbps uplink switch with a high-performance switch engine and large cache. With its full metal and fanless design, the switch has great heat dissipation and can operate in temperatures ranging -10°C to 55°C. It offers EMC and has protection against overvoltage, overcurrent, static electricity, lightning strikes, pulses and other types of interference. The switch can be remotely managed through webpage and SNMP. The red port provides up to 90 W. The device supports link aggregation and STP to ensure high network stability. It is widely used in digital transformation and network construction by small and medium-sized enterprises, chain business, branches, government structures, schools, hotels, and more.

Functions

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. 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.

- All-gigabit port design (10 gigabit uplink port).
- Meets the requirements of IEEE 802.3af and IEEE 802.3at power supply standards. The red port additionally complies with Hi-PoE/IEEE 802.3bt standard.
- 250 meter long distance PoE.
- PoE watchdog real-time monitors camera statuses and automatically reboots faulty network cameras.
- Supports STP, RSTP and ERPS.
- IEEE802.1Q-based VLAN configuration.
- Static link aggregation and dynamic link aggregation.
- Easy to manage the device through the webpage.
- EMC compliant, the device is lightning proof.
- Desktop mount and rack mount.



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.

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 °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.

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Minimal WEB

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

Technical Specification

Basic

Layer	Layer 2
Switching Capacity	176 Gbps
Packet Forwarding Rate	130.944 Mpps
Description of Function Slots	Port 1-48: 48 × RJ-45 10/100/1000 Mbps Port 49-52: 4 × SFP+ 1/10 Gbps
Operating Temperature	-10 °C to +55 °C (14 °F to +131 °F)
Operating Humidity	5%–95% (RH), non-condensing
Storage Humidity	5%–95% (RH), non-condensing
Power Supply	Built-in power supply: 100–240 VAC, 50/60 Hz, 6 A Max
Power Consumption	Idling: 39.8 W Full load: ≤ 460 W
Statics Protection	Air discharge: 8 kV Contact discharge: 6 kV
Lightning Protection	Common mode: 4 kV Differential mode: 2 kV
Net Weight	5.4 kg (11.90 lb)
Gross Weight	6.7 kg (14.77 lb)
Product Dimensions	440 mm × 391 mm × 44.0 mm (17.32" × 15.39" × 1.73") (L × W × H)
Packaging Dimensions	561 mm × 513 mm × 146 mm (22.09" × 20.20" × 5.75") (L × W × H)
Installation	Rack mount; desktop mount

PoE

PoE	Yes
PoE Power	Port 1-4 ≤ 90 W, Port 5-48 ≤ 30 W, total ≤ 400 W
PoE Protocol	IEEE 802.3af; IEEE 802.3at; Hi-PoE; IEEE 802.3bt
PoE Power Consumption Management	Yes
PoE Pin Assignment	1, 2, 4, 5 (V+), 3, 6, 7, 8 (V-)
Long Distance PoE Transmission	Yes
Reset Button	1
Storage Humidity	5%–95% (RH), non-condensing

Hardware

Ethernet Port	48
Debugging	1 × Console port
Reset Button	1

Performance

Packet Buffer Size	16 Mbit
Jumbo Frame	12288 Byte
MAC Table Size	32K
Communication Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3x; IEEE 802.3ab; IEEE 802.3z; IEEE 802.3ad

VLAN Number	4094
VLAN Interface	16

Feature

Ethernet Loop Protection	STP/RSTP/ERPS
VLAN Function	Port-based VLAN
Link Aggregation	LACP Static link aggregation Dynamic link aggregation
Port Feature	IEEE 802.3x flow control Unknown unicast suppression Multicast storm control Broadcast storm control
IEEE 802.3x Flow Control	Yes
Multicast	IGMP Snooping
Reliability	LLDP
DHCP Function	DHCP Client
Security	802.1X Port isolation Radius HTTPS
QoS/ACL	SP/WRR queue scheduling 802.1p and DSCP priority mapping Port speed limit
Equipment Management	Web SNMP V1/V2C/V3 NTP Logs Ping

General

Packing List	1 × User Manual 1 × Legal and Regulatory Information 1 × Warranty Card 1 × List of Hazardous Substances 1 × Power Cord 1 × Rack-mounting Kit
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Transmission Performance:

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

Cable(m)	Load Capacity(W)	Bandwidth(Mbps)
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IEEE802.3bt 90W

100	71.3	1000
150	62	10
200	51	10
250	40	10

Hi-PoE 60W

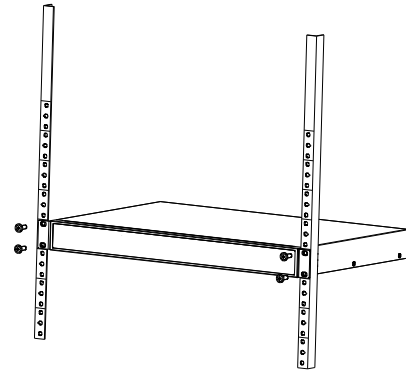
100	53	1000
150	50	10
200	47	10
250	37	10

IEEE802.3at 30W

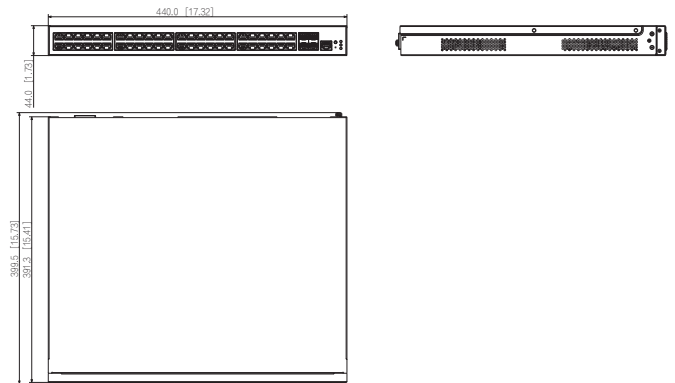
100	25.5	1000
150	25.5	10
200	25.5	10
250	25.5	10

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.

Installation



Dimensions (mm[inch])



Ordering Information

Type	Model	Description
SFP module	GSFP-RJ45	Gigabit RJ45 SFP Module
	GSFP-1310T-20-SMF	Gigabit 1310/1550nm,20km,LC, Single-mode
	GSFP-1310R-20-SMF	Gigabit 1550/1310nm,20km,LC, Single-mode
	GSFP-1310-20-SMF	Gigabit 1310nm,20km,LC, Single-mode
	GSFP-850-MMF	Gigabit 850nm,550m,LC, Multi-mode
	TSFP-1270T-20-SMF	10G 1270/1330nm,20km,LC, Single-mode
	TSFP-1270R-20-SMF	10G 1330/1270nm,20km,LC, Single-mode
	TSFP-1310-20-SMF	10G 1310nm,20km,LC, Single-mode
	TSFP-1550-40-SMF	10G 1550nm,40km,LC, Single-mode
	TSFP-850-MMF	10G 850nm,300m,LC, Multi-mode