DH-CHS4412-8GT-125

12-Port Cloud Managed Hardened Gigabit Switch with 8-Port PoE

PoE2.0

- 8 × RJ45 Gigabit PoE ports, 4 × SFP Gigabit ports.
- 125 W total PoE budget, 802.3af/at on all PoE ports, 802.3bt on red ports.
- DIP switch to fast turn on/off working mode of Cloud-Managed, PoE Watchdog, Long Distance PoE.
- Wide operating temperature ranging from –30 °C to 65 °C.
- Supports VLAN, STP, RSTP and link aggregation.
- WEB-managed and centralized cloud management through the DoLynk App and performs real-time monitoring of the network.
- Easy config to auto detect and set up network and systems.

Series Overview

The Hardened Cloud Managed PoE Switch series is a state-of-the-art device that can effortlessly turn on and off its managed mode with the simple flip of a switch. When managed mode is enabled, local network management and cloud management are seamlessly integrated. For cloud management, you can perform operation and maintenance using topology visualization for front-end devices, transmission, and back-end storage devices within both CCTV systems and IT system. The switch features a high-performance switch engine and large cache, ensuring smooth transmission of video streams. Additionally, it offers standard PoE for high power consumption, long distance PoE, and PoE Watchdog, simplifying installation and deployment. With its full metal and fanless design, it has great heat dissipation and can operate in harsh environments. It also offers EMC and has protection against overvoltage, overcurrent, static electricity, lightning strikes, pulses and other types of interference. This makes it suitable for scenes such as homes, factories, and offices.

Functions

Managed Mode ON/OFF

Easily switches between managed and unmanaged mode with just the flip of a switch. When in managed mode, you can perform management through the webpage locally or the cloud platform. This allows the device to seamlessly adapt to a variety of scenes.

Local and Cloud Management

Professional cloud network management with operation and maintenance services greatly reduces the investment cost of enterprise user network management. At the same time, it improves the network operation and maintenance management experience.

Network Topology Management

Supports the LLDP protocol and is able to generate and display the network topology, so that you can quickly identify issues, and perform operation and maintenance remotely on devices that are in the topology.

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. 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.

Loop Protection

When a loop is detected, the loop alarm will be triggered and the elimination mechanism will activate to prevent broadcast storms from occurring.

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.

Link Aggregation

Combines multiple physical links into one virtual channel for dynamic redundancy and load balancing, ensuring that the connection remains stable.

Scene

Suitable for use both indoors and outdoors such as in corridors, factories, and parks.

Technical Specification

Basic

Layer	Layer 2
Switching Capacity	24 Gbps
Packet Forwarding Rate	17.856 Mpps
Description of Function Slots	Port 1-8: 8 × RJ45 10/100/1000 Mbps (PoE) Port 9-12: 4 × SFP 100/1000 Mbps (uplink)
Operating Temperature	–30 °C to +65 °C (–22 °F to +149 °F)
Operating Humidity	10%–90% (RH), non-condensing
Protection	IP30;IK06
Storage Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Humidity	5%–95% (RH), non-condensing
Power Supply	External dual power supply (terminal block and DC): 50–57 VDC, 2.7–2.37 A
Power Consumption	Idling: 3 W Full load: 134.5 W
Statics Protection	Air discharge: 15 kV Contact discharge: 8 kV
Lightning Protection	Power Port: Common mode/Differential mode 6 kV Network Port: Common mode 10kV,Differential mode 2kV
Net Weight	0.72 kg (1.59 lb)
Gross Weight	1.73 kg (3.81 lb)
Product Dimensions	171.8 mm × 133.4 mm × 42 mm (6.76" × 5.25" × 1.65") (L × W × H)
Packaging Dimensions	314.5 mm × 253.5 mm × 130.5 mm (12.38" × 9.98" × 5.14") (L × W × H)
Casing Material	Sheet metal
Installation	DIN rail mount; desktop mount

PoE

PoE	Yes
PoE Power	Port 3-8≤30 W, port 1–2≤90 W, total≤125 W
PoE Protocol	IEEE 802.3af; IEEE 802.3at; Hi-PoE; IEEE 802.3bt
PoE Power Consumption Management	PoE power consumption management; PoE power on/off; turns off PoE if overload is detected;
PoE Pin Assignment	Port 1-2: 1,2,4,5（V+）,3,6,7,8（V-） Port 3-8: 1,2,（V+）,3,6,（V-）
Long Distance PoE Transmission	Yes
Perpetual PoE	Yes

Hardware

DIP Switch	Managed mode: Switches between managed and unmanaged mode. Managed mode includes local web management and cloud management. It is on by default. Extend mode: The transmission distance of ports 1–8 can reach up to 250 meters. The negotiation speed can be reduced to 10 Mbps. PoE Watchdog: Monitors the flow of data traffic for ports 1–8. If PoE fails for any of the ports and there is no traffic for 2 minutes, the failed ports will be restarted.
Reset Button	1

Performance

MTBF	1,179,412h
Packet Buffer Size	8.4 Mbit
Jumbo Frame	12288 Byte
MAC Table Size	8K
Communication Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3x; IEEE 802.3ab; IEEE 802.3z; IEEE 802.3az; IEEE 802.3ad
Management VLAN	Yes
VLAN Number	32
Dynamic ARP	10

Feature

Ethernet Loop Protection	STP; RSTP
VLAN Function	IEEE 802.1Q VLAN
Link Aggregation	Static Aggregation
Port Feature	IEEE 802.31x Flow Control Unknown Unicast Suppression Multicast Storm Control Broadcast Storm Control MAC+Port Binding loop prenvention
Mirror	Local Port Mirroring
Reliability	LLDP
DHCP Function	DHCP Client
Security	Port Isolation
Equipment Management	Web Management Cloud Management Logs Fault Alarm Virtual Cable Test

General

Packing List	1 × User Manual 1 × Legal and Regulatory Information 1 × Power Cord 1 × Power Adapter 1 × Terminal Block

Transmission Performance

Switch power supply voltage 54V.
CAT6. Max. DC resistance < 8 Ω/100 m

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	46	1000
150	42	10
200	37	10
250	32	10
IEEE802.3at 30W		
100	25.5	1000
150	25.5	10
200	25.5	10
250	24	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
PoE Switch	DH-CHS4412-8GT-125	12-Port Cloud Managed Hardened Gigabit Switch with 8-Port PoE
Accessories (Optional)	GSFP-850-MMF	SFP Optical Module
	GSFP-1310-20-SMF	SFP Optical Module
	GSFP-1310R-20-SMF	SFP Optical Module
	GSFP-1310T-20-SMF	SFP Optical Module
	GSFP-RJ45	RJ45 SFP Module

Accessories

Optional:

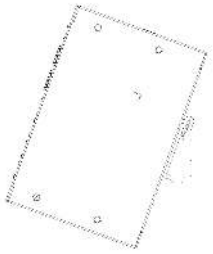
GSFP-850-MMF
SFP Optical Module

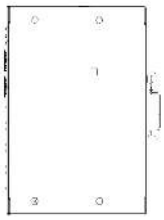
GSFP-1310-20-SMF
SFP Optical Module

GSFP-1310R-20-SMF
SFP Optical Module

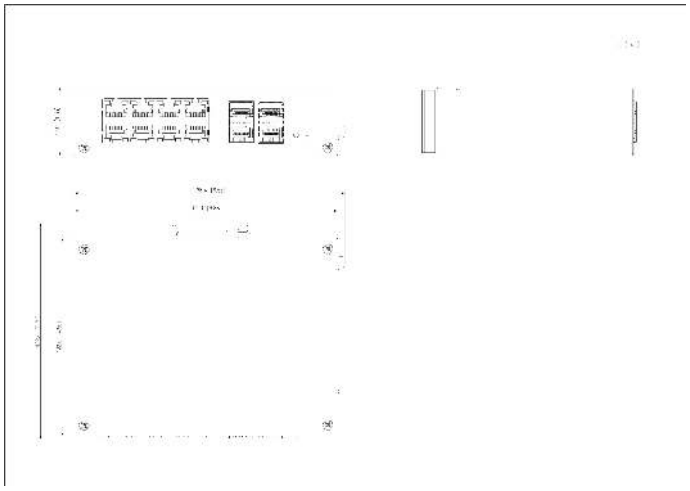
GSFP-1310T-20-SMF
SFP Optical Module

GSFP-RJ45
RJ45 SFP Module

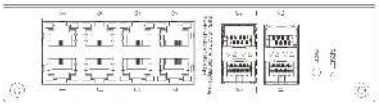




Dimensions (mm[inch])



Panels



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