

# DH-CHS4212-8GT-110

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



## System 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 security 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.

- Features managed mode.
- Complies with IEEE802.3, IEEE802.3u, IEEE802.3x, IEEE802.3ab, IEEE802.3z, IEEE802.3az and IEEE802.3ad standards.
- Meets the requirements of IEEE802.3af, IEEE802.3at and Hi-PoE.
- Supports network topology visualization.
- Supports mobile management by app.
- Supports one-stop maintenance.
- With its full metal design and dust-proof enclosure, it can be used in a wide range of temperatures.
- Supports desktop mount and DIN rail mount.



### 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.

### 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.

### Link Aggregation

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

### 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.

## Scene

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

## Specification

### Basic

Layer	Layer 2
Switching Capacity	24 Gbps
Packet Forwarding Rate	17.856 Mpps
Description of Function Slots	Port 1-8: 8 × RJ-45 10/100/1000 Mbps (PoE) Port 9-10: 2 × SFP 100/1000 Mbps (uplink) Port 11-12: 2 × RJ-45 10/100/1000 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): 48–57 VDC, 2.5–2.1 A
Power Consumption	Idling: 2 W Full load: 117.2 W
Statics Protection	Air discharge: 8 kV Contact discharge: 6 kV
Lightning Protection	Common mode: 4 kV Differential mode: 2 kV
Net Weight	0.66 kg (1.46 lb)
Gross Weight	1.6 kg (3.53 lb)
Product Dimensions	171.8 mm × 139.4 mm × 42 mm (6.76" × 5.49" × 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	Iron
Installation	DIN rail mount; desktop mount
Certifications	CE

### PoE

PoE	Yes
PoE Power	Port 3-8≤30 W, port 1–2≤90 W, total≤110 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; Green PoE
PoE Pin Assignment	1,2,4,5 (V+),3,6,7,8 (V-)
Long Distance PoE Transmission	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	810,020 hours
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
VLAN Number	32
Dynamic ARP	10

### Feature

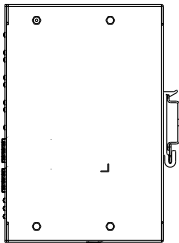
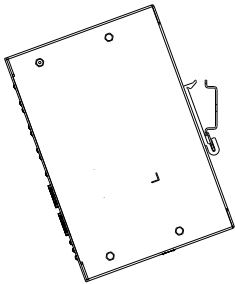
Ethernet Loop Protection	STP; RSTP
VLAN Function	Port-based VLAN
Link Aggregation	Static Aggregation
Port Feature	IEEE 802.3x Flow Control Unknown Unicast Suppression Multicast Storm Control Broadcast Storm Control MAC+PORT Binding Port Self-loop Detection Ports Self-loop Detection
Mirror	Local Port Mirroring
Reliability	LLDP
DHCP Function	DHCP Client
Security	Port Isolation IP/Port/MAC Binding
Equipment Management	Web Management Cloud Management Logs System Logs Fault Alarm

### General

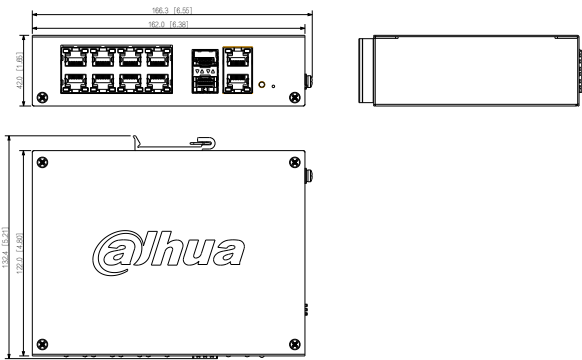
Packing List	1 × User Manual 1 × Legal and Regulatory Information 1 × Power Cord 1 × Power Adapter 1 × Terminal Block
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Ordering Information		
Type	Model	Description
SFP module	GSFP-1310T-20-SMF	1.25G 1310/1550nm,20km,LC, Single-mode
	GSFP-1310R-20-SMF	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

Installation



Dimensions (mm[inch])



Panels

