DH-PFS4212-8GT-110

12-Port Managed Desktop Gigabit Switch with 8-Port PoE

- All-gigabit port design
- Supports IEEE802.3af, IEEE802.3at, Hi-PoE and IEEE802.3bt (red port) standards
- 250 m long-distance PoE transmission (10 Mbps)
- PoE Watchdog
- Supports STP, RSTP, and MSTP
- IEEE802.1Q-based VLAN configuration
- Manual link aggregation and static LACP
- Desktop mount and wall mount

System Overview

The device is a layer-2 commercial switch. It provides high-performance switching engine and large buffer memory to ensure smooth video stream transmission. With a full-metal and fanless design, the device features great heat dissipation capability on the shell surface, and is able to work in the environment from –10 °C to +55 °C. It adopts EMC (Electro Magnetic Compatibility) protection design, which meets the Class B standard. With Telnet, WEB management, SNMP (Simple Network Management Protocol) and other functions, the device can be remotely managed. The device can directly connect to iLinks-View.

Functions

PoE Watchdog

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

Long-distance PoE

By dialing or enabling long-diatance transmission on the WEB interface, the transmission distance of a PoE port can be up to 250 m, meeting the requirements of wired transmission (bandwidth reduced to 10 Mbps).

Red Port 90W

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

Wide Operating Temperature

Supports working in temperatures between-10 °C to +55 °C. It has built-in professional mine-proof circuits, which effectively reduce the impact of thunderstorms on network systems and improves system robustness, allowing it to readily adapt to harsh environments.

Intelligent PoE

Provides control over power consumption and offers real-time monitoring to ensure power supplies receive priority with important ports and to prevent malfunctions caused by changes in power consumption. Supports ultra wide power supplies and is able to adapt to IPC power fluctuations.

Fast Loop Convergence

Supports ERPS protocol to provide loop protection. Convergence time can be no more than 50 ms when a link disconnection occurs.

Scene

The device is applicable for use in different scenarios, including home, office, server farm, and small mall.

Technical Specification

Hardware

PoE	Yes
Ethernet Port	10
Optical Port	2
Ethernet Port Speed	10 Mbps/100 Mbps/1000 Mbps
Optical Port Speed	1000 Mbps
Ethernet Port	Port 1-8: 8 x 10/100/1000 Base-T (PoE) Port 9-10: 2 x 10/100/1000 Base-T Port 11-12: 2 x 1000 Base-X
Power Supply Mode	48 V–57 VDC
Operating Temperature	–10 °C to +55 °C (+14 °F to +131 °F)
Operating Humidity	5%–95% (RH)
Power Consumption	12 W

Performance

Layer	L2

Managed	Yes
Switching Capacity	52 Gbps
Packet Forwarding Rate	17.856 Mpps
Packet Buffer Size	4 Mbits
Communication Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3x; IEEE 802.3ab; IEEE 802.3z; IEEE 802.3ad; IEEE 802.1d; IEEE 802.1p; IEEE 802.1q; IEEE 802.1s; IEEE 802.1w; IEEE 802.1x
MAC Table Size	8K

Function

PoE Protocol	IEEE 802.3af (PoE); IEEE 802.3at (PoE+); Hi-PoE; IEEE 802.3bt
PoE Power	Port 1-2: ≤90 W Port 3-8: ≤30 W Total: ≤110 W
PoE Pin Assignment	1, 2, 4, 5 (V+), 3, 6, 7, 8 (V-)
Long Distance PoE Transmission	Yes
Jumbo Frame	9,000 bytes
VLAN Function	Yes
Flow Control	Half-duplex based on back pressure type control Full duplex based on PAUSE frame
Link Aggregation	Static link aggregation; LACP
Port Mirroring	Multiple-to-one port mirroring
Multicast	Yes
DHCP Function	DHCP client DHCP-Server
Security	Users management HTTPS SSH Hardware supports MAC binding based on port 802.1x Loop protection
QoS	QoS base on CoS/DPL/PCP/DEI 8 output queues for each port Port shaping Port tag remarking QoS base on DSCP
Maintenance	One-click restore to default settings Uploading/downloading configuration files Updated packet upload System logs
Device Management	Web (HTTP and HTTPS protocol); SNMP V1/V2C/V3; CLI

General

Statics Protection	Air discharge: 8 kV Contact discharge: 6 kV
Lighting Protection	Common mode: 2 kV Differential mode: 1 kV
Net Weight	0.84 kg (1.85 lb)
Gross Weight	1.75 kg (3.86 lb)
Product Dimensions	220 mm × 135 mm × 30 mm (8.67" × 5.31" × 1.18") (L × W × H)
Packing Dimensions	290 mm × 196 mm × 91 mm (11.42" × 7.72" × 3.58") (L × W × H)

Transmission Performance:

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

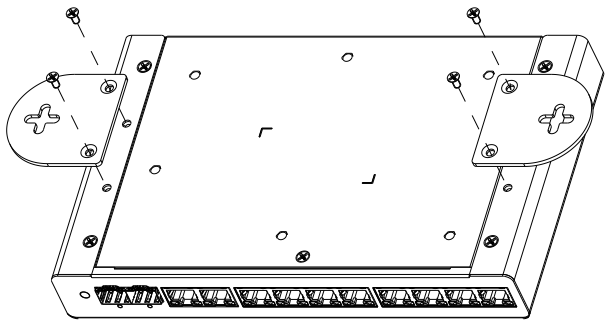
Cable(m)	Load Capacity(W)	Bandwidth(Mbps)
IEEE802.3bt 90 W		
100	71.3	100
150	62	10
200	51	10
250	40	10
Hi-PoE 60 W		
100	53	100
150	50	10
200	47	10
250	37	10
IEEE802.3at 30 W		
100	25.5	100
150	25.5	10
200	25.5	10
250	25.5	10

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	PFT3950	1.25G 850 nm, 500 m, LC, Multi-mode
	PFT3960	1.25G 1310/1550 nm,20 km, LC, Single-mode
	PFT3970	1.25G 1550/1310 nm,20 km,LC, Single-mode

Installation



Dimensions (mm[inch])