

DH-PFS4410-6GT-DP

10-Port Gigabit Industrial Swicth with 6-Port Gigabit PoE (Managed)



- * The parameters and datasheets below can only be applied to V2.0 (version 2.0)
- · 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 DIN-rail mount.













System Overview

The device is a layer-2 switch. Equipped with high performance switching engine and large buffer memory, it features low transmission delay and high reliability. The solid and sealed all-metal case design and efficient surface heat dissipation make it can work in the environment from –40 °C to +75 °C. The protection for power input end overcurrent, overvoltage and EMC can effectively resist the interference from static electricity, lightning, and pulse. Redundant power supply guarantees stable operation for the system. With Telnet, WEB management, SNMP and other functions, the device can be remotely managed. It 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-distance 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 90W per port. Suitable for powering high-power devices.

Wide Operating Temperature

Supports working in temperatures between-40 $^{\circ}$ C to +75 $^{\circ}$ 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.

Redundant Power Supply

Redundant power supply ensures that the device is still powered when one power port malfunctions, vastly improving device reliability.

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 corridors and offices.

Technical Specification

Hardware

Included Power Adapter	No
PoE	Yes
Ethernet Port	6
Optical Port	4
Ethernet Port Speed	10 Mbps/100 Mbps/1000 Mbps
Optical Port Speed	1000 Mbps
Console Port	1
Power Supply Mode	48 V–57 V DC
Operating Temperature	-40 °C to +75°C (-40 °F to +167 °F)
Operating Humidity	10%-90% (RH)
Power Consumption	Idling: ≤ 6 W Full load: 120 W

Performance

Layer	L2
Managed	Yes

Industrial PoE Switch | DH-PFS4410-6GT-DP

Switching Capacity 28 Gbps Packet Forwarding Rate 14.88 Mpps Packet Buffer Size 4 Mbits Communication Standard IEEE 802.3; IEEE 802.3at; IEEE 802.3at; IEEE 802.3at; IEEE 802.3at; IEEE 802.3at IEEE	ndustrial PoE Sw	itch DH-PFS4410-6GT-DP
Packet Buffer Size 4 Mbits Communication Standard IEEE 802.3; IEEE 802.3at; IEEE 802.3ab; IEEE 802.3ab; IEEE 802.3ab; IEEE 802.3ac IEEE 802.3ab; IEEE 802.3ab; IEEE 802.3ac IEEE 802.3ab; IEEE 802.3a	Switching Capacity	28 Gbps
IEEE 802.3; IEEE 802.3; IEEE 802.3ad MAC Table Size	Packet Forwarding Rate	14.88 Mpps
MAC Table Size BK Function PoE Protocol BEE 802.3af (PoE); IEEE 802.3at (PoE+); Hi-PoE; IEEE 802.3bt Port 1-2: < 90 W Port 3-6: < 30 W Total: < 120 W Port 3-6: < 30 W Total: < 120 W Poer One on and off Power off when PoE power is overloaded Green PoE PoE Pin Assignment 1, 2, 4, 5 (V+), 3, 6, 7, 8 (V-) Long Distance PoE Transmission Jumbo Frame 9,000 bytes Spanning Tree Protocol ERPS VLAN Function 802.1Q Flow Control Full-duplex flow control (back pressure) Full-duplex flow control (PAUSE) Link Aggregation Static link aggregation; LACP Port Mirroring Multicast Yes DHCP Function DHCP Function DHCP Server DHCP-Snooping User management HTTP SSH SSMP Y1/V2C/V3 RMON ACL P Source guard Port/VLAN-based ARP check Static ARP check Dynamic ARP check Dynamic ARP check S02.1x Loop protection Cos/OPL/PCP/DEI-based QoS 8 output queue for each port Port shaping Port stag remarking DSCP-based QoS Online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Air discharge: 8 kV Contact discharge: 6 kV Differential mode: 4 kV Differential mode: 4 kV Differential mode: 4 kV	Packet Buffer Size	4 Mbits
Function PoE Protocol BEEE 802.3af (PoE); IEEE 802.3at (PoE+); HI-PoE; IEEE 802.3bt PoE Power Port 1-2: < 90 W Port 3-6: < 30 W Totals: \$120 W Power consumption PoE Power Consumption Management PoE power consumption management PoE power on and off Power off when PoE power is overloaded Green PoE PoE Pin Assignment 1, 2, 4, 5 (V+), 3, 6, 7, 8 (V-) Long Distance PoE Transmission Jumbo Frame 9,000 bytes Spanning Tree Protocol ERPS VLAN Function 802.1Q Flow Control Full-duplex flow control (back pressure) Full-duplex flow control (PAUSE) Link Aggregation Static link aggregation; LACP Port Mirroring Multicast Yes DHCP Function DHCP Function DHCP-Server DHCP-Server DHCP-Snooping User management HTTP SNM V1/V2C/V3 RMON ACL IP Source guard Port/VLAN-based ARP check Static ARP check NO2.1X Loop protection Cos/DPL/PCP/DEI-based QoS 8 output queue for each port Port shaping Port tag remarking DSCP-based QoS Maintenance Uploading/downloading configuration files Online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Air discharge: 8 kV Contact discharge: 6 kV Ufferential mode: 4 kV Ufferential mode: 6 kV Ufferential mode: 4 kV	Communication Standard	
PoE Protocol EEE 802.3af (PoE): IEEE 802.3at (PoE+); Hi-PoE; IEEE 802.3bt Port 1-2: ≤ 90 W	MAC Table Size	8K
PoE Power Port 1-2: 590 W Port 3-6: 430 W Total: \$120 W Power consumption management Poe power on and off Power off when PoE power is overloaded Green PoE PoE Pin Assignment 1, 2, 4, 5 (V+), 3, 6, 7, 8 (V-) Long Distance PoE Transmission Yes Spanning Tree Protocol Full-duplex flow control (back pressure) Full-duplex flow control (PAUSE) Link Aggregation Static link aggregation; LACP Port Mirroring Multiple-to-one port mirroring Multicast Yes DHCP client DHCP-Server DHCP-Snooping User management HTTP SSH SNMP V1/V2C/V3 RMONO ACL IP Source guard Port/VLAN-based ARP check Static ARP check Dynamic ARP check BO2.1x Loop protection Cos/DPL/PCP/DEI-based QoS 8 output queue for each port Port shaping Port ag remarking DSCP-based QoS Author user and port System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Air discharge: 8 kV Contact discharge: 6 kV Lighting Protection Common mode: 6 kV Differential mode: 4 kV	Function	
PoE Power Port 3-6: ≤ 30 W Total: ≤ 120 W Power consumption management PoE power on and off Power off when PoE power is overloaded Green PoE PoE Pin Assignment 1, 2, 4, 5 (∀+), 3, 6, 7, 8 (∀-) Long Distance PoE Transmission Jumbo Frame 9,000 bytes Spanning Tree Protocol ERPS VLAN Function 802.1Q Flow Control Full-duplex flow control (back pressure) Full-duplex flow control (PAUSE) Link Aggregation Static link aggregation; LACP Port Mirroring Multicast Ves DHCP client DHCP-Server DHCP-Shooping Security Security Cos Port Name ARP check Soziax ARP check Soziax ARP check Soziax Loop protection Cos/DPL/PCP/DEI-based QoS 8 output queue for each port Port shaping DSCP-based QoS Soutput queue for each port Port shaping DSCP-based QoS Maintenance Uploading/downloading configuration files Online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Common mode: 6 kV Differential mode: 4 kV Contact discharge: 6 kV Common mode: 6 kV Differential mode: 4 kV	PoE Protocol	IEEE 802.3af (PoE); IEEE 802.3at (PoE+); Hi-PoE; IEEE 802.3bt
PoE Power Consumption Management PoE power on and off Power off when PoE power is overloaded Green PoE PoE Pin Assignment 1, 2, 4, 5 (V+), 3, 6, 7, 8 (V-) Long Distance PoE Transmission Yes Jumbo Frame 9,000 bytes Spanning Tree Protocol ERPS VLAN Function 802.1Q Flow Control Full-duplex flow control (back pressure) Full-duplex flow control (PAUSE) Link Aggregation Static link aggregation; LACP Port Mirroring Multiple-to-one port mirroring Multicast Yes DHCP Function DHCP-Server DHCP-Snooping User management HTTP SSH SNMP Y1/Y2C/V3 RMON ACL IP Source guard Port/VLAN-based ARP check Static ARP check Static ARP check S02.1x Loop protection QoS Port shaping Port tag remarking DSCP-based QoS Soutput queue for each port Port shaping Port tag remarking DSCP-based QoS Online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Common mode: 6 kV Differential mode: 4 kV Differential mode: 4 kV	PoE Power	Port 3-6: ≤ 30 W
Long Distance POE Transmission Jumbo Frame 9,000 bytes Spanning Tree Protocol ERPS VLAN Function 802.1Q Flow Control Full-duplex flow control (back pressure) Full-duplex flow control (PAUSE) Link Aggregation Static link aggregation; LACP Port Mirroring Multiple-to-one port mirroring Multicast Yes DHCP Function DHCP Function User management HTTP SSH SNMP V1/V2C/V3 RMON ACL IP Source guard Port/VLAN-based ARP check Static ARP check Dynamic ARP check S02.1x Loop protection Cos/DPL/PCP/DEI-based QoS 8 output queue for each port Port shaping Port tag remarking DSCP-based QoS Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Common mode: 6 kV Differential mode: 4 kV Differential mode: 4 kV	•	PoE power on and off Power off when PoE power is overloaded
Transmission Jumbo Frame 9,000 bytes Spanning Tree Protocol ERPS VLAN Function 802.1Q Flow Control Full-duplex flow control (back pressure) Full-duplex flow control (PAUSE) Link Aggregation Static link aggregation; LACP Port Mirroring Multiple-to-one port mirroring Multicast Yes DHCP client DHCP-Server DHCP-Server DHCP-Snooping User management HTTP SSH SNMP V1/V2C/V3 RMON ACL IP source guard Port/VLAN-based ARP check Static ARP check Static ARP check 802.1x Loop protection Qos Cos/DPL/PCP/DEI-based Qos 8 output queue for each port Port shaping Port tag remarking DSCP-based Qos 9 output queue for each port Port shaping Port tag remarking DSCP-based Qos System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Air discharge: 8 kV Contact discharge: 6 kV Lighting Protection Common mode: 6 kV Differential mode: 4 kV	PoE Pin Assignment	1, 2, 4, 5 (V+), 3, 6, 7, 8 (V-)
Spanning Tree Protocol VLAN Function 802.1Q Full-duplex flow control (back pressure) Full-duplex flow control (PAUSE) Link Aggregation Static link aggregation; LACP Port Mirroring Multiple-to-one port mirroring Multicast Yes DHCP Function DHCP-Server DHCP-Snooping User management HTTP SSH SNMP V1/V2C/V3 RMON ACL IP source guard Port/VLAN-based ARP check Static ARP check Dynamic ARP check 802.1x Loop protection Cos/DPL/PCP/DEI-based QoS 8 output queue for each port Port shaping DSCP-based QoS 4 online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Common mode: 6 kV Differential mode: 4 kV	•	Yes
VLAN Function 802.1Q Flow Control Full-duplex flow control (back pressure) Full-duplex flow control (PAUSE) Link Aggregation Static link aggregation; LACP Port Mirroring Multiple-to-one port mirroring Multicast Yes DHCP client DHCP-Server DHCP-Snooping User management HTTP SSH SNMP V1/V2C/V3 RMON ACL IP source guard Port/VLAN-based ARP check Static ARP check Dynamic ARP check 802.1x Loop protection QoS Cos/DPL/PCP/DEL-based QoS 8 output queue for each port Port shaping Port tag remarking DSCP-based QoS Uploading/downloading configuration files Online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Common mode: 6 kV Differential mode: 4 kV	Jumbo Frame	9,000 bytes
Flow Control Full-duplex flow control (back pressure) Full-duplex flow control (PAUSE) Link Aggregation Static link aggregation; LACP Port Mirroring Multiple-to-one port mirroring Multicast Yes DHCP client DHCP-Server DHCP-Snooping User management HTTP SSH SNMP V1/V2C/V3 RMON ACL IP source guard Port/VLAN-based ARP check Static ARP check Dynamic ARP check 802.1x Loop protection Cos/DPL/PCP/DEI-based QoS 8 output queue for each port Port shaping Port ag remarking DSCP-based QoS Maintenance Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Common mode: 6 kV Differential mode: 4 kV	Spanning Tree Protocol	ERPS
Full-duplex flow control (PAUSE) Link Aggregation Static link aggregation; LACP Port Mirroring Multiple-to-one port mirroring Multicast Yes DHCP client DHCP-Server DHCP-Server DHCP-Snooping User management HTTP SSH SNMP V1/V2C/V3 RMON ACL IP source guard Port/VLAN-based ARP check Static ARP check Dynamic ARP check 802.1x Loop protection CoS/DPL/PCP/DEI-based QoS 8 output queue for each port Port shaping Port tag remarking DSCP-based QoS Maintenance Uploading/downloading configuration files Online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Common mode: 6 kV Differential mode: 4 kV	VLAN Function	802.1Q
Port Mirroring Multicast Yes DHCP client DHCP-Server DHCP-Snooping User management HTTP SSH SNMP V1/V2C/V3 RMON ACL IP source guard Port/VLAN-based ARP check Static ARP check Dynamic ARP check Dynamic ARP check Bount queue for each port Port shaping Port yar gremarking DSCP-based QoS Maintenance Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Common mode: 6 kV Differential mode: 4 kV	Flow Control	
Multicast Pes DHCP client DHCP-Server DHCP-Snooping User management HTTP SSH SNMP V1/V2C/V3 RMON ACL IP source guard Port/VLAN-based ARP check Static ARP check Dynamic ARP check BO2.1x Loop protection Cos/DPL/PCP/DEI-based QoS 8 output queue for each port Port shaping Port tag remarking DSCP-based QoS Maintenance Uploading/downloading configuration files Online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Air discharge: 8 kV Contact discharge: 6 kV Lighting Protection Common mode: 6 kV Differential mode: 4 kV	Link Aggregation	Static link aggregation; LACP
DHCP client DHCP-Server DHCP-Snooping User management HTTP SSH SNMP V1/V2C/V3 RMON ACL IP source guard Port/VLAN-based ARP check Dynamic ARP check Dynamic ARP check Bo2.1x Loop protection Cos/DPL/PCP/DEI-based QoS 8 output queue for each port Port shaping Port tag remarking DSCP-based QoS Maintenance Uploading/downloading configuration files Online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Air discharge: 8 kV Contact discharge: 6 kV Lighting Protection Common mode: 6 kV Differential mode: 4 kV	Port Mirroring	Multiple-to-one port mirroring
DHCP-Server DHCP-Snooping User management HTTP SSH SNMP V1/V2C/V3 RMON ACL IP source guard Port/VLAN-based ARP check Static ARP check Dynamic ARP check 802.1x Loop protection QoS Cos/DPL/PCP/DEI-based QoS 8 output queue for each port Port shaping Port tag remarking DSCP-based QoS Maintenance Uploading/downloading configuration files Online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Common mode: 6 kV Contact discharge: 6 kV Lighting Protection Uploading mode: 4 kV	Multicast	Yes
User management HTTP SSH SNMP V1/V2C/V3 RMON ACL IP source guard Port/VLAN-based ARP check Static ARP check Dynamic ARP check 802.1x Loop protection Cos/DPL/PCP/DEI-based QoS 8 output queue for each port Port shaping Port tag remarking DSCP-based QoS Uploading/downloading configuration files Online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Air discharge: 8 kV Contact discharge: 6 kV Lighting Protection Common mode: 6 kV Differential mode: 4 kV	DHCP Function	DHCP-Server
QoS 8 output queue for each port Port shaping Port tag remarking DSCP-based QoS Uploading/downloading configuration files Online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Air discharge: 8 kV Contact discharge: 6 kV Differential mode: 6 kV Differential mode: 4 kV	Security	HTTP SSH SNMP V1/V2C/V3 RMON ACL IP source guard Port/VLAN-based ARP check Static ARP check Dynamic ARP check 802.1x
Maintenance Online upgrade System logs Device Management Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI General Statics Protection Air discharge: 8 kV Contact discharge: 6 kV Lighting Protection Common mode: 6 kV Differential mode: 4 kV	QoS	8 output queue for each port Port shaping Port tag remarking
General Statics Protection Air discharge: 8 kV Contact discharge: 6 kV Lighting Protection Common mode: 6 kV Differential mode: 4 kV	Maintenance	Online upgrade
Statics Protection Air discharge: 8 kV Contact discharge: 6 kV Lighting Protection Common mode: 6 kV Differential mode: 4 kV	Device Management	Web (HTTP and HTTPS protocol); Telnet; SNMP; CLI
Contact discharge: 6 kV Lighting Protection Common mode: 6 kV Differential mode: 4 kV	General	
Lighting Protection Differential mode: 4 kV	Statics Protection	
Net Weight 1.25 kg (2.8 lb)	Lighting Protection	
	Net Weight	1.25 kg (2.8 lb)

Gross Weight	1.52 kg (3.4 lb)
Product Dimensions	125 mm × 53.5mm × 175mm (4.9 " × 2.1 " × 6.9") (L × W × H)
Packing Dimensions	254 mm × 287 mm × 101 mm (10.0 " × 11.3 " × 4.0 ")

Transmiss	ion Performance:	
Switch power supply voltage 53V. CATSE/CAT6. Max. DC resistance < $10\Omega/100m$		
Cable(m)	Load Capacity(W)	Bandwidth(Mbps)
IEEE802.3b	t 90W	
100	71.3	100
150	62	10
200	51	10
250	40	10
Hi-PoE 60W		
100	53	100
150	50	10
200	47	10
250	37	10
IEEE802.3at 30W		
100	25.5	100
150	25.5	10
200	25.5	10
250	25.5	10

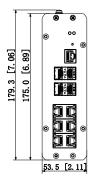
Ordering Information			
Туре	Model	Description	
	GSFP-1310T-20-SMF	1.25G 1310/1550nm, 20km, LC, Single-mode	
SEP module	GSFP-1310R-20-SMF	1.25G 1550/1310nm, 20km, LC, Single-mode	
SEP module	GSFP-1310-20-SMF	1.25G 1310nm, 20km, LC, Single-mode	
	GSFP-850-MMF	1.25G 850nm, 550m, LC, Multi-mode	
DIN-Rail Power Supply	DRL-48V120W1AA	120W, 100VAC~240VAC-48V2.5A	

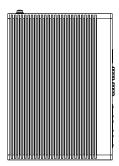
Note: Data from this table was collected by Dahua test lab and is for reference only . If there is inconsistency between field application and the table, the field result shall

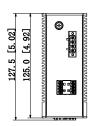
Note: This product does not include a power adapter, the power adapter needs to be purchased separately to use with the product. $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1$

prevail.

Dimensions (mm[inch])







Installation

