

# 16-port Managed PoE Gigabit Ethernet Switch

16-port PoE and Intelligent PoE



- Intelligent PoE
- Supports 90W IEEE802.3bt
- 250 m PoE Transmission Distance
- PoE Watchdog
- 4 Mbit Data Cache for Real-time Transmission and Smooth Video
- Gigabit Port Design















### **System Overview**

The DH-PFS4218-16GT-230 managed PoE switch comes with 16 gigabit PoE ports and 2 gigabit uplink combo ports. Highly reliable, it can carry a full load of 230 W. It also has a strong switching capability and optimizes transmission performance when accessing Ultra HD videos. With its full metal design, the device has great heat dissipation and low power consumption, working in environments ranging from 0 °C to +45 °C (32 °F to 131 °F). It also has powerful network management functions, supporting CLI and various types of web and network management software based on SNMP.

### **Functions**

### 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.

### All-gigabit Ports

Designed with large buffer memory and all-Gigabit ports, enabling high-definition access of large stream.

### Red Port 90W

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.

### **Uplink Combo**

With two adaptive 10 Mbps/100 Mbps/1000 Mbps RJ-45 ports and 1000 Mbps optical ports, the switch provides users with a wide choice of uplink access.

### Long Distance PoE

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

### Minimal Web

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

| Technical Specification             |   |  |
|-------------------------------------|---|--|
| Hardware                            |   |  |
| Included Power Adapter              | Yes   |  |
| PoE                                 | Yes   |  |
| Ethernet Port                       | 16  |  |
| Ethernet Port Speed                 | 10/100/1000 Mbps  |  |
| Ethernet Port Uplink Speed          | 10/100/1000 Mbps  |  |
| Optical Port Uplink Speed           | 100/1000 Mbps   |  |
| Description of Function Slots       | Port 1-16:16 × 10M/100M/1000MBase-T (PoE);<br>Port 17-18:2 × 10M/100M/1000MBase-T (uplink)<br>(combo)<br>Port 17-18:2 × 1000M SFP (uplink)(combo) |  |
| Debugging                           | 1 x Console Port  |  |
| Reset Button                        | 1   |  |
| Power Supply                        | 100–240 VAC, 50/60 Hz, 7 A  |  |
| Operating Temperature               | 0 °C to +45 °C (32 °F to 131 °F)  |  |
| Operating Humidity                  | 10%-90% (RH)  |  |
| Storage Temperature                 | -20 °C to +70 °C (-4 °F to +158 °F)   |  |
| Storage Humidity                    | 5%–90% (RH), non-condensing   |  |
| Power Consumption                   | 265W  |  |
| Performance                         |   |  |
| Layer                               | Layer 2+  |  |
| Management Type                     | Web (http and https protocol); CLI; SNMP V1/<br>V2C/V3  |  |
| Switching Capacity                  | 56 Gbps   |  |
| Packet Forwarding Rate              | 29.76 Mpps  |  |
| Packet Buffer Size                  | 12 Mbit   |  |
| Jumbo Frame                         | 10K   |  |
| MAC Table Size                      | 16K   |  |
| VLAN Number                         | 4K  |  |
| VLAN Interface                      | 32  |  |
| IPv4 Routes                         | 16  |  |
| Dynamic ARP                         | 303   |  |
| Communication Standard              | IEEE 802.3, IEEE 802.3u, IEEE 802.3ab   |  |
| Feature                             |   |  |
| PoE Protocol                        | IEEE802.3af/ IEEE802.3at/ Hi-PoE/IEEE802.3bt  |  |
| PoE Power                           | Port 1-2 ≤ 90 W,Port 3-16 ≤ 30 W, Total ≤ 230 W   |  |
| PoE Power Consumption<br>Management | Yes   |  |
| PoE Pin Assignment                  | Yes   |  |
| Long Distance PoE<br>Transmission   | Yes   |  |
| Spanning Tree Protocol              | STP; RSTP; MSTP   |  |
| VLAN Function                       | Yes   |  |
| Link Aggregation                    | Yes   |  |
| Multicast                           | Yes   |  |
| ARP                                 | Yes   |  |
| Equipment Management                | Yes   |  |
| General                             |   |  |
| Static Protection                   | Air Discharge: 8 kV   |  |
| Lightening Protection               | Common mode: 6 kV   |  |
| Net Weight                          | 3.1 kg (6.83 lb)  |  |

| Gross Weight       | 3.7 kg (8.16 lb)                                   |  |
|--------------------|--|--|
| Product Dimensions | 440 mm × 185.8 mm × 44 mm (17.32" × 7.31" × 1.73") |  |
| Package Dimensions | 469 mm × 265 mm × 83 mm (18.46" × 10.43" × 3.27")  |  |
| Casing Material    | Electro Galvanized Steel Sheet                     |  |
| Installation       | Desktop Mount, Rack Mount                          |  |
| Certifications     | CE, FCC  |  |

### **Transmission Performance**

Switch Power Supply Voltage 53V CAT5E/CAT6 Max. DC Resistance <10  $\Omega$ /100 m

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|---|-------------------|------------------|--|--|
| Cable (m)   | Load Capacity (W) | Bandwidth (Mbps) |  |  |
| IEEE802.3bt 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               |  |  |
| Note: Data from this table was collected by Dahua's test lab and is for reference only. If there are inconsistencies between field application and the table, the field application should be used. |                   |                  |  |  |

## Transmission | DH-PFS4218-16GT-230

| Ordering Information |                   |   |  |
|----------------------|-------------------|---|--|
| Туре                 | Part Number       | Description                               |  |
| SFP Module           | GSFP-1310T-20-SMF | 1.25G 1310/1550nm, 20 km, LC, Single-mode |  |
|                      | GSFP-1310R-20-SMF | 1.25G 1550/1310nm, 20 km, LC, Single-mode |  |
|                      | GSFP-1310-20-SMF  | 1.25G 1310nm, 20 km, LC, Single-mode      |  |
|                      | GSFP-850-MMF      | 1.25G 850nm, 550 km, LC, Single-mode      |  |

# Dimensions mm [in.]







