

24-port Managed PoE Ethernet Switch

PoE 2.9

Layer 2 PoE, PoE+, Hi-PoE, and PoE++ Switch



• Layer 2 Network Management PoE Ethernet Switch

- Intelligent PoE for Power Consumption Management
- Long-distance PoE Transmission Distance, up to 250.0 m (820.21 ft)
- PoE Watchdog Function Monitors Network
- High-capacity Data Cache (4-megabit) for Real-time Transmission with smooth video
- Supports IEEE802.3af, IEEE802.3at, Hi-PoE, and IEEE802.3bt Standards
- New Limited Lifetime Warranty¹

Product Overview

The 24-port managed desktop switch is designed for field transmission applications and for high-definition video. The switch is equipped with a high-performance switching engine, a large buffer, low transmission delay, and high reliability. In addition to the 24 PoE ports, the switch offers two (2) gigabit uplink combo ports with a PoE budget of 360 W. The switch also delivers powerful network management functions including CLI, iLinksView, and Web and network management software based on SNMP.

The switch is housed in a sealed, metal case that offers low power consumption.

Functions

Intelligent PoE

The switch features Intelligent PoE power consumption management to help keep the power and the data flowing, even when the switch experiences a power fault. Intelligent PoE monitors the power consumption of the connected devices, and in the event of large power fluctuations the switch shuts down one port at a time rather than shutting down all ports. Unlike typical switches that shut down all ports at once, this switch shuts down the highest number port first, then the next highest number until the switch detects the power consumption is below the PoE budget. For example, if the switch has eight PoE ports and each port is connected to a network camera, the switch disables port number 8 first, then subsequent ports until the power budget is below the threshold wattage.

PoE Watchdog

The switch automatically monitors each port for an active connection with the associated camera. If the switch detects a camera failure it powers off then restarts the PoE connection to restart the camera.

PoE++

The switch supports IEEE802.3bt technology that delivers 90 W via a PoE port and drives high-power infrastructure for smart building systems, safe cities, thin clients, and many more applications. With this standard, the switch can power IT and IoT devices that demand increased power consumption resulting in lower installation and wiring costs.

Long-distance PoE Transmission

The switch extends PoE transmission distance to 250.0 m (820.21 ft), a significant improvement over typical switches.

Environmental

The switch is designed to operate in severe environments and in temperatures ranging from -10° C to $+55^{\circ}$ C (14° F to 131° F). The switch includes a professional-grade surge protection circuit that offers 4 kV (common mode) and 2 kV (differential mode) all-port surge protection. This protection reduces damage to the network from a lightning storm. The switch meets the Class B EMC standard and is suitable for residential, commercial, and light-industrial applications.

Technical Specification

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Ethernet Ports	Ports 1 through 24: 10/100 Mbps, RJ45 Ports 25 and 26: 10/100/1000 Mbps (uplink), RJ45 Ports 25 and 26: SFP 1000 Mbps (uplink combo)	
PoE Power Consumption	Ports 1 and 2: ≤ 90 W (IEEE802.3bt) Ports 3 through 24: ≤ 30 W (IEEE802.3at) Total Power Consumption: ≤ 360 W	
PoE Protocol	PoE (IEEE802.3af), PoE+ (IEEE802.3at), Hi-PoE, PoE++ (IEEE802.3bt)	
PoE PIN Assignment	1, 2, 4, 5 (V+), 3, 6, 7, 8 (V-);	
PoE Management	Power consumption management Power on and power off Power down for overload Green PoE Legacy support	
PoE Transmission Distance ²	250.0 m (820.21 ft)	
Switching Capacity	8.8 Gbps	
Packet Forwarding Rate	6.55 Mpps	
Packet Buffer Memory	2.75 Mb	
MAC Table Size	8К	
Standards Compliance	IEEE802.3; IEEE802.3u; IEEE802.3x; IEEE802.3ab; IEEE802.3z	
Power Input	100 VAC to 240 VAC	
Power Consumption	Idle: 20 W PoE Full Load: 360 W	
Operating Temperature	-10° C to 55° C (14° F to 131° F)	
Operating Humidity	10% to 90%, Relative	
Electrostatic Discharge	Air Discharge: 8 kV Contact Discharge: 6 kV	
Surge Protection	Common Mode: 4 kV Differential Mode: 2 KV Class B Electromagnetic Compatibility Standard	
Dimensions (L x W x H)		
Product	440.0 mm x 300.0 mm x 44.0 mm (17.32 in. x 11.81 in. x 1.73 in.)	
Packaging	527.0 mm x 412.0 mm x 110.0 mm (20.75 in. x 16.22 in. x 4.33 in.)	
Weight	4.62 kg (10.19 lb)	
Installation	Rack-mount (rack-mount ears included)	
Certifications		
Safety	EN 62368-1:2014 + A11:2017	
Electromagnetic Compatibility (EMC)	CFR 47 FCC Part 15 subpart B EN55032:2015, EN61000-3-2:2014, EN61000-3-3:2013, EN55024:2010+A1:2015, EN55035:2017, EN50130-4:2011+A1:2014	

Service Specification		
Spanning Tree	IEEE802.1d (STP); 802.1w (RSTP)	
VLAN	IEEE802.1Q Standard VLAN	
Flow Control	Supports IEEE802.3x (full duplex flow control) and back pressure flow control (half duplex)	
Link Aggregation	Static, LACP	
Port Mirroring	One-to-One and Many-to-One Port Mirroring	
Multicast	GMP snooping based on port	
DHCP	DHCP Client	
Security Features	Hardware supports IP and MAC binding based on port, MAC filtering based on port, and IEEE802.1x port authentication	
Quality of Service	 High and low priority WRR 802.1P DSCP Priority based on protocol 	

Transmission Distances³

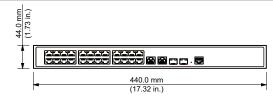
Via CAT5E/CAT6 Ethernet Cable Switch power supply voltage 53 V Maximum DC resistance < 10 Ω/100 m

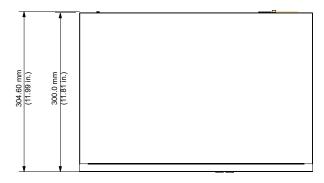
		Load Capacity W		
Cable Length, m (ft)	Bandwidth, Mbps	IEEE802.3bt (90 W)	Hi-PoE (60 W)	IEEE802.3at (30 W)
100 (328)	100	71.3	53	25.5
150 (492)	10	62	50	25.5
200 (656)	10	51	47	25.5
250 (820)	10	40	37	25.5

Ordering Information

Туре	Part Number	Description
PoE Switch	DH-PFS4226-24ET2GF-360	Layer 2 24-port Managed PoE Switch
Accessories, optional	PFT3950	1.25 GB, 850 nm, 500 m, LC, Multi-mode
	PFT3960	1.25 GB, 1310/1550 nm, 20 km, LC, Single Mode
	PFT3970	1.25 GB, 1550/1310 nm, 20 km, LC, Single Mode

Dimensions





1. New switch warranty period is extended to two years after end of sale date.

2. Enabling 100 m (328.08 ft) to 250 m (820.21 ft) transmission distance will lower the transmission data speed Gbps to 10 Mbps.
 This data was collected by Dahua test labs and for reference only. Environmental and application factors may

cause differences in lab test results and field applications.

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