

Product Specifications

8-Port 10/100TX 802.3at PoE +
2-Port 10/100TX Desktop Switch (120 watts)

FSD-1008HP

Version 1.0

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Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2017/10/20	Keithy	Initial Release

Author:	Keithy	Editor:	Mark
Reviewed by:	Jonas	Approved by:	Kent

1. PRODUCT DESCRIPTION



Flexible and Extendable Centralized Power Distribution

PLANET FSD-1008HP provides eight 10/100TX ports featuring 30-watt 802.3at PoE+, a total 120-watt PoE budget and extra two uplink ports to fulfill the demand of sufficient PoE power for HD IP surveillance and Wi-Fi system in a small-scale but high-performance network. With the same desktop-sized and compact metal housing, it makes the placement of the unit convenient and provides a quick and easy PoE PDs deployment with power feeding.

Ethernet Data Transmit Distance Extension

The built-in solid DIP switch provides “Standard”, “VLAN” and “Extend” operation modes. The FSD-1008HP operates as a normal IEEE 802.3at PoE+ switch in the “Standard” operation mode. The “VLAN” operation mode features with port-based VLAN function that can help to prevent the IP camera’s multicast or broadcast storm from influencing each other.

In the “Extend” operation mode, the FSD-1008HP operates on a per-port basis at 10Mbps duplex operation but can support 30-watt PoE power output over a distance of up to 250 meters overcoming the 100m limit on Ethernet UTP cable. With this brand-new feature, the FSD-1008HP provides an additional solution for 802.3at PoE+ distance extension, thus saving the cost of Ethernet cable installation. Furthermore, its VLAN isolation function isolates ports so as to prevent broadcast storm and defend DHCP spoofing in the “Extend” operation mode.

Two Extra Uplink Ports

The FSD-1008HP provides 2 extra 10/100BASE-TX copper interfaces that enable network administrators to increase their network bandwidth to relieve traffic congestion when the 2 uplink ports are used to connect PoE-capable devices, such as NVR, Video Streaming Server, NAS and more. The administrators can easily connect and supply power to PoE-capable devices no matter how large the network expansion is.

Environment-friendly, Fanless Design for Silent Operation

The FSD-1008HP comes with a desktop-sized, compact metal housing, making the placement of the unit convenient. It features a ventilated construction in which a cooling fan is not necessary, thereby making its operation noiseless. Moreover, the FSD-1008HP is able to operate reliably and stably in any environment without affecting its performance. The deployment of PoE PDs with constant power feeding can be easily and quickly done.

Easy Cable Connection

With data switching and power over Ethernet integrated into one unit, the FSD-1008HP reduces cabling requirements and eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. A wire that carries both data and power can lower the installation costs, simplify the installation effort and eliminate the need for electricians or extension cords. With 8 PoE interfaces, the FSD-1008HP is ideal for small businesses and workgroups making the deployment of the PoE facility including wireless access points, IP-based surveillance camera and IP phones in any places easier, more efficient and more cost-effective.

2. PRODUCT FEATURES

➤ **Physical Port**

- 10-port 10/100BASE-TX Fast Ethernet RJ45 copper
- 8-port IEEE 802.3at PoE+ Injector (Ports 1 to 8)

➤ **Power over Ethernet**

- Complies with IEEE 802.3at Power+ over Ethernet end-span PSE
- Up to 8 ports of IEEE 802.3af/at devices powered
- Supports PoE power up to 30.8 watts for each PoE port
- Each port supports 55V DC power to PoE powered device
- 120-watt PoE budget
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100m in standard mode with 250m in extended mode

➤ **Switching**

- Hardware-based 10/100Mbps auto-negotiation and auto MDI/MDI-X
- Flow control for full duplex operation and back pressure for half duplex operation
- IEEE 802.1Q VLAN transparency
- Hardware DIP switch for **Standard**, **VLAN** and **Extend** mode selection; the Extend mode features 30-watt PoE transmit distance of 250m at speed of 10Mbps and VLAN isolation (Only for Ports 1 to 8)
- Solid DIP switch to isolate ports to prevent broadcast storm and defend DHCP spoofing

➤ **Hardware**

- 9-inch desktop size, 1U height, rack mountable
- LED indicators for system power, per port PoE ready and PoE activity, speed, Link/Act
- Fanless design
- Supports Energy-Efficient Ethernet (EEE) function (IEEE 802.3az)

3. PRODUCT SPECIFICATIONS

3.1 Main Components

Switch ASIC	RTL8316E
PoE Controller	TPS23861

3.2 Functional Specifications

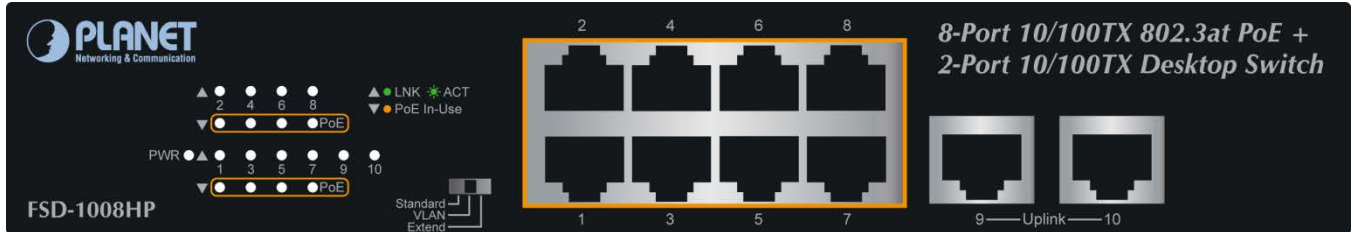
Model	FSD-1008HP
Hardware Specifications	
Copper Port	10 10/100BASE-TX MDI/MDIX Ports
PoE Injector Port	8-port with 802.3af/at PoE injector function with Ports 1 to 8
Switch Architecture	Store-and-Forward
Switch Fabric	2Gbps/non-blocking
Switch Throughput@64 bytes	1.48Mpps@64 bytes
MAC Address Table	8K entries, automatic source address learning and aging
Maximum Frame Size	1522 bytes
Flow Control	IEEE 802.3x pause frame for full-duplex Back pressure for half-duplex
LED	System: <ul style="list-style-type: none"> ■ Power (Green) 10/100BASE-TX RJ45 interfaces: <ul style="list-style-type: none"> ■ 10/100Mbps LNK/ACT (Green) PoE interfaces: <ul style="list-style-type: none"> ■ PoE-in-Use (Orange)
DIP Switch	Selectable operation mode <ul style="list-style-type: none"> ■ Standard ■ VLAN ■ Extend
Dimensions (W x D x H)	220 x 150 x 43 mm (1U height)
Enclosure	Metal
Weight	1230g
Power Requirements	AC 100~240V, 50/60Hz, 2.5A max.
Power Consumption/ Dissipation	System On: Max. 2.4 watts/8.1 BTU Ethernet Full Loading: Max. 5 watts/10.2 BTU

	PoE Full Loading: Max. 129 watts/440.1 BTU
Thermal Fan	Fanless
Power over Ethernet	
PoE Standard	IEEE 802.3af Power over Ethernet/PSE IEEE 802.3at Power over Ethernet Plus/PSE
PoE Power Supply Type	End-span
PoE Power Output	Per port 55V DC, 540mA. max. 30 watts
Power Pin Assignment	1/2 (+), 3/6 (-)
PoE Power Budget	120 watts
Max. Number of Class 2 PDs	8
Max. Number of Class 3 PDs	8
Max. Number of Class 4 PDs	4
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3x Flow control and back pressure IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3az Energy Efficient Ethernet (EEE)
Environment	
Operating	Temperature: 0 ~ 50 degrees C Relative Humidity: 5 ~ 95% (non-condensing)
Storage	Temperature: -10 ~ 70 degrees C Relative Humidity: 5 ~ 95% (non-condensing)

3.3 Physical Specifications

Dimensions (W x D x H)	220 x 150 x 43 mm
Net weight	1230g

➤ Front Panel



➤ Rear Panel



➤ LED Definition

■ System

LED	Color	Function
PWR	Green	Lights to indicate that the Switch has power.

■ Per 10/100Mbps Port

LED	Color	Function
PoE-in-use	Orange	Lights to indicate the port is providing 55V DC in-line power. (1-8 ports)
Speed/ LNK/ACT	Green	Lights to indicate the Switch is successfully connecting to the network at 10/100Mbps. Blinks to indicate that the Switch is actively sending or receiving data over that port.

3.4 Environmental Specifications

Operating:

Temperature	0 ~ 50 degrees C
Relative Humidity	5 ~ 95% (non-condensing)

Storage:

Temperature	-10 ~ 70 degrees C
Relative Humidity	5 ~ 95% (non-condensing)

3.5 Electrical Specifications

Input Voltage:	100~240V AC, 50/60Hz, 2.5A (max.)
Power Consumption (System on):	100V: 2.4 watts/8.1BTU
	110V: 2.4 watts/8.1BTU
	120V: 2.4 watts/8.1BTU
	220V: 2.4 watts/8.1BTU
	240V: 2.4 watts/8.1BTU
Power Consumption (Ethernet Full Loading):	100V: 5 watts/17BTU
	110V: 5 watts/17BTU
	120V: 5 watts/17BTU
	220V: 5 watts/17BTU
	240V: 5 watts/17BTU
Power Consumption (PoE Full Loading):	100V: 129 watts/440.1BTU
	110V: 129 watts/440.1BTU
	120V: 129 watts/440.1BTU
	220V: 127 watts/433.3BTU
	240V: 127 watts/433.3BTU

3.6 Regulatory Compliance

FCC Part 15 Class A, CE

3.7 Reliability

MTBF > 50,000 hrs @ 25 degrees C

3.8 Basic Packaging

- The FSD-1008HP x 1
- User's Manual x 1
- Two Rack-mounting Brackets with Attachment Screws x 1 (For 19-inch rack)

- Rubber Feet x 4
- Power Cord x 1

3.9 Packaging Information

Dimensions (W x D x H)	201.5 x 310 x 80 mm
Gross Weight	1.8kg
Carton Dimensions (W x D x H)	423 x 323 x 218 mm
Carton Weight	9.5kg
Carton Unit	5pcs in one carton