



## 9-port 10/100M Switch with 8-port 802.3at PoE

**PS981 / PS981L**



### Introduction

#### Centralized Power Distribution for Ethernet Networking

PS981 is a 9-Port 10/100Mbps Switch with 8-Port 802.3at/af Power over Ethernet and a total of 120 watt or 65 watt of PoE budget, which is an ideal solution to fulfill the demand of sufficient PoE power for network applications with Fast Ethernet speed transmission. The eight 802.3at/af PoE ports provide PoE power injector function which is able to drive 8 IEEE 802.3at/af compliant powered devices. The PS981 also provides a simple, cost-effective and non-blocking wire-speed performance.

#### Ideal Solution for Securing IP Surveillance Infrastructure

Particularly designed for the growing popular IP Surveillance applications, the PS981 PoE Switch is positioned as a Surveillance Switch for quick and easy PoE IP camera deployment with power feeding. The PS981 provides 802.3at/af PoE functions along with 8 10/100Base-TX ports featuring 30-watt 802.3at PoE in RJ-45 copper interfaces and 1 extra uplink supporting transmission of surveillance images and videos.

## Perfectly Integrated Solution for PoE IP Camera and NVR System

PS981 provides eight 802.3at PoE ports for catering to small scale of IP Surveillance networks at a lower total cost. The PS981 comes with high performance switch architecture and 65/120-watt PoE power budget. The recorded video files from 8 PoE IP Cameras can be powered by the PS981 and saved in the 8-channel NVR system or surveillance software to perform comprehensive security monitoring. For instance, one PS981 can be combined with one 8-Channel NVR and 8 PoE IP cameras as a kit for the administrators to centrally and efficiently manage the surveillance system in the local LAN and the remote site via Internet.

## Stable and High Performance Switch Architecture

The PS981 has a 4K MAC address table, featuring high performance switch architecture capable of providing the non-blocking 1.8Gbps switch fabric and wire-speed throughput as high as 6.547Mpps, which greatly simplifies the tasks of upgrading the LAN for catering to increasing bandwidth demands. Besides, the 802.3x Full-Duplex flow control function of the PS981 enables PD devices and servers to be directly connected to the switch for wire-speed packet transfer performance without the risk of packet loss.

The PS981 RJ-45 copper interfaces support 10/100Mbps Auto-Negotiation at port 1 to port 8 and 10/100Mbps Auto-Negotiation at port 9 for optimal speed detection through RJ-45 Category 5e cables. It also supports standard Auto-MDI/MDI-X that can detect the type of connection to any Ethernet device without requiring special straight or crossover cables.

## Easy Cable Connection

With data and power over Ethernet from one unit, the PS981 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. Providing 8 PoE interfaces, the PS981 is ideal for small businesses and workgroups requiring deploying the PoE for the wireless access points, IP-based surveillance camera or IP phones in any places easily, efficiently and cost-effectively.

### Hardware Specification

<b>Network Connector</b>	9-Port RJ-45 for 10/100Base-TX (Port 1 to Port 8 and a Uplink Port)
<b>PoE Inject Port</b>	8-Port with 802.3at/af PoE injector function
<b>LED Display</b>	System: Power (Green)

Per PoE port:  
 PoE in Use (Orange)  
 LNK/ACT (Green)  
 Uplink port:  
 LNK/ACT (Green)  
 PWR (Green)

<b>Switch Architecture</b>	Store and Forward switch architecture	
<b>MAC Address Table</b>	4K MAC address table with Auto learning function	
<b>Switch Fabric</b>	1.8Gbps	
<b>Switch Throughput</b>	6.547Mpps@64Bytes	
<b>Flow Control</b>	Back pressure for Half-Duplex. IEEE 802.3x pause frame for full-duplex	
<b>Power Requirements</b>	AC 100~240V, 50/60Hz, 2.6A max.	
<b>Power Consumption</b>	65 watt (PS981L), 120 watts (PS981)	
<b>Dimensions (W x D x H)</b>	230 x 150 x 43 mm	
<b>Weight</b>	1kg	
<b>Power over Ethernet</b>		
<b>PoE Standard</b>	IEEE 802.3at Power over Ethernet / PSE	
<b>PoE Power Supply Type</b>	End-Span	
<b>PoE Power Output</b>	Per Port 56V DC, 500mA, max. 30watts	
<b>Power Pin Assignment</b>	1/2(+), 3/6(-)	
<b>PoE Power Budget</b>	65w or 120 watts (at room temperature)	
<b>Max. number of PoE PSE</b>	8	
<b>Standard Conformance</b>		
<b>EMI Safety</b>	FCC Class A, CE	
<b>Standard Compliance</b>	IEEE 802.3	Ethernet
	IEEE 802.3u	Fast Ethernet
	IEEE 802.3x	Flow Control

IEEE 802.3at/af Power over Ethernet

## Environment

**Operating Environment** 0 ~ 40 degrees C

**Storage Environment** -10 ~ 70 degrees C

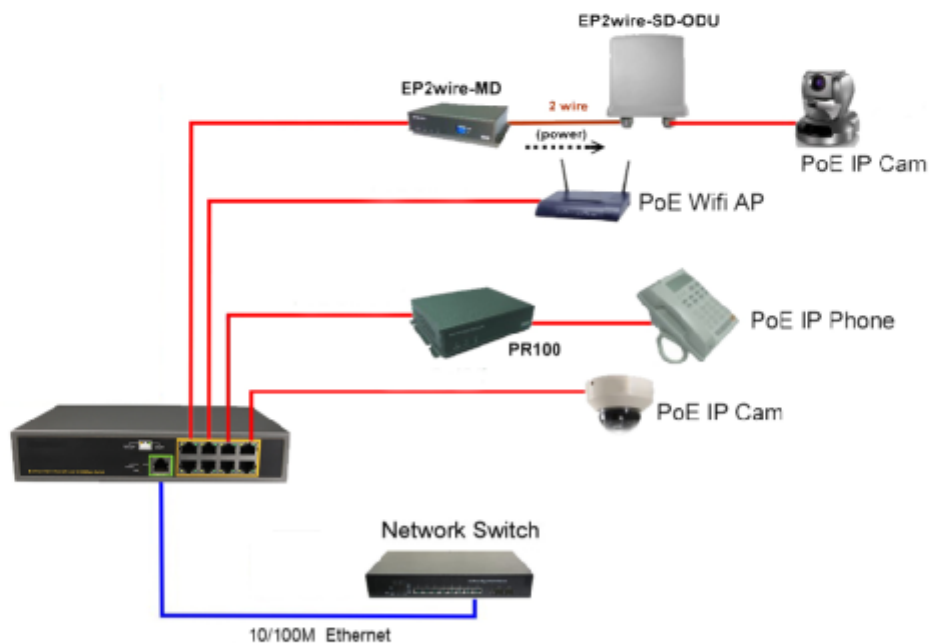
**Operating Humidity** 5 ~ 95%, Relative Humidity, non-condensing

**Storage Humidity** 5 ~ 95%, Relative Humidity, non-condensing

## Ordering Information

<b>PS981L</b>	9-port 10/100M Switch with 8-port 802.3at PoE, 65w internal power
<b>PS981</b>	9-port 10/100M Switch with 8-port 802.3at PoE, 120w internal power

## Application Diagram



\*PoE Repeater : PR100, EP2wire