

8-Port 10/100TX 802.3at PoE + 2-Port Gigabit TP/SFP Combo Web Smart Ethernet Switch

FGSD-1008HPS



Presentation Outlines

- ◆ **Product Overview**
- ◆ **Product Features**
- ◆ **Product Benefits**
- ◆ **Applications**

Cost-effective, Desktop-size L2 Web Smart PoE+ Solution

PoE Usage LED Indication

Gigabit Fiber Uplink

8 x 802.3at PoE+ Port

8-channel NVR

Product Overview



Product Overview

◆ The PLANET Economic PoE+ Web Smart Switch Family

IEEE 802.3at
(Up to 30.8W)



FGSD-1008HPS
8 PoE+
+ 2G TP/SFP



FGSW-1816HPS
16 PoE+
+ 2G TP/SFP

IEEE 802.3af
(Up to 15.4W)



FGSW-1828PS
16TP w/ 8 PoE
+ 2G TP/SFP



FSD-804PS
8-Port 10/100TX
with 4 PoE



FNSW-1608PS
16TP w/ 8 PoE



FNSW-2400PS
24 PoE

4 x PoE

8 x PoE

16 x PoE

24 x PoE

Product Overview

◆ Front Panel

- ✓ **8-Port 10/100BASE-TX** Fast Ethernet ports, auto-MDI / MDI-X, auto negotiation
- ✓ **Two Gigabit TP / SFP combo** interfaces
- ✓ One **Reset** button on front panel for reboot / reset



◆ Rear Panel

- ✓ **100~240V AC, universal power supply**
- ✓ **Thermal fan1**
- ✓ **Earth ground**



Product Overview

- ◆ **Why 8 PoE Ports w/ 2 Gigabit uplink ?**

Designed for IP Surveillance

NVR

4 / **8** / 16 / 32 channel

Video Recording

CMS

4 / **8** / 16 / 32 / 64 channel

Central Management Software

Make it a part of the IP Surveillance Kit



FGSD-1008HPS
8-Port PoE Switch



8-CH NVR



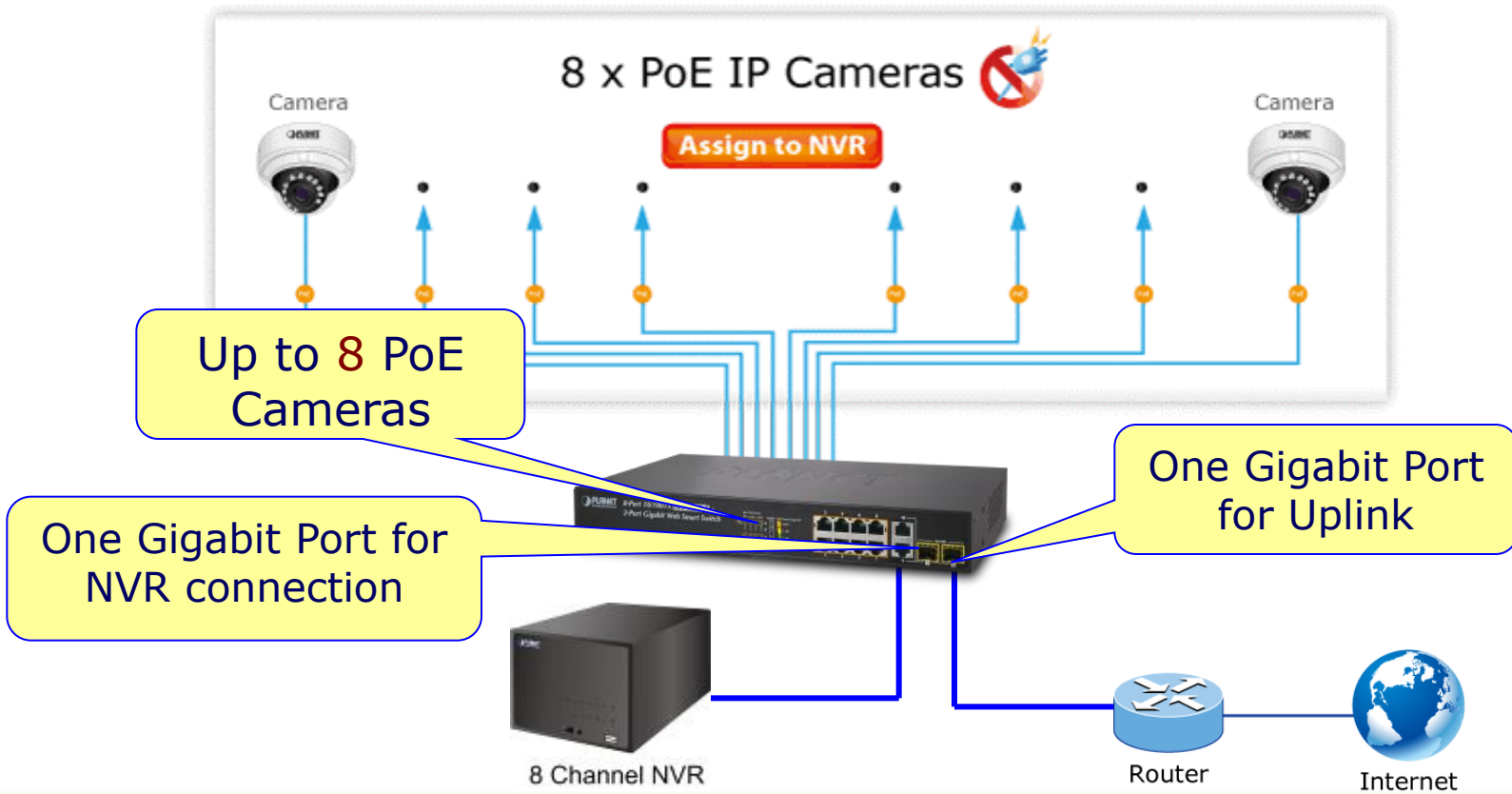
8 PoE IP Cameras

Product Benefits



Product Benefits

Model Name	FGSD-1008HPS
Power Budget	125-watt
Applications	All types of IP surveillance, VoIP and Wi-Fi deployments



Product Benefits

◆ As required by customers

Providing **8 PoE+** with **2 Gigabit TP** interfaces in one unit

Works with **8-channel NVR** via one Gigabit TP/SFP Combo port



FGSD-1008HPS

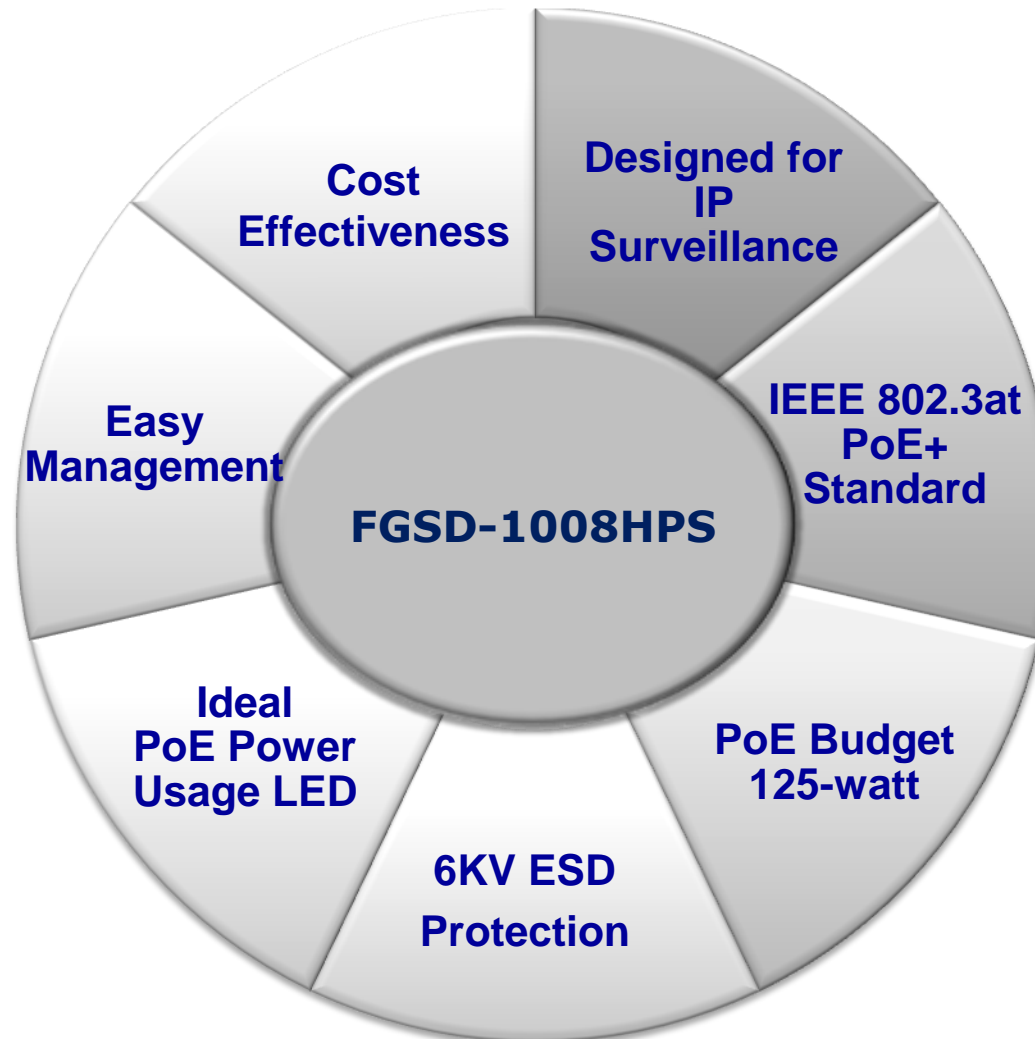
Build an IP camera system easily

Power Flexibility

Cost Effectiveness

Easy Management

Product Key Features



Product Features



Product Features

◆ Hardware

- ✓ **8-Port** 10/100Mbps Fast Ethernet interfaces
- ✓ **2-Port** 10/100/1000Mbps Gigabit interfaces
- ✓ **2 mini-GBIC** SFP slots, flexible for Gigabit fiber-optic network extension
- ✓ 1000Base-SX/LX :Maximum 120 kilometres (MGB-L120)
- ✓ **6KV ESD** protection
- ✓ **4K** MAC address table size
- ✓ Switch architecture with non-blocking switch fabric (**5.6Gbps**) and wire-speed throughput
- ✓ Prevents packet loss with backpressure (half-duplex) and 802.3 pause frame flow control (full-duplex)
- ✓ **Auto-MDI / MDI-X** on each port



Product Features

◆ Power over Ethernet Plus

- ✓ Complies with **IEEE 802.3af / 802.3at** Power over Ethernet Plus PSE
- ✓ **8 10/100Mbps** copper ports with **built-in PoE+** injector
- ✓ **52V DC, 30-watt PoE** power output
- ✓ **125-watt PoE Power Budget**
- ✓ **Auto detects** powered device and consumption levels
- ✓ **Circuit protection** to prevent power interference between ports

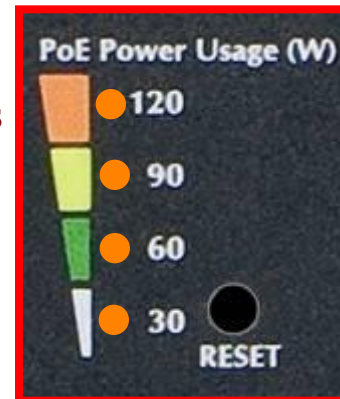
Model		FGSD-1008HPS
PoE Budget		125-watt
PoE Ability	Class 1 PD, <3.8W	8
	Class 2 PD, <6.5W	8
	Class 3 PD, <12.9W	8
	Class 4 PD, <25W	5
Input Power		100~240V AC / 50-60Hz, 2A

Product Features

◆ Intelligent LED Indicator for Real-time PoE Usage

- ✓ With these LED indications, you can monitor the PoE power status of the FGSD-1008HPS easily and efficiently

- ◆ PoE Output Budget over **120 watts**
- ◆ PoE Output Budget over **90 watts**
- ◆ PoE Output Budget over **60 watts**
- ◆ PoE Output Budget over **30 watts**



Product Features



FGSD-1008HPS Web Smart Switch

- Switch Menu**
- ▶ System
 - ▶ Port Management
 - ▶ VLAN Setting
 - ▶ QoS Setting
 - ▶ Security Filter
 - ▶ Spanning Tree
 - ▶ Trunking
 - ▶ DHCP Relay Agent
 - ▶ **PoE Setting**
 - ▶ PoE Status
 - ▶ PoE Port Setting
 - ▶ PoE Sequential
 - ▶ PoE Schedule
 - ▶ Configuration Backup/Upload
 - ▶ Misc Operation
 - ▶ SNMP
 - ▶ Logout

Per port PoE configuration

PoE Port Setting

Port PoE Function	Status	Priority	Power Allocation
-----	<input type="checkbox"/>	<input type="text"/> (Critical: 1; High: 2; Low: 3)	<input type="text"/> Watts (max: 36 Watts)
Port No.	<input type="checkbox"/> 01 <input type="checkbox"/> 02 <input type="checkbox"/> 03 <input type="checkbox"/> 04 <input type="checkbox"/> 05 <input type="checkbox"/> 06 <input type="checkbox"/> 07 <input type="checkbox"/> 08		
<input type="button" value="Update"/>			

PoE Port Status <input type="button" value="Refresh"/>					
Port	Status	Class	Priority	Power Used - Watts	Power Allocation - Watts
1	Enable	0	1	0.9	30
2	Enable	0	1	15.9	30
3	Enable	0	1	15.9	30
4	Enable	0	1	15.7	30
5	Enable	---	1	0.00	30
6	Enable	---	1	0.00	30
7	Enable	---	1	0.00	30
8	Enable	---	1	0.00	30

Per port PoE consumption



Product Features

◆ Management

- ✓ Remote Web interface for switch management and setup
- ✓ Supports SNMP v1 / V2c
- ✓ Supports DHCP Option82 and DHCP Relay
- ✓ Firmware upgrade through Web interface
- ✓ Configuration backup / reload through Web interface
- ✓ Reset button for system reboot or reset to factory default
- ✓ PLANET Smart Discovery Utility for deploy management



Product Features

◆ VLAN

- ✓ IEEE 802.1Q tag-based VLAN
- ✓ Port-based VLAN
- ✓ MTU VLAN (Multi-Tenant Unit VLAN)

◆ Link Aggregation

- ✓ Up to 3 trunk groups
- ✓ Up to 4 Fast Ethernet ports or 2 Gigabit ports per trunk group
- ✓ IEEE 802.3ad LACP (Link Aggregation Control Protocol)
- ✓ Cisco ether-channel (Static Trunk)

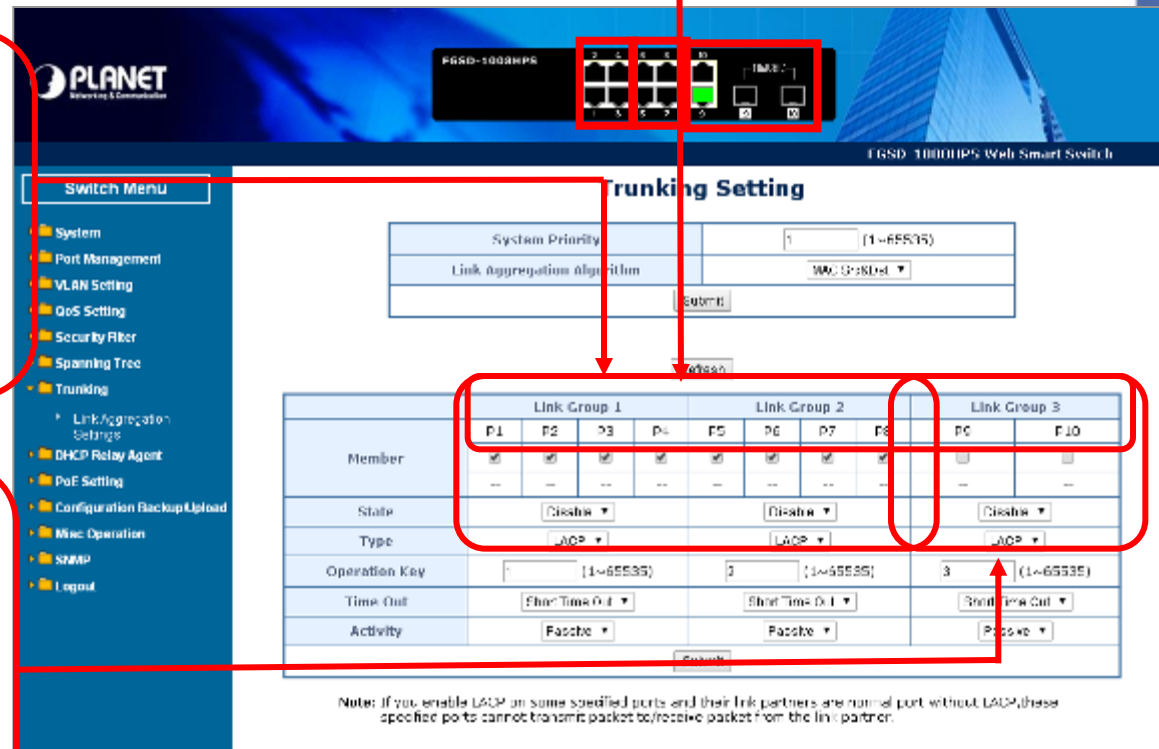
Product Features

◆ Link Aggregation

✓ Up to 3 trunk groups

✓ 2 groups of
4-Port 10/ 100Base-TX
trunk support,
up to 800Mbps
bandwidth per trunk

✓ 1 group of
2-Port 10/100/1000Mbps
trunk support,
up to 2000Mbps
bandwidth per trunk



Trunking Setting

System Priority: 1 (1~65535)
Link Aggregation Algorithm: MAC-Dependent

Member	Link Group 1				Link Group 2				Link Group 3	
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
State	On	On	On	On	On	On	On	On	On	On
Type	LACP				LACP				LACP	
Operation Key	1 (1~65535)				2 (1~65535)				3 (1~65535)	
Time Out	Short Time Out				Short Time Out				Short Time Out	
Activity	Passive				Passive				Passive	

Note: If you enable LACP on some specified ports and their link partners are normal port without LACP, these specified ports cannot transmit packet to/receive packet from the link partner.



Product Features

◆ **Spanning Tree Protocol**

- ✓ **STP**, IEEE 802.1D (Classic Spanning Tree Protocol)
- ✓ **RSTP**, IEEE 802.1w (Rapid Spanning Tree Protocol)
- ✓ Loopback Detection

◆ **Port Mirroring**

- ✓ Monitors the **incoming** or **outgoing** traffic on a particular port

◆ **In/Out Bandwidth Control**

- ✓ Provides a different transmission rate per Fast Ethernet port

Product Features

◆ QoS

- ✓ 2 priority queues on all switch ports
- ✓ Traffic classification:
 - ✓ Port-based priority
 - ✓ IEEE 802.1p based priority
 - ✓ IP TOS / DSCP based priority
 - ✓ TCP / UDP Port-based QoS
- ✓ Strict priority and Weighted Round Robin (WRR) CoS policies
- ✓ Broadcast Storm Control support



Product Features

◆ Multicast

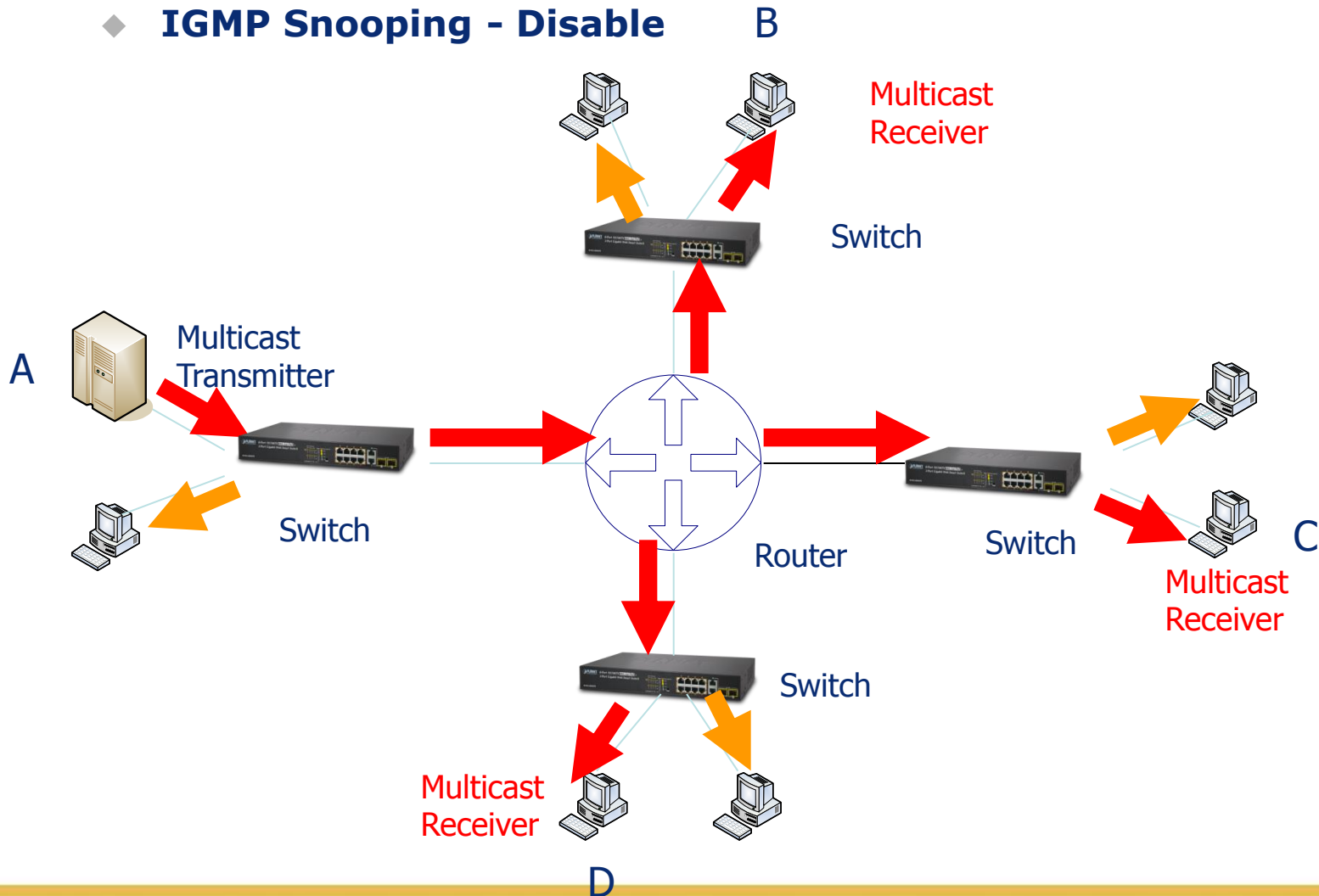
- ✓ Supports **IGMP Snooping v1 and v2**

◆ Security

- ✓ MAC address filter
- ✓ TCP & UDP filter on each port
- ✓ Management idle time security

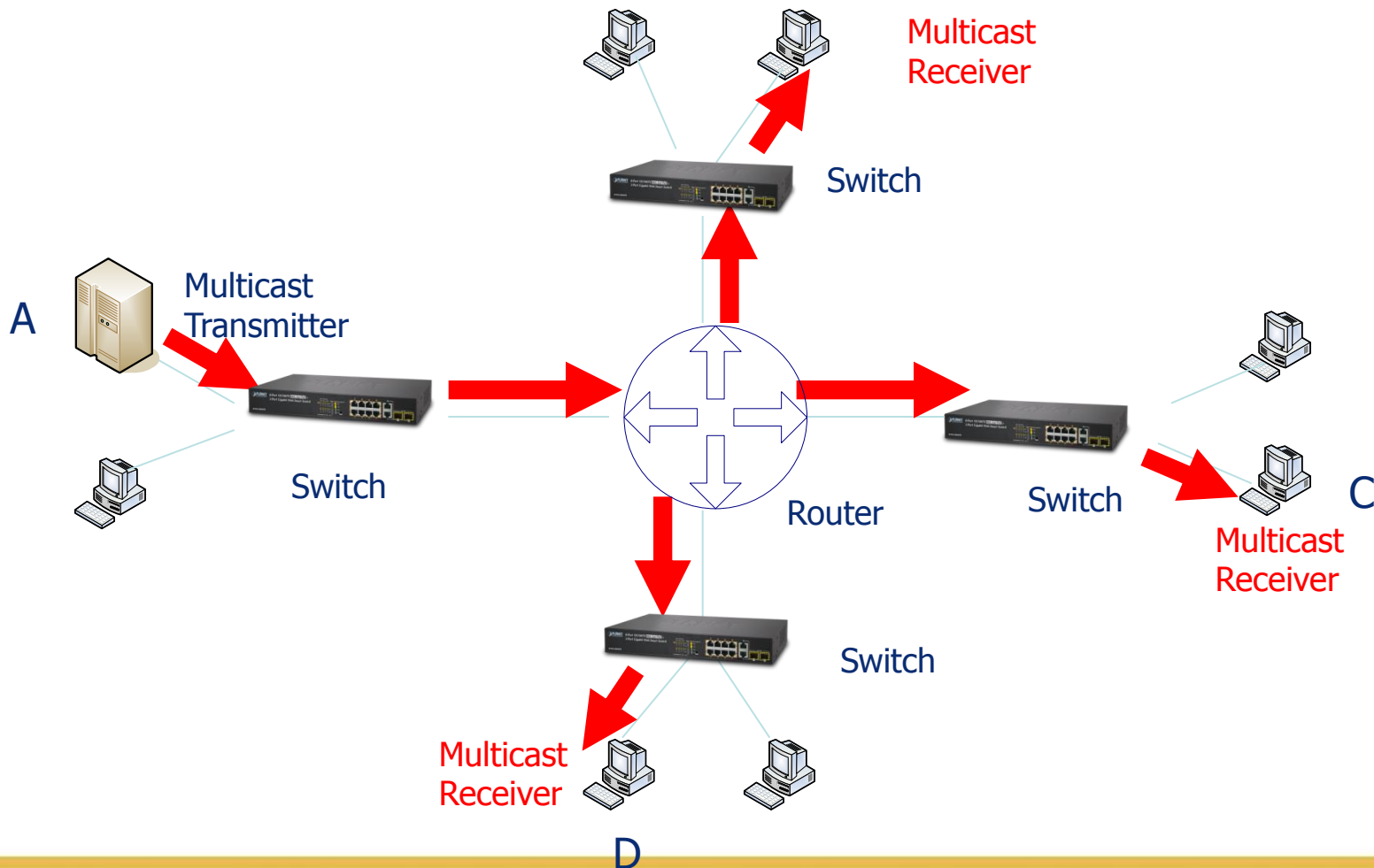
Product Features

- ◆ **IGMP Snooping - Disable**



Product Features

◆ IGMP Snooping - Enable

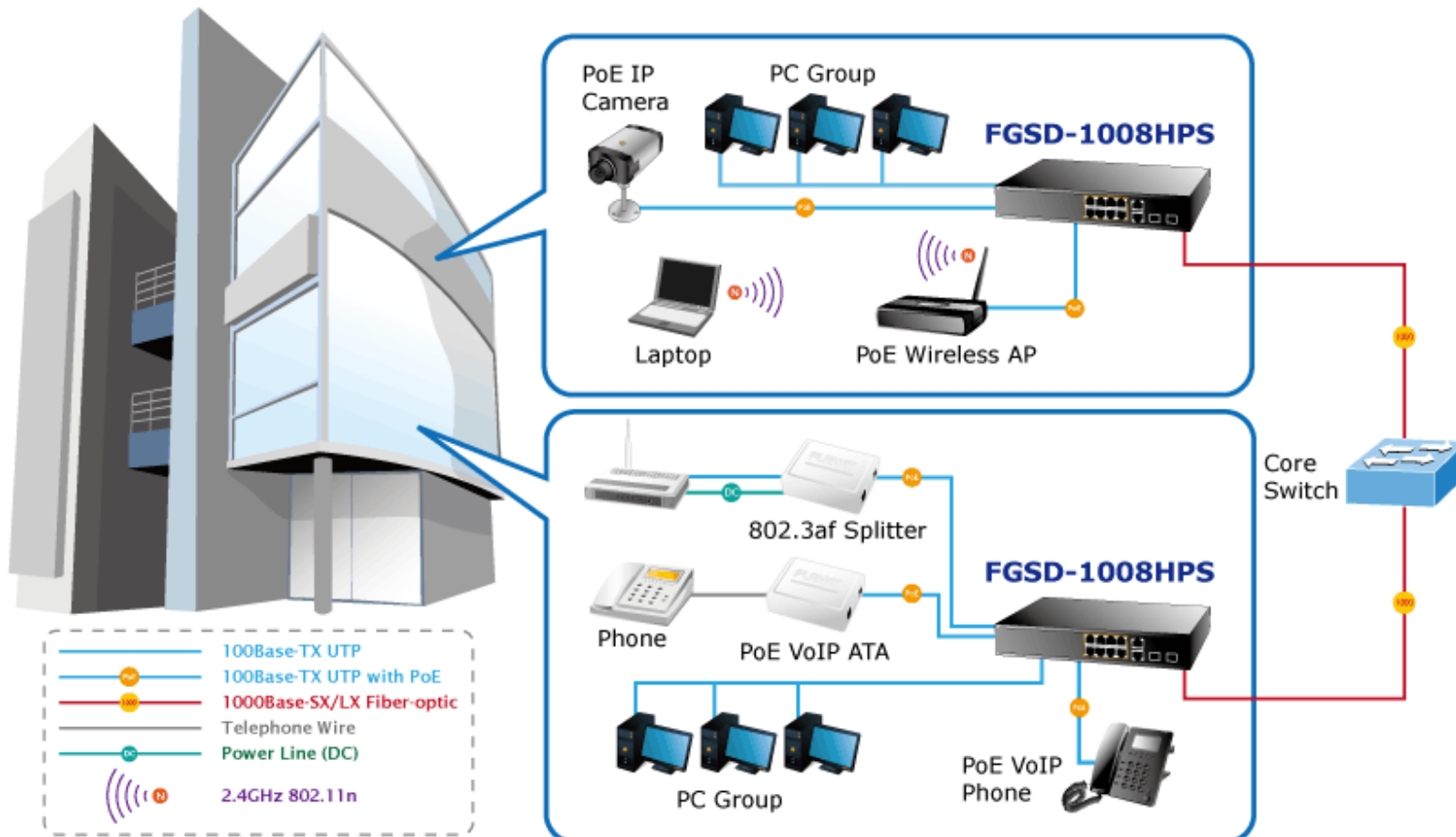


Applications



Applications

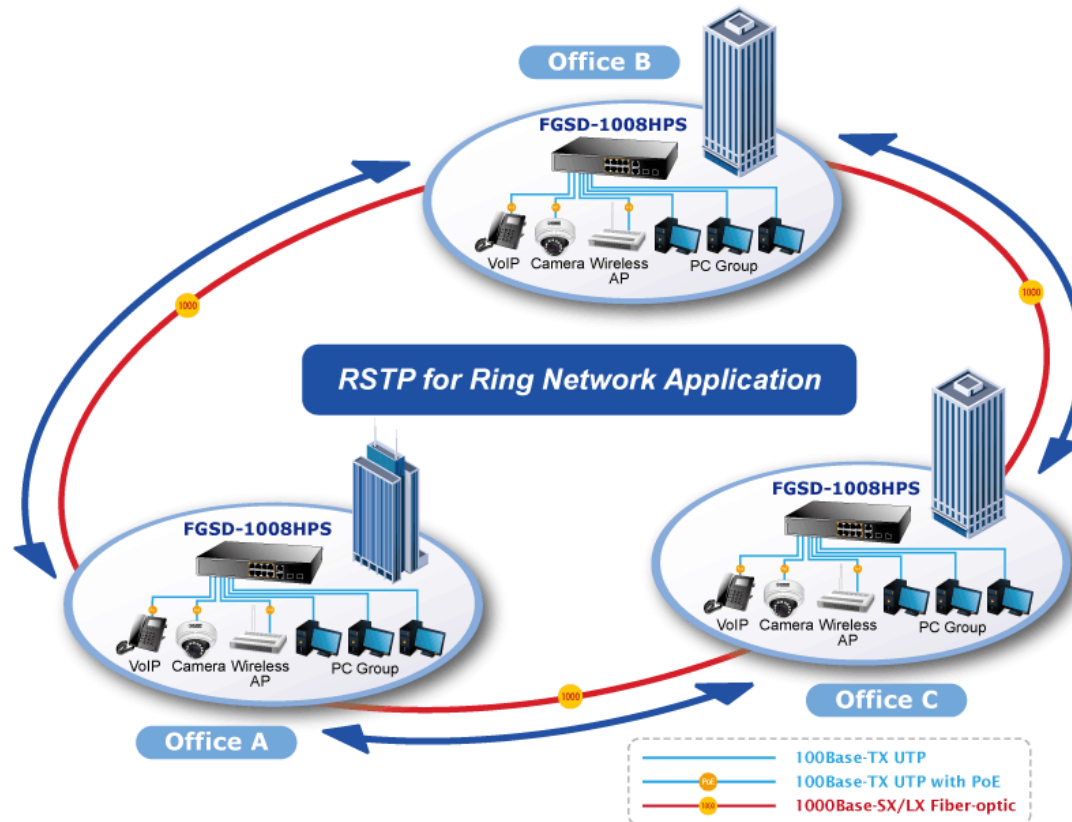
- ◆ **PoE IP Surveillance with Extended Network Infrastructure for SMBs / Workgroups**



Applications

◆ Rapid Spanning Tree Protocol for Efficient Network System

The FGSD-1008HPS features strong **rapid self-recovery capability** to prevent interruptions and external intrusions. It incorporates **Rapid Spanning Tree Protocol (802.1w RSTP)** into customer's automation network to enhance system reliability and uptime.



Appendix Sales Target

◆ Target Markets

- ✓ IP Surveillance integrator, Wireless Service Provider
- ✓ Enterprise / SMB Office / Government / Campus
- ✓ System Integrator



◆ Profitable Products

- ✓ The following 8-port PoE switches / injector hubs are potential to all customers:
 - FGSD-1022P, FGSD-1022HP
 - WGSD-10020HP, GS-4210-8P2T2S
- ✓ The following network video recorders (NVRs) are potential to all customers:
 - NVR-820, NVR-915, HDVR-830



Appendix



Appendix

◆ **Related IP Surveillance PoE Products:**

- ✓ **ICA-1200:** Full HD PoE Box IP Camera
- ✓ **ICA-3260:** 60fps Full HD IR Bullet IP Camera
- ✓ **ICA-4210P:** 60fps Full HD IR IP Camera
- ✓ **ICA-2250VT:** Industrial PoE Plus Outdoor IR IP Camera



Appendix

◆ Related **Wireless PoE** Products:



- ✓ **WDAP-C7400** 900Mbps Dual Band Ceiling Mount Wireless Access Point
- ✓ **WDAP-C7200AC** 1200Mbps 802.11ac Ceiling Mount Wireless Access Point
- ✓ **WNAP-6350** 2.4GHz 300Mbps 802.11b/g/n Wireless Outdoor Access Point
- ✓ **WNAP-7350** 5GHz 300Mbps 802.11a/n Wireless Outdoor Access Point






Appendix

◆ Related Product - NVR

◆ Midrange NVR






Model Name		Description
NVR-1615		16-Ch Network Video Recorder
NVR-915		9-Ch Network Video Recorder

◆ Entry-Level HDVR

Model Name		Description
HDVR-1630		16 Channel Hybrid Digital Video Recorder
HDVR-830		8 Channel Hybrid Digital Video Recorder
HDVR-430		4 Channel Hybrid Digital Video Recorder

Appendix

◆ Professional NVR

Model Name		Description
NVR-3280		32-Ch Rack-mount Network Video Recorder with 8-Bay Hard Disks
NVR-3250		32-Ch Rack-mount Network Video Recorder
NVR-3210		32-Ch Network Video Recorder
NVR-1620		16-CH Network Video Recorder with HDMI
NVR-820		8-CH Network Video Recorder with HDMI

Appendix

◆ Available **Gigabit Ethernet** Fiber Optic SFP Modules:

Gigabit Ethernet Transceiver (1000BASE-X SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Wavelength
MGB-GT	1000	Copper	--	100m	--	0 ~ 60 °C
MGB-SX	1000	LC	Multi Mode	550m	850nm	0 ~ 60°C
MGB-SX2	1000	LC	Multi Mode	2km	1310nm	0 ~ 60 °C
MGB-LX	1000	LC	Single Mode	10km	1310nm	0 ~ 60°C
MGB-L30	1000	LC	Single Mode	30km	1310nm	0 ~ 60°C
MGB-L50	1000	LC	Single Mode	50km	1550nm	0 ~ 60 °C
MGB-L70	1000	LC	Single Mode	70km	1550nm	0 ~ 60°C
MGB-L120	1000	LC	Single Mode	120km	1550nm	0 ~ 60 °C
MGB-TSX	1000	LC	Multi Mode	550m	850nm	-40 ~ 75 °C
MGB-TLX	1000	LC	Single Mode	10km	1310nm	-40 ~ 75 °C
MGB-TL30	1000	LC	Single Mode	30km	1310nm	-40 ~ 75 °C
MGB-TL70	1000	LC	Single Mode	70km	1550nm	-40 ~ 75 °C

Appendix

◆ Available **Gigabit Ethernet WDM** Fiber Optic SFP Modules:

Gigabit Ethernet Transceiver (1000BASE-BX, Single Fiber Bi-directional SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (TX)	Wavelength (RX)	Operating Temp.
MGB-LA10 MGB-LB10	1000	WDM(LC)	Single Mode	10km	1310nm 1550nm	1550nm 1310nm	0 ~ 60°C
MGB-LA20 MGB-LB20	1000	WDM(LC)	Single Mode	20km	1310nm 1550nm	1550nm 1310nm	0 ~ 60°C
MGB-LA40 MGB-LB40	1000	WDM(LC)	Single Mode	40km	1310nm 1550nm	1550nm 1310nm	0 ~ 60°C
MGB-LA60 MGB-LB60	1000	WDM(LC)	Single Mode	60km	1310nm 1550nm	1550nm 1310nm	0 ~ 60°C
MGB-TLA10 MGB-TLB10	1000	WDM(LC)	Single Mode	10km	1310nm 1550nm	1550nm 1310nm	-40~75°C
MGB-TLA20 MGB-TLB20	1000	WDM(LC)	Single Mode	20km	1310nm 1550nm	1550nm 1310nm	-40~75°C
MGB-TLA40 MGB-TLB40	1000	WDM(LC)	Single Mode	40km	1310nm 1550nm	1550nm 1310nm	-40~75°C
MGB-TLA60 MGB-TLB60	1000	WDM(LC)	Single Mode	60km	1310nm 1550nm	1550nm 1310nm	-40~75°C



ACTIVATING IP POWER