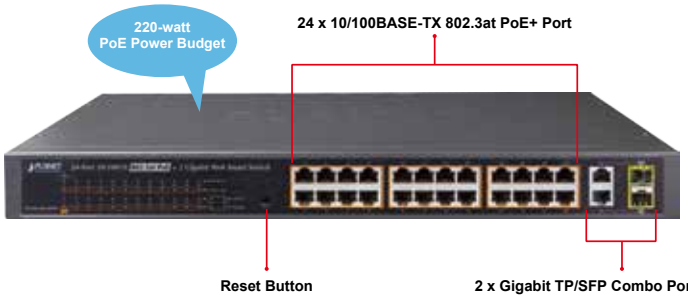
24-Port 10/100TX 802.3at PoE + 2-Port Gigabit TP/SFP Combo Web Smart Ethernet Switch

Cost-effective PoE+ Managed Switch for Small and Medium Networking

Particularly designed for the popular IP surveillance applications, PLANET FGSW-2624HPS 802.3at PoE web smart switch is a surveillance switch with the central management of remote power control and IP camera monitoring. The FGSW-2624HPS provides PoE functions along with **24 10/100BASE-TX** ports featuring **30-watt 802.3at PoE+** with RJ45 copper interfaces and **2 Gigabit TP/SFP combo** interfaces supporting high-speed transmission of surveillance images and videos. With a total power budget of up to **220 watts** for different kinds of PoE applications, respectively, the FGSW-2624HPS provides a quick, safe and cost-effective Power over Ethernet network solution for small businesses and enterprises.



Centralized Power Management for Security and Public Service PoE Applications

To fulfill the needs of the high power consumption of PoE network applications, the FGSW-2624HPS features the standard IEEE 802.3at Power over Ethernet Plus (PoE+) that combines up to 30 watts of power output and data per port over one cat5E/6 Ethernet cable. It is designed specifically to meet the demand of the high power consumption of network PDs (powered devices) such as IR, PTZ, speed dome cameras; and even box-type IP cameras with built-in fan and heater. Compliant with both 802.3at and 802.3af standards, the series allows more flexibility in power requirement for a variety of PDs, making installation costs affordable.

Physical Port

- **24-port 10/100BASE-TX** RJ45 copper with **24-port IEEE 802.3at/af PoE** injector
- **2-port 10/100/1000BASE-T** Gigabit RJ45 copper
- **2 1000BASE-X mini-GBIC/SFP slots**, shared with port-25 to port-26
- Reset button for system management

Power over Ethernet

- Complies with IEEE 802.3at Power over Ethernet Plus Mid-span PSE
- Up to 24 IEEE 802.3at/802.3af devices powered
- Supports PoE Power up to 30.8 watts for each PoE port
- Detects powered device (PD) automatically
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100m
- PoE Power Usage
- PoE Management
  - Per port PoE function enable/disable
  - PoE Port Power feeding priority
  - Per PoE port power limit
  - PD classification detection
  - PoE power sequential

Layer 2 Features

- Supports broadcast storm control
- Supports **VLAN**
  - IEEE 802.1Q tag-based VLAN, up to 32 VLANs groups, out of 4095 VLAN IDs
  - Port-based VLAN, up to 26 VLAN groups
  - MTU VLAN (Multi-tenant Unit VLAN)
- Supports **Link Aggregation**
  - 802.3ad Link Aggregation Control Protocol (LACP)
  - Cisco ether-channel (static trunk)
- Supports **Spanning Tree Protocol**
  - STP, IEEE 802.1D Spanning Tree Protocol
  - RSTP, IEEE 802.1w Rapid Spanning Tree Protocol
- Port mirroring to monitor the incoming or outgoing traffic on a particular port
- Provides port mirror (Many-to-1)

Number of Powered Devices / Applications	Model & PoE Budget	FGSW-2624HPS
		220 watts
PoE Ability (100 meters)	Class 2 PD @ 7 watts — PoE Mini Dome, PoE VoIP Phone	24
	Class 3 PD @ 15 watts — PoE Box IP Camera, PoE Wireless AP	14
	Class 4 PD @ 30 watts — PoE+ Speed Dome	7

Robust Layer 2 Features

The FGSW-2624HPS can be programmed for advanced switch management functions such as dynamic port link aggregation (LACP), Spanning Tree Protocol (STP), IGMP snooping v1 and, v2, bandwidth control, and L2/L4 security control. The FGSW-2624HPS provides IEEE 802.1Q tagged VLAN, port-based VLAN and MTU VLAN. The VLAN groups allowed will be maximally up to 32. Via aggregation of supporting ports, the FGSW-2624HPS allows the operation of a high-speed trunk combining multiple ports and supports fail-over as well.

Remote and Centralized Management

For catering to the need of easy management and centralized SNMP application to monitor the status of the switch and traffic per port, the FGSW-2624HPS provides friendly Web management interface for efficient network operation. With its built-in Web-based management, the FGSW-2624HPS offers an easy-to-use, platform-independent management and configuration facility. It also supports standard Simple Network Management Protocol (SNMP) and can be monitored via any standard-based management software.

Quality of Service

- 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

Multicast

- Supports IGMP Snooping v1 and v2 (excluding IGMP Query feature)

Security

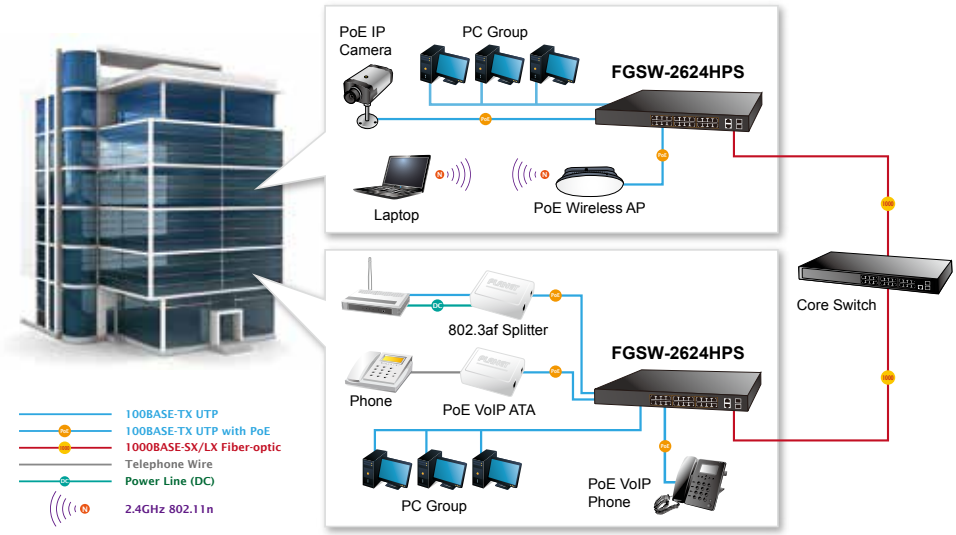
- Physical port to MAC address binding
- TCP/UDP port number filter: Forwarding or discarding typical network applications
- Port mirroring to monitor the incoming or outgoing traffic on a particular port

Management

- Switch Management Interfaces
  - Web switch management
  - SNMP v1 switch management
- Firmware upload/download via HTTP
- Hardware reset button for system reboot or resetting to factory default

Flexible and Extendable Uplink Solution

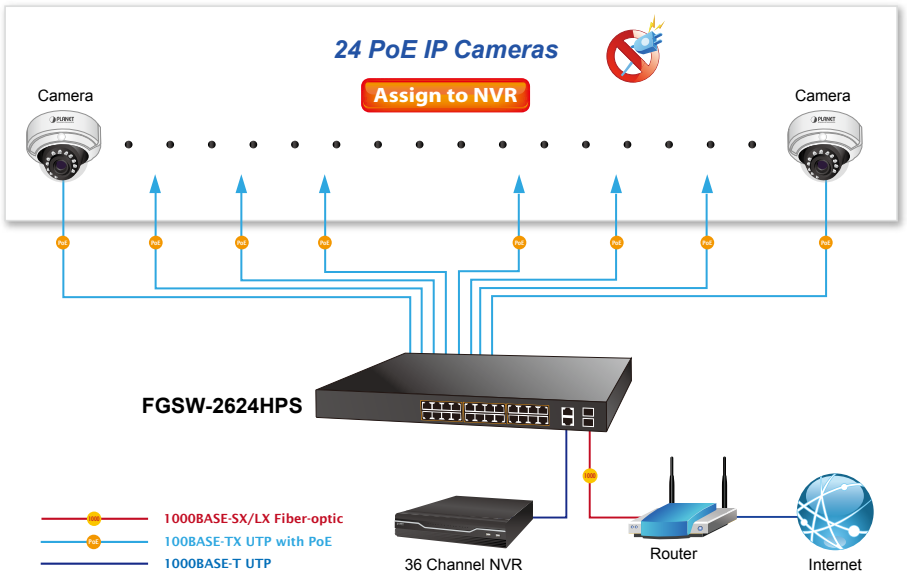
The FGSW-2624HPS provides 2 extra Gigabit TP/SFP combo interfaces supporting 10/100/1000BASE-T RJ45 copper to connect with surveillance network devices such as NVR, Video Streaming Server or NAS to facilitate surveillance management. Or through these fiber SFP slots, it can also connect with the 1000BASE-SX/LX SFP (Small Form-factor Pluggable) fiber transceiver to uplink to backbone switch and monitoring center in long distance. The distance can be extended from 550 meters (multi-mode fiber) to 10/20/30/40/50/60/70/120 kilometers (single-mode fiber or WDM fiber). They are well suited for applications within the industrial data centers and distributions.



Applications

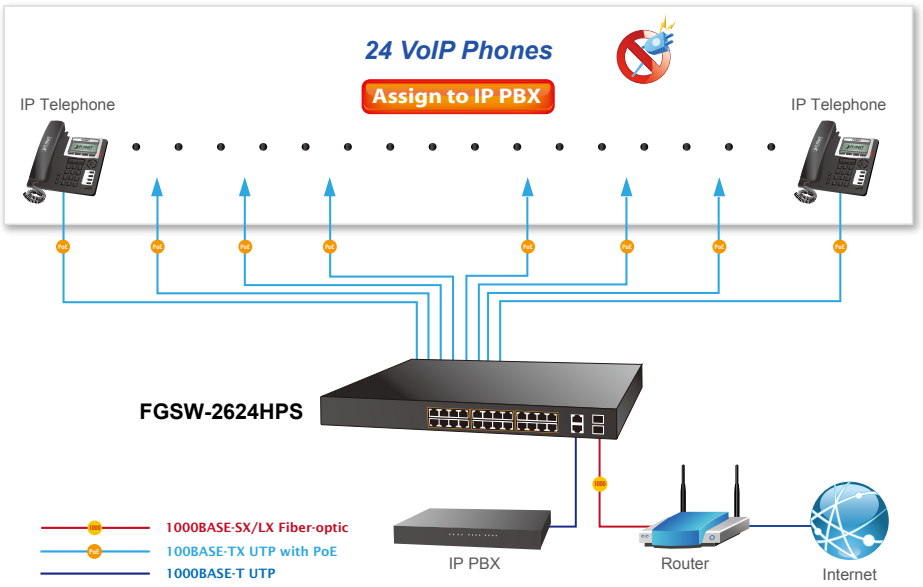
PoE IP Surveillance with Extended Network Infrastructure for SMBs / Workgroups

Providing 24 10/100BASE-TX PoE+ ports, in-line power interfaces and two Gigabit TP/SFP Combo interfaces, the FGSW-2624HPS can easily build an IP camera system for the enterprises where its power is centrally controlled. It can work with one 32-channel NVR to perform comprehensive security monitoring with 24 IP cameras via one Gigabit TP/SFP Combo port. The FGSW-2624HPS comes with non-blocking design, desktop size and SFP fiber-optic modules, bringing flexibility to building a network infrastructure at a low cost.



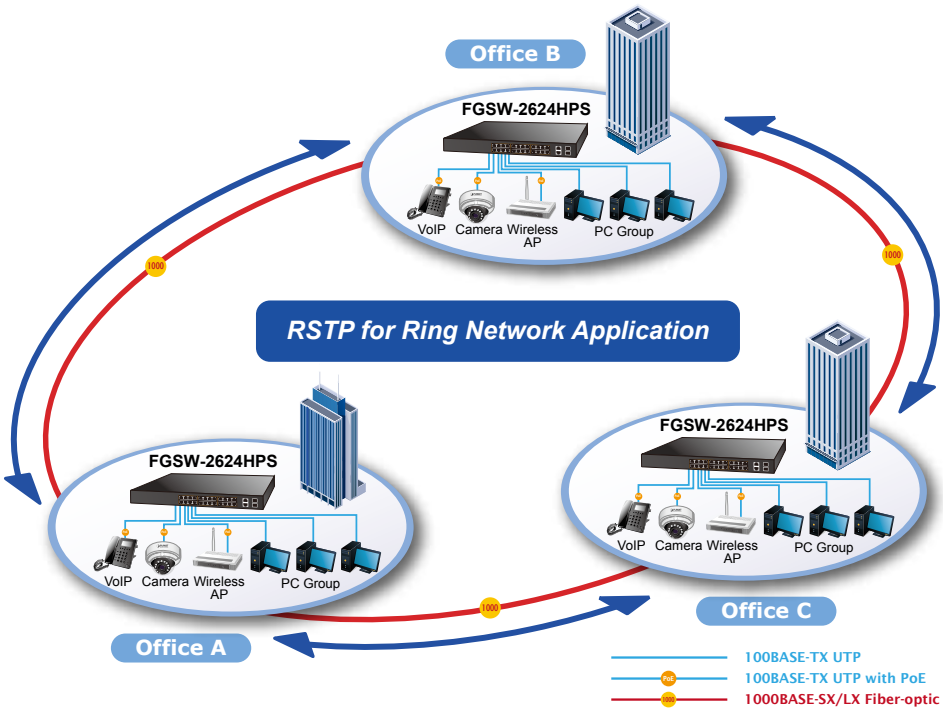
Extended Network Infrastructure for SMBs / Workgroups with PoE IP Phone

Providing 24 10/100BASE-TX PoE+ ports, in-line power interfaces and two Gigabit TP/SFP Combo interfaces, the FGSW-2624HPS can easily build a VoIP system for the enterprises where its power is centrally controlled. It can work with one IP PBX to perform comprehensive security communicating with 24 VoIP phones via one Gigabit TP/SFP Combo port.



Rapid Spanning Tree Protocol for Efficient Network System

The FGSW-2624HPS 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.



Specifications

Product		FGSW-2624HPS
Hardware Specifications		
10/100Mbps Copper Ports		24 10/100BASE-TX RJ45 auto-MDI/MDI-X ports
Gigabit Copper Ports		2 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
SFP/mini-GBIC Slots		2 1000BASE-X SFP interfaces, shared with Port-25 to Port-26
Switch Architecture		Store-and-Forward
Switch Fabric		8.8Gbps / non-blocking
Throughput		6.54Mpps@64Bytes
Address Table		4K entries, automatic source address learning and ageing
Shared Data Buffer		2.75Mb embedded memory for packet buffers
Flow Control		IEEE 802.3x pause frame for full-duplex Back pressure for half-duplex
Maximum Transmit Unit		1518 Bytes
Reset Button		< 5 sec: System reboot > 5 sec: Factory default
Dimensions (W x D x H)		440 x 210 x 44mm, 1U height
Weight		2.8kg
Power Consumption		Max. 248 watts / 846BTU
ESD Protection		Contact Discharge 4KV DC Air Discharge 8KV DC
LED		**System**: Power (Green) **10/100BASE-TX RJ45 Interfaces** (Port 1 to Port 24): 10/100Mbps LNK/ACT (Green) PoE-in-Use (Orange) **10/100/1000BASE-T RJ45 / SFP Interfaces** (Port 25 to Port 26): LNK/ACT (Green) 100/1000 (Green)
Cable	Twisted-pair	10BASE-T: 2-pair UTP Cat 3, 4, 5 for up to 100 meters 100BASE-TX: 2-pair UTP Cat 5, 5e for up to 100 meters 1000BASE-T: 4-pair UTP Cat 5e, 6 for up to 100 meters
	Fiber-optic Cable	1000BASE-SX : 50/125μm or 62.5/125μm multi-mode fiber-optic cable, up to 550m (varying on SFP module) 1000BASE-LX : 9/125μm single-mode fiber optic cable, up to 10/20/30/40/50/70/120 kilometers (varying on SFP module)
Power over Ethernet		
PoE Standard		IEEE 802.3af / 802.3at PoE+ / PSE
PoE Power Supply Type		Mid-span
Power Pin Assignment		4/5(+), 7/8 (-)
PoE Power Output		Per Port 53V DC, Max. 30.8 watts
PoE Power Budget		220 watts (max.) @ 25 degrees C 190 watts (max.) @ 50 degrees C
PoE Ability	PD @ 7 watts	24 units
	PD @ 15.4 watts	24 units
	PD @ 30 watts	12 units
Layer 2 Functions		
Port Configuration		Port disable / enable Auto-negotiation 10/100/1000Mbps full and half duplex mode selection Flow Control disable / enable
Port Status		Display each port's speed duplex mode, link status, flow control status, auto negotiation status and trunk status
Port Mirroring		TX / RX / Both Many-to-1 monitor
VLAN		802.1Q tagged-based VLAN, up to 32 VLAN groups, out of 4094 VLAN IDs Port-based VLAN, up to 26 VLAN groups MTU VLAN
Link Aggregation		1 group of 2-Port 10/100/1000BASE-T trunk supported
QoS		Allows to assign low / high priority on each port First-In-First-Out, All-High-before-Low, Weight-Round-Robin QoS policy
IGMP Snooping		IGMP (v1 / v2) Snooping, up to 32 multicast groups Without Query supported
Security Control		MAC address binding TCP & UDP filter
Management Functions		
Basic Management Interfaces		Web browser, SNMP v1

Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3z Gigabit Ethernet over Fiber-Optic IEEE 802.3x Full-duplex flow control IEEE 802.1Q VLAN IEEE 802.1p QoS IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus
Environment	
Operating	Temperature: 0 ~ 50°C Relative Humidity: 5 ~ 95% (non-condensing)
Storage	Temperature: -10 ~ 70°C Relative Humidity: 5 ~ 95% (non-condensing)

Ordering Information

FGSW-2624HPS	24-Port 10/100TX 802.3at PoE + 2-Port Gigabit TP/SFP Combo Web Smart Ethernet Switch (220W PoE budget)

Related Products

ICA-2250VT	Industrial PoE Plus Outdoor IR IP Camera
ICA-E3550V	5 Mega-pixel Bullet IR PoE IP Camera
ICA-4200V	Full HD 20M IR Vari-focal Dome IP Camera
ICA-E5550V	5 Mega-pixel Vandalproof IR PoE IP Camera
ICA-E8550	5 Mega-pixel Outdoor IR PoE Fisheye IP Camera
ICA-HM620	2 Mega-pixel PoE Plus Speed Dome Internet Camera
POE-162S	IEEE 802.3at Gigabit High Power over Ethernet Splitter
POE-E201	IEEE 802.3at Power over Ethernet Extender
WDAP-1750AC	1750Mbps 802.11ac Dual Band Wall-mount Enterprise Wireless Access Point
WNAP-C3220A	802.11n Wireless Ceiling-mount PoE Access Point
WNAP-W2201A	802.11n 300Mbps In-Wall Access Point w/USB Charger (EU Type)
WDAP-W7200AC	1200Mbps 802.11ac Dual Band Wall-mount Wireless Access Point
ICF-1800	HD Touch Screen Android Multimedia Conferencing Phone
VIP-5060PT	Professional HD PoE IP Phone (6-Line)

SFP Gigabit Modules are available for the FGSW-2624HPS

Gigabit Ethernet Transceiver (1000BASE-X SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Operating Temp.
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

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	1000	WDM(LC)	Single Mode	10km	1310nm	1550nm	0 ~ 60 °C
MGB-LB10	1000	WDM(LC)	Single Mode	10km	1550nm	1310nm	0 ~ 60 °C
MGB-LA20	1000	WDM(LC)	Single Mode	20km	1310nm	1550nm	0 ~ 60 °C
MGB-LB20	1000	WDM(LC)	Single Mode	20km	1550nm	1310nm	0 ~ 60 °C
MGB-LA40	1000	WDM(LC)	Single Mode	40km	1310nm	1550nm	0 ~ 60 °C
MGB-LB40	1000	WDM(LC)	Single Mode	40km	1550nm	1310nm	0 ~ 60 °C
MGB-LA60	1000	WDM(LC)	Single Mode	60km	1310nm	1550nm	0 ~ 60 °C
MGB-LB60	1000	WDM(LC)	Single Mode	60km	1550nm	1310nm	0 ~ 60 °C
MGB-TLA10	1000	WDM(LC)	Single Mode	10km	1310nm	1550nm	-40 ~ 75 °C
MGB-TLB10	1000	WDM(LC)	Single Mode	10km	1550nm	1310nm	-40 ~ 75 °C
MGB-TLA20	1000	WDM(LC)	Single Mode	20km	1310nm	1550nm	-40 ~ 75 °C
MGB-TLB20	1000	WDM(LC)	Single Mode	20km	1550nm	1310nm	-40 ~ 75 °C
MGB-TLA40	1000	WDM(LC)	Single Mode	40km	1310nm	1550nm	-40 ~ 75 °C
MGB-TLB40	1000	WDM(LC)	Single Mode	40km	1550nm	1310nm	-40 ~ 75 °C
MGB-TLA60	1000	WDM(LC)	Single Mode	60km	1310nm	1550nm	-40 ~ 75 °C
MGB-TLB60	1000	WDM(LC)	Single Mode	60km	1550nm	1310nm	-40 ~ 75 °C

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