24-Port 10/100TX 802.3at PoE Web Smart Ethernet Switch

Centralized Power Distribution for Fast Ethernet PoE Networking

To fulfill the needs of higher power required PoE network applications with 10/100Mbps transmission, PLANET FNSW-2400PS' PoE power output is upgraded from IEEE 802.3af PoE to IEEE 802.3at PoE+. It features **24** 10/100BASE-TX RJ45 ports with **IEEE 802.3at PoE+** injector function that combines up to 30 watts of power output and data per port over one Cat5E/6 Ethernet cable. It is specifically designed for powered devices (PDs) such as PTZ cameras that consume high power.

Cost-effective Edge Network Connection Solution

To provide enhanced network management with cost saving benefit to customers, the FNSW-2400PS is a Layer 2 Web Smart Switch with PoE injector function. In addition, the 24 ports the FNSW-2400PS has are Fast Ethernet ones, meaning high performance but low cost to build. Network expansion can be had when integrated with PoE+ injector function. With 125 watts of PoE power budget, it provides a compact, affordable, safe and reliable power solution for small and medium enterprises.

Easy Cabling Installation

As the FNSW-2400PS simultaneously transmits both data and power over one cable, the need for an extra cable is not necessary. Besides, the PoE Switch does not need extension cords or electrical outlets on the wall, ceiling or any unreachable place for network expansion. In all, it lowers the installation costs and simplifies the deployment effort.

Physical Port

- **24 10/100BASE-TX RJ45 copper ports with IEEE 802.3af/at PoE+**

Power over Ethernet

- Complies with IEEE 802.3at Power over Ethernet Plus/mid-span PSE
- Backward compatible with IEEE 802.3af Power over Ethernet
- Up to 24 ports of IEEE 802.3af/IEEE 802.3at devices powered
- Supports PoE power up to 30 watts for each PoE port
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100 meters

Layer 2 Features

- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- High performance of Store-and-Forward architecture and runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- Storm Control support
  - Broadcast
- Supports **VLAN**
  - IEEE 802.1Q tagged VLAN
  - Port-based VLAN
  - MTU VLAN (Multi-Tenant Unit VLAN)
- Supports Spanning Tree Protocol
  - IEEE 802.1D Spanning Tree Protocol
  - IEEE 802.1w Rapid Spanning Tree Protocol
  - Lookback Detection
- Supports **Link Aggregation**
  - 802.3ad Link Aggregation Control Protocol (LACP)
  - Maximum 2 trunk groups, up to 4 ports per trunk group
- Port mirroring to monitor the incoming or outgoing traffic on a particular port

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
- Supports QoS and In/Out bandwidth control on each port

User-friendly Web-based Management

For efficient management, the FNSW-2400PS is equipped with remote Web interface. It can be programmed for advanced switch management functions such as port configuration, VLAN, Rapid Spanning Tree Protocol (RSTP), IGMP snooping, port trunk, QoS, bandwidth control, MAC address, and TCP and UDP filters.

The FNSW-2400PS provides port-based, IEEE 802.1Q MTU VLAN including overlapping. The VLAN groups allow the FNSW-2400PS to have a maximum of up to 24 port-based VLAN groups or up to 32 IEEE 802.1Q VLAN groups. On the other hand, the MTU VLAN treats Port 1 to Port 24 as a separate LAN group. Via port trunking, the FNSW-2400PS allows the operation of a high-speed trunk to combine multiple ports. The FNSW-2400PS also provides two groups of up to 4-Port 10/100BASE-TX trunk support with up to 800Mbps bandwidth per trunk group.

- Broadcast Storm Control support

Multicast
- Supports IGMP snooping v1 and v2

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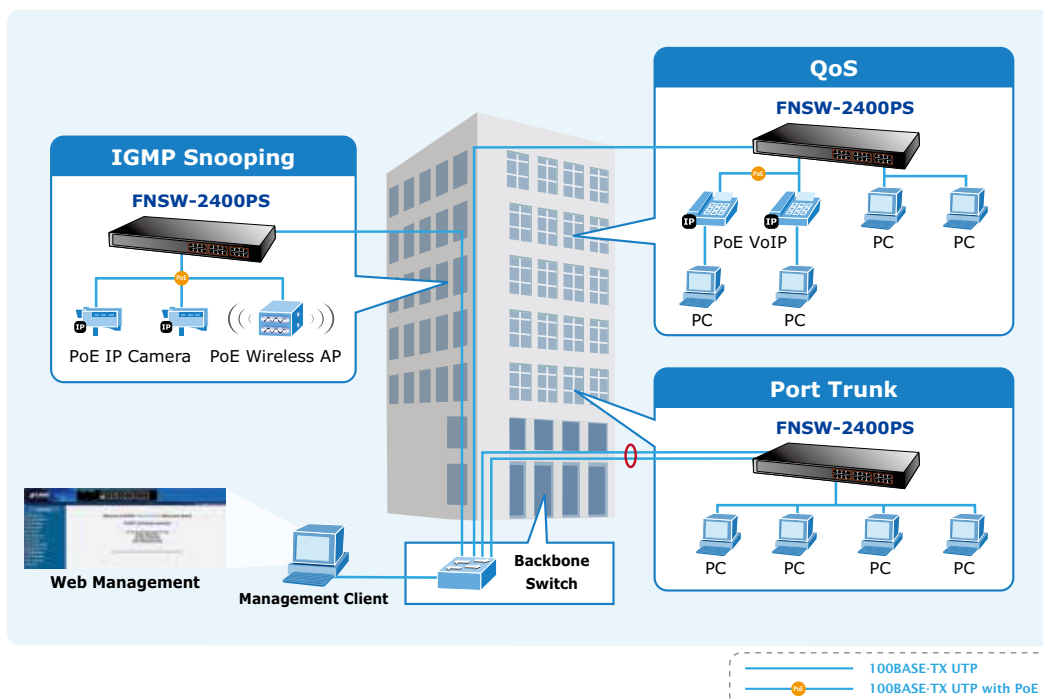- TCP & UDP filter on each port
- Management idle time security

Management
- Remote Web interface for Switch management and setup
- Supports SNMP v1
- Supports DHCP Option 82 and DHCP Relay
- Firmware upgrade through Web interface
- Configuration upload / download through Web interface
- Reset button for system reboot or reset to factory default

Applications

Department / Workgroup PoE Switch

With 24 10/100Mbps ports, the FNSW-2400PS provides a cost-effective and high-performance solution for power users. With its 4.8 Gigabits per second, non-blocking switch fabric, this device can easily provide a local, high bandwidth Fast Ethernet network for your departmental backbone. Providing up to 125 watts of PoE budget and in-line power interface, the FNSW-2400PS helps the administrator to centrally control power for IP phone system, IP camera system and AP group. For instance, 24 cameras or wireless APs installed for surveillance or wireless roaming demands can be managed the administrator. Without the power-socket limitation, the FNSW-2400PS makes the installation of cameras and wireless APs more efficient.

Specifications

Product	FNSW-2400PS
Hardware Specifications	
Copper Ports	24 10/100BASE-TX RJ45 auto-MDI/MDI-X ports
Switch Architecture	Store-and-Forward
Switch Fabric	4.8Gbps/non-blocking
Throughput	3.57Mpps@64bytes
Address Table	8K entries, automatic source address learning and aging
Shared Data Buffer	1.75M bits
Flow Control	IEEE 802.3x pause frame for full duplex Back pressure for half duplex
Dimensions (W x D x H)	445 x 207 x 45 mm, 1U height
Weight	2.6g
LED	System: PWR (Green) PoE Ethernet Interfaces (Port-1 to Port-24): PoE (Orange) Ethernet Interfaces (Port-1 to Port-24): 10/100 LNK/ACT (Green)
Power Consumption	Max. 135 watts/460 BTU
Power Requirements – AC	AC 100~240V, 50/60Hz, 2A
Power over Ethernet	
PoE Standard	IEEE 802.3af/802.3at PoE PSE
PoE Power Supply Type	Mid-span
PoE Power Output	Per port 52V DC, 30 watts (max.)
Power Pin Assignment	4/5(-), 7/8(+)
PoE Power Budget	125 watts (max.)
Smart Functions	
System Configuration	Web interface, SNMP v1, v2
Port Configuration	Port speed duplex mode selection Port Disable / Enable
Bandwidth Control	Yes
Broadcast Storm Control	Yes
Port Statistics	Display each port's details about Ethernet traffic counter information
VLAN	24 port-based VLAN groups / 32 IEEE 802.1Q VLAN groups / MTU VLAN
Spanning Tree Protocol	STP, IEEE 802.1D (Spanning Tree Protocol) RSTP, IEEE 802.1w (Rapid Spanning Tree Protocol)
Port Trunking	2 groups of 4-port 10/ 100Base-TX trunk support, up to 800Mbps bandwidth per trunk group
Port Mirroring	Port mirroring allows monitoring of the traffic across any port in real time
QoS	Allows to assign low / high priority on each port First-In-First-Out, All-High-before-Low, Weight-Round-Robin QoS policy
MAC Address / TCP & UDP Filter	Yes
IGMP Snooping v1 / v2	Allows to Disable or Enable
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/100BASE-FX IEEE 802.3x flow control and back pressure IEEE 802.3ad port trunk with LACP IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1p Class of Service IEEE 802.1Q VLAN tagging IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus
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)

Ordering Information

FNSW-2400PS	24-Port 10/100TX 802.3at PoE Web Smart Ethernet Switch

Related Products

FNSW-1600P	16-Port 10/100TX 802.3at PoE Web Smart Ethernet Switch

FNSW-2400PS