PLANET
Networking & Communication

24-Port 10/100Mbps PoE Web Smart Ethernet Switch

Cost-effective Edge Network Connection Solution

To provide enhanced network management with cost saving benefit to customers, PLANET releases the new version of the FNSW-2400PS, the Layer 2 Web Smart Switch with PoE injector function. The FNSW-2400PS is equipped with 24 Fast Ethernet ports integrating with PoE injector function. With 125Watts PoE power budget, it provides a compact, affordable, safe and reliable power solution for small to medium enterprises.

IEEE 802.3af Power over Ethernet Support

The PoE in-line power following the **IEEE 802.3af** standard makes the FNSW-2400PS able to deliver power to 24 PoE compliant devices at the distance up to 100 meters through the 4-pair Cat 5/5e UTP wire. It optimizes the installation and safe power management of network devices such as wireless access points **(AP)**, Voice over IP **(VoIP)** phones and **IP Surveillance cameras**. With more efficient switching power supply, the efficiency of the FNSW-2400PS would be much better than four linear power adapters in a long run and bring customers the key benefit – energy saving.

Easy Cabling Installation

The Power over Ethernet technology enables the Ethernet wire to carry both data and power. With data and power over Ethernet from one unit, the FNSW-2400PS shall reduce cable installation and eliminate the need for extension cords or dedicated electrical outlets on the wall, ceiling or any unreachable place. In all, it lowers the installation costs and simplifies the deployment effort.

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, and MAC address / TCP & UDP filter.

The FNSW-2400PS provides Port-Based / IEEE 802.1Q / MTU VLAN (port based / IEEE 802.1Q VLAN including overlapping). The VLAN groups allowed on the FNSW-2400PS will be maximally up to 24 for port based or up to 32 for IEEE 802.1Q VLAN groups. On the other hand, the MTU VLAN divides port 1 to port 24 as separate LAN group. Via supporting port trunking, the FNSW-2400PS allows the operation of a high-speed trunk combining 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.

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 125Watts PoE budget, in-line power interface, the FNSW-2400PS helps the administrator to flexibly build a power central-controlled IP phone system, IP Camera system, AP group for the enterprise. For instance, 24 cameras or wireless APs can be installed around the corner in the company for surveillance or wireless roaming demands. Without the power-socket limitation, the FNSW-2400PS makes the installation of cameras and Wireless LAN AP more efficiently.

Data Sheet
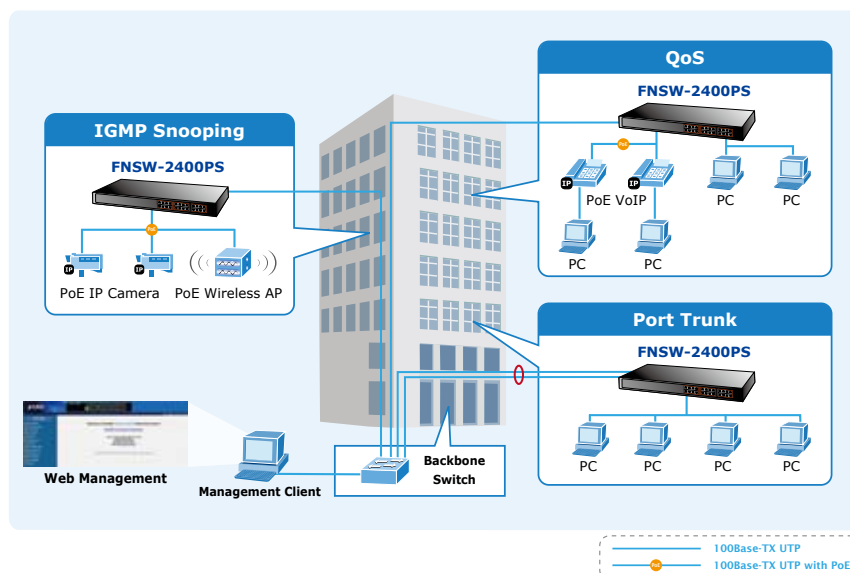
KEY FEATURES

PHYSICAL PORT

- 24-Port 10/100Mbps Fast Ethernet ports with PoE Injector

- Reset button for system management

POWER OVER ETHERNET

- Complies with IEEE 802.3af Power over Ethernet Mid-Span PSE

- Up to 24 IEEE 802.3af devices powered

- Supports PoE Power up to 15.4 Watts for each 802.3af PoE port

- Auto detect powered device (PD)

- Circuit protection prevents power interference between ports

- Remote power feeding up to 100m

LAYER 2 FEATURES

- Auto-MDI / MDI-X detection on each RJ-45 port

- Prevents packet loss with back pressure (Half-Duplex) and IEEE 802.3x PAUSE Frame Flow control (Full-Duplex)

- Supports **VLAN**:

  – IEEE 802.1Q Tag-Based VLAN

  – Port-Based VLAN

  – MTU VLAN (Multi-Tenant Unit VLAN)

- Supports Link **Aggregation**

  – up to 2 trunk groups

  – up to 4 Fast Ethernet ports per trunk group

  – IEEE 802.3ad LACP (Link Aggregation Control Protocol)

- Supports Spanning Tree Protocol

  – STP, IEEE 802.1D (Classic Spanning Tree Protocol)

  – RSTP, IEEE 802.1w (Rapid Spanning Tree Protocol)

  – Loopback Detection

- 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

- In/Out rate limit control on each port

- 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

SPECIFICATION

Product	24-Port 10/100Mbps PoE Web Smart Ethernet Switch
Model	FNSW-2400PS
Hardware Specification	
Ports	24 10/100Base-TX RJ-45 Auto-MDI/MDI-X interfaces
Switch Processing Scheme	Store-and-Forward
Throughput (packet per second)	3.57Mpps@64Bytes
Switch Fabric	4.8Gbps
Address Table	8K entries
Share Data Buffer	1.75Mb embedded memory for packet buffers
Flow Control	Back pressure for Half Duplex, IEEE 802.3x Pause Frame for Full Duplex
Dimension (W x D x H)	445 x 207 x 45 mm (1U height)
Weight	2.55kg
Power Requirement	100~240V AC, 50-60 Hz, 2A
Power Consumption / Dissipation	Max.135 Watts / 460 BTU
Smart Function	
System Configuration	Web interface, SNMP v1
Port Configuration	Port Speed Duplex mode selection Port Disable / Enable
Bandwidth Control	Yes
Broadcast Storm Control	Yes
Port Statistics	Display each port's detail 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
Power over Ethernet	
PoE Standard	IEEE 802.3af Power over Ethernet / PSE
PoE Power Supply Type	Mid-Span
PoE Power output	Per Port 48V DC, 350mA . Max. 15.4Watts
Power Pin Assignment	4/5(-), 7/8(+)
PoE Power Budget	125Watts
Standards Conformance	
Regulation Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3af Power over Ethernet (15.4Watts) 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
Environment	
Temperature	Operating: 0~50 Degree C Storage: -10~70 Degree C
Humidity Operating	5~95%, Storage: 5~95% (Non-condensing)

ORDERING INFORMATION

FNSW-2400PS	24-Port 10/100Mbps PoE Web Smart Ethernet Switch

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