

SW1024

UNIFIED ACCESS SWITCH



INTRODUCTION

The SW1024 is a fully manageable PoE+ switch with 24 Ethernet and 2 SFP gigabit ports, designed specifically for medium/large enterprises and organizations that need to expand wired connectivity to PoE-enabled devices at the network edge. In addition to supplying a maximum total power of 500W to connected devices, the SW1024 also allows network administrators to perform fine-grained per-port power control, prioritization, and monitoring. Providing power to devices such as access points, VoIP phones, and IP cameras no longer requires a power outlet at every location, which greatly simplifies installation and reduces the total cost of ownership.

In order to ensure reliable and uninterrupted operation of bandwidth-hungry and latency-sensitive applications, the SW1024 offers powerful performance with fine-grained QoS capabilities. Its 52 Gbps switching capacity and throughput of up to 38.7 Mpps, along with 802.1p/DSCP QoS and per-port priority queues, guarantees the performance of differentiated network traffic such as video and voice. Port trunking can also provide link redundancy and improved throughput when compared to single links. With the SW1024, network administrators reduce the risk of network downtime and avoid potential lost productivity.

One of the major benefits of the SW1024 is its seamless integration with 4ipnet WHG-series Wireless LAN Controllers, unifying management of wired and wireless devices at the network edge. In all, 4ipnet's SW1024 is a secure, reliable, and high performance layer 2 PoE switch that is ideal for organizations wishing to maximize ROI on their network infrastructure.

HIGHLIGHTS

- IEEE 802.3af (PoE) and 802.3at (PoE+) compliant
- 24 PoE/PoE+ gigabit Ethernet ports & 2 gigabit SFP ports
- Up to 30W per port for 802.3at compliant devices
- Up to 500W total power budget
- 38.7 Mpps throughput with 52 Gbps switching capacity
- Real-time traffic classification with 8 QoS priority queues per port
- Supports 802.1Q VLAN tagging with up to 4,096 VLAN IDs
- Port trunking with IEEE 802.3ad Link Aggregation Protocol
- Multiple user authentication methods: 802.1X and MAC-based
- Management with Web GUI, CLI, or SNMP and advanced features such as port mirroring

FEATURES

Unifying Wired & Wireless

The SW1024 provides a comprehensive set of features and unparalleled flexibility in a reliable platform for organizations that wish to expand connectivity at the network edge. For Class 3 PoE devices such as wireless access points, VoIP phones, IP surveillance cameras, and other IP-based peripheral devices, the SW1024 is able to provide a full 15.4 watts. The SW1024 also supports 802.3at PoE+ for powering newer 802.11n or 802.11ac wireless access points that have higher power consumptions. By eliminating the need for traditional power adapters, organizations can greatly reduce the total cost of the network infrastructure.

Simple Installation & Easy Maintenance

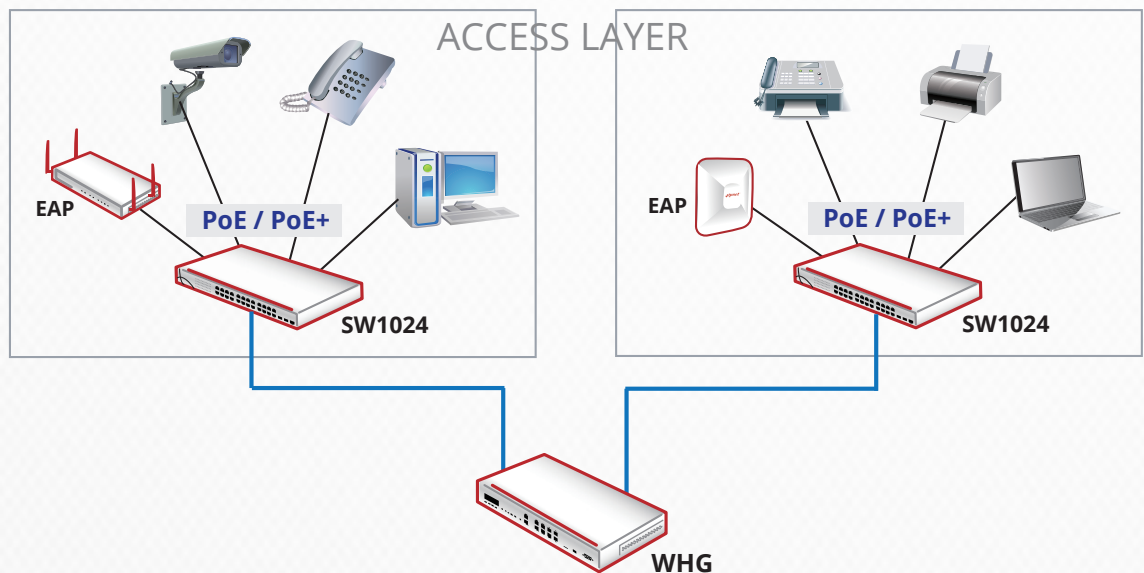
To simplify deployments and lower the cost of installation, the SW1024 supports IEEE 802.1AB Link Layer Discovery Protocol (LLDP), which enables the switch to automatically discover Ethernet devices, determine the devices' power requirements, and assign VLANs.

Guaranteed Performance for Sensitive Applications

Interruptions of mission-critical applications in enterprises usually means lost productivity and revenue. To guarantee quality of service for differentiated traffic, the SW1024 supports eight priority queues per port, allowing each port to effectively prioritize traffic and mitigate the effects of network congestion. Furthermore, the SW1024 supports multiple scheduling methods such as strict priority and weighted round robin to give network administrators even more fine-grained control over QoS functionality.

Reliable, Robust, & Secure

The SW1024 supports a wide array of features that ensure a reliable and secure access layer. For example, IEEE 802.3ad Link Aggregation Protocol creates redundant links that prevent network failure when a link is disrupted, while also increasing throughput when compared to a single link. Furthermore, multiple spanning trees and support for RSTP guarantees high link availability and fast convergence during link failures. To help organizations secure their networks, the SW1024 provides features such as standards-based 802.1X port-based access control, port mirroring, DHCP snooping, and other threat detection and monitoring capabilities.



SPECIFICATIONS

INTERFACES

10/100/1000Base-T Ethernet RJ-45 Ports with PoE+	+ 24
100/1000Base-X SFP Ports	+ 2
Auto MDI / MDIX	+ Yes

POWER

Maximum System Power Consumption (without PoE)	+ 21.5W
Maximum PoE Power Per Port	+ 30W
Total PoE Power Budget	+ 500W
Per Port Power Prioritization	+ Yes

PERFORMANCE

Switching Capacity	+ 52 Gbps
Throughput	+ 38.7 Mpps

SECURITY

MAC-based Port Security	+ Yes
802.1X User Authentication	+ Yes
MAC-based User Authentication	+ Yes
Browser-based Authentication	+ Yes
IP Source Guard	+ Yes
DHCP Snooping	+ Yes
Access Control List	+ Yes

QUALITY OF SERVICE

Hardware Queues Per Port	+ 8
Scheduling Methods	+ Strict Priority + Weighted Round Robin + Hybrid
802.1p Class of Service	+ Yes
DSCP / IP Precedence Marking	+ Yes
Ingress / Egress Rate Limiting	+ Yes

MANAGEMENT

Command Line Interface (CLI)	+ Yes
Browser-based GUI	+ Yes
Telnet	+ Yes
SNMP	+ v1, v2c, v3
Remote Monitoring (RMON)	+ Groups 1, 2, 3, 9
DHCP	+ Client + Relay
Event and Error Logging	+ Yes
Configuration Backup	+ Yes
Network Time Protocol (NTP)	+ Yes
RADIUS Authentication	+ Yes
TACACS+ Authentication	+ Yes
HTTPS/SSLv2	+ Yes
Port Mirroring	+ 1:1 or N:1

LAYER 2

Standards Supported	+ IEEE 802.1AB: Link Layer Discovery Protocol
	+ IEEE 802.1D: Spanning Tree Protocol
	+ IEEE 802.3p: CoS Prioritization
	+ IEEE 802.1Q: VLAN Tagging
	+ IEEE 802.1Q-in-Q: VLAN Stacking
	+ IEEE 802.1s: Multiple Spanning Tree Protocol
	+ IEEE 802.1v: VLAN Classification by Protocol and Port
	+ IEEE 802.1w: Rapid Spanning Tree Protocol
	+ IEEE 802.1X: Port Access Control
	+ IEEE 802.3: 10Base-T
	+ IEEE 802.3u: 100Base-T
	+ IEEE 802.3ab: 1000Base-T
	+ IEEE 802.3z: 1000Base-X

Jumbo Frames	+ 9K
MAC Address Table Size	+ 8K
Packet Buffer	+ 4MB
Number of VLANs	+ 4K
Port-based VLAN	+ Yes
MAC-based VLAN	+ Yes
Voice VLAN	+ Yes
Private VLAN (PVLAN)	+ Yes
Multicast VLAN Registration (MVR)	+ Yes
Storm Control	+ Yes
IGMP	+ v1, v2, v3
IGMP Snooping	+ Yes
802.3ad LACP	+ Link Aggregation Groups: 13 + Maximum Ports Per Group: 16

MECHANICAL

Dimensions (L x W x H)	+ 440 mm x 330 mm x 45 mm
Weight	+ 4.7 kg (10.4 lbs)
Environmental Conditions	+ Operating Temperature: 0°C (32°F) to 40°C (104°F) + Operating Humidity: 5% to 90% non-condensing
Certifications	+ CE + FCC Class A