

NSH-3428P

Managed Layer 2 Gigabit PoE Plus Switch

24-port 10/100/1000Base-T + 4-slot Gigabit SFP



Description










The NSH-3428P is the new generation of Volktek Managed L2 Gigabit Switch designed for growing demands of popular IP surveillance applications which is suitable for both small and medium sized businesses such as hotels, offices and business complexes. The switch offers enhanced L2 features with intelligent PoE+ (802.3af/at) for up to 24-ports Gigabit Ethernet and stands for a total power budget 370W or 740W (with optional extended power module). The switch supports up to 4-slots Gigabit SFP for redundant network transmission using either multimode or single mode. The development is explicitly planned for converged networks where power, voice, video, data are all carried on a single network cable.

The NSH-3428P, Managed L2 Switch is obtained to minimize the operational and labour cost as it directly connects with Powered Devices such as IP cameras, VoIP phones and Access Points without using of any intermediate fiber media. By offering optimization for network efficiency, operational cost saving and easy user management, the NSH-3428P allows quick deployment within a friendly enterprise budget with IEEE 802.3az Energy Efficient Ethernet for better power saving consumption. All in one makes NSH-3428P to be an ideal solution for the best combination of functionality, performance and feasibility in appropriate cost saving package.

Features Highlight

Support Verity of PoE Power Consumption

Our solution for meeting the needs of high power consumption of PoE network applications, NSH-3428P supports 370W for PoE power budget, which allows an easy “plug and play” for various types of high power consuming PoE devices. These products could be PoE IP cameras like speed dome cameras or outdoor APs. To handle the substantial need of power, an extendible power supply module (MPS-460) is developed which brings the PoE power budget to 740W.

Model	PoE Budget	Number of PoE Powered Devices		
 NSH-3428P	370W	24	24	12
 NSH-3428P + MPS-460 Optional Extended Power Module	740W	24	24	24
Variety of PoE Powered Devices	 PoE VoIP Phone	 PoE Wireless CPE	 PoE Wireless AP	 PoE+ Outdoor AP
	 PoE Mini Dome	 PoE IP Camera	 PoE+ Speed Dome	
	Max PoE Ability (100 Meters)	Class 2 PD < 6.49 Watts	Class 3 PD < 12.95 Watts	Class 4 PD < 25.5 Watts
	Low Power	Mid Power	High Power	

Features Highlight

Extensive L2 Features

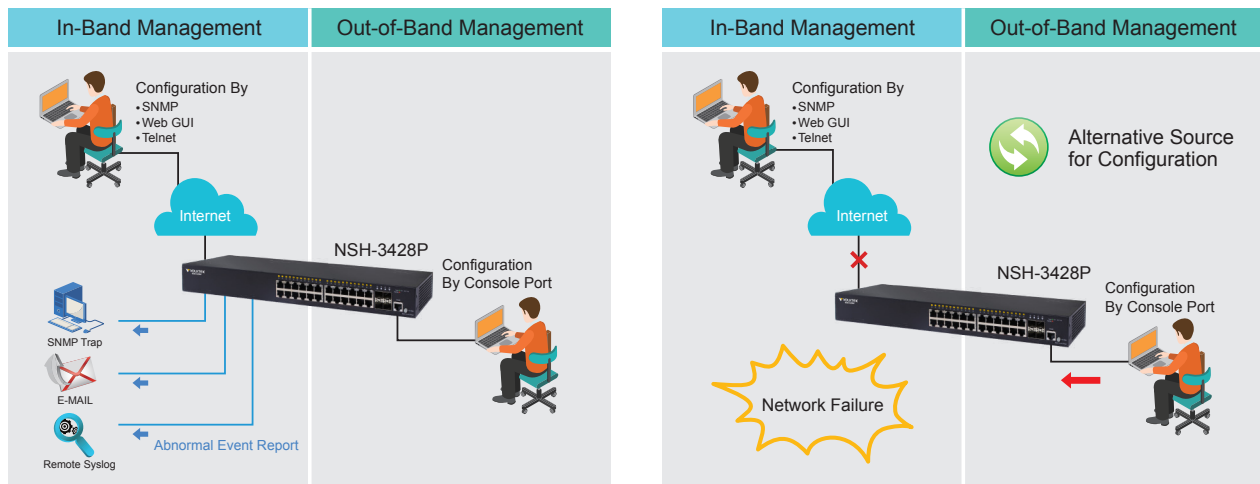
NSH-3428P provides a collection of modernized traffic regulating protocols such as IGMP Snooping and VLAN to manage the network traffic of surveillance system. The device supports IGMP Snooping v1/v2/v3 for reducing network congestion in addition with efficient Storm Control and Flow Control techniques. The VLAN groups facilitate proper utilization of bandwidth by controlling unnecessary traffic which makes the surveillance network more efficient, robust and secured.

Maintain a Redundant and Resilient Network

NSH-3428P supports RSTP and LACP for maintaining seamless transmission within the network. RSTP reduces the network convergence time by providing a backup path in case of primary link failure, resulting a secure, reliable and loop free network. LACP contributes for constructing a protected virtual single high bandwidth channel by enclosing multiple physical ports together to achieve redundancy on condition of link failure that assures security and reliability of the network.

Efficient Network Monitoring and Proactive Capability

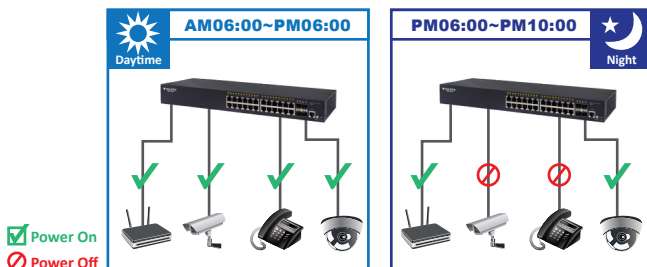
NSH-3428P is configured with SNMP v1/v2c which gives an enhanced approach for traffic analysis, monitoring and management within a surveillance network. The switch is assimilated with intelligent e-mail alarm system and SNMP Trap functionality to detect system abnormality along with Faster Troubleshooting. In addition to this, the device maintains a system log for the subsequent analysis of abnormal and unwanted flows. For efficient network management, the switch is integrated with a Console Port (Out-of-Band Management) which provides an alternative source to deal with network failure (Web GUI, SNMP and Telnet).



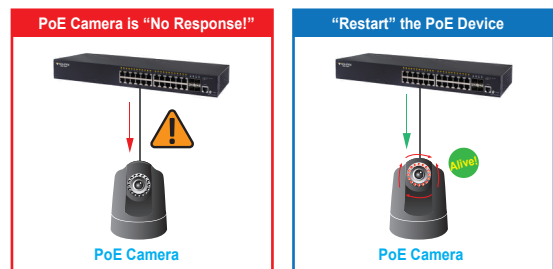
Innovative PoE+ for Powered Devices

NSH-3428P is designed with intelligent PoE features to utilize power more efficiently. With user-configurable power budget limit feature, administrators can set power on each port to a desired hourly/weekly schedule and can enable or disable the power output to the powered devices accordingly. To monitor real-time status of PDs, the switch sends alive-checking packets to PDs which reduces management burden and increases system reliability.

PoE Scheduling



PoE Alive-Checking



Eco-friendly Green Ethernet Design

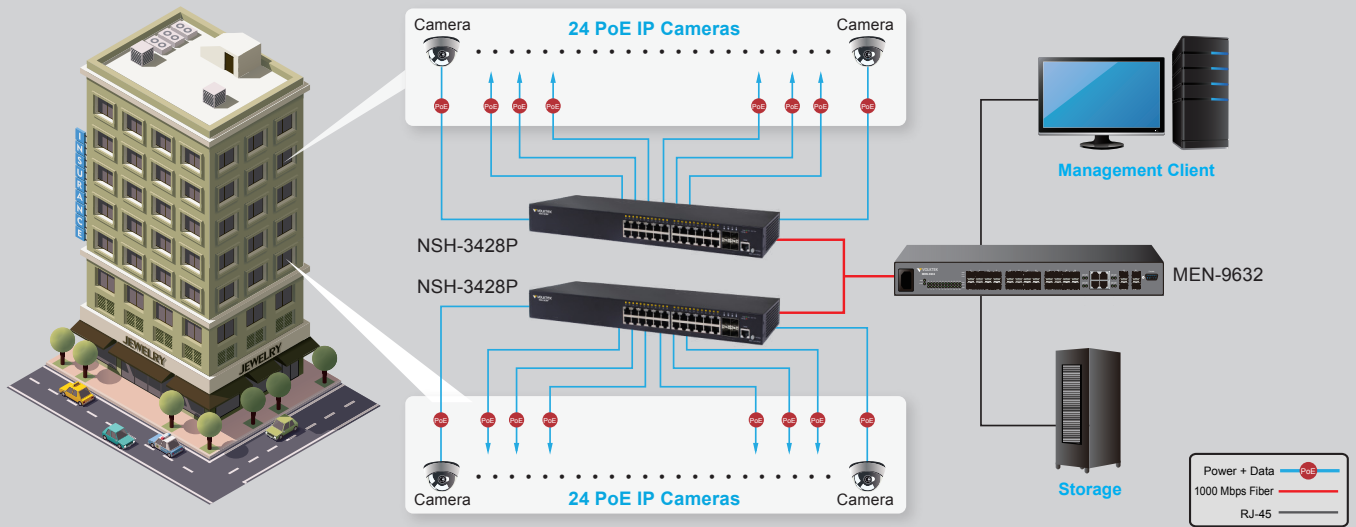
To address the concerns of increasing power consumption, the NSH-3428P implements IEEE 802.3az Energy Efficient Ethernet (EEE) compliant Green Ethernet technology. This eco-friendly design allows the switch to automatically adjust power consumption and conserve energy during the periods of low data activity. This helps you to lower energy usage significantly and save your operational costs.



Surveillance Applications

Support Efficient Communication

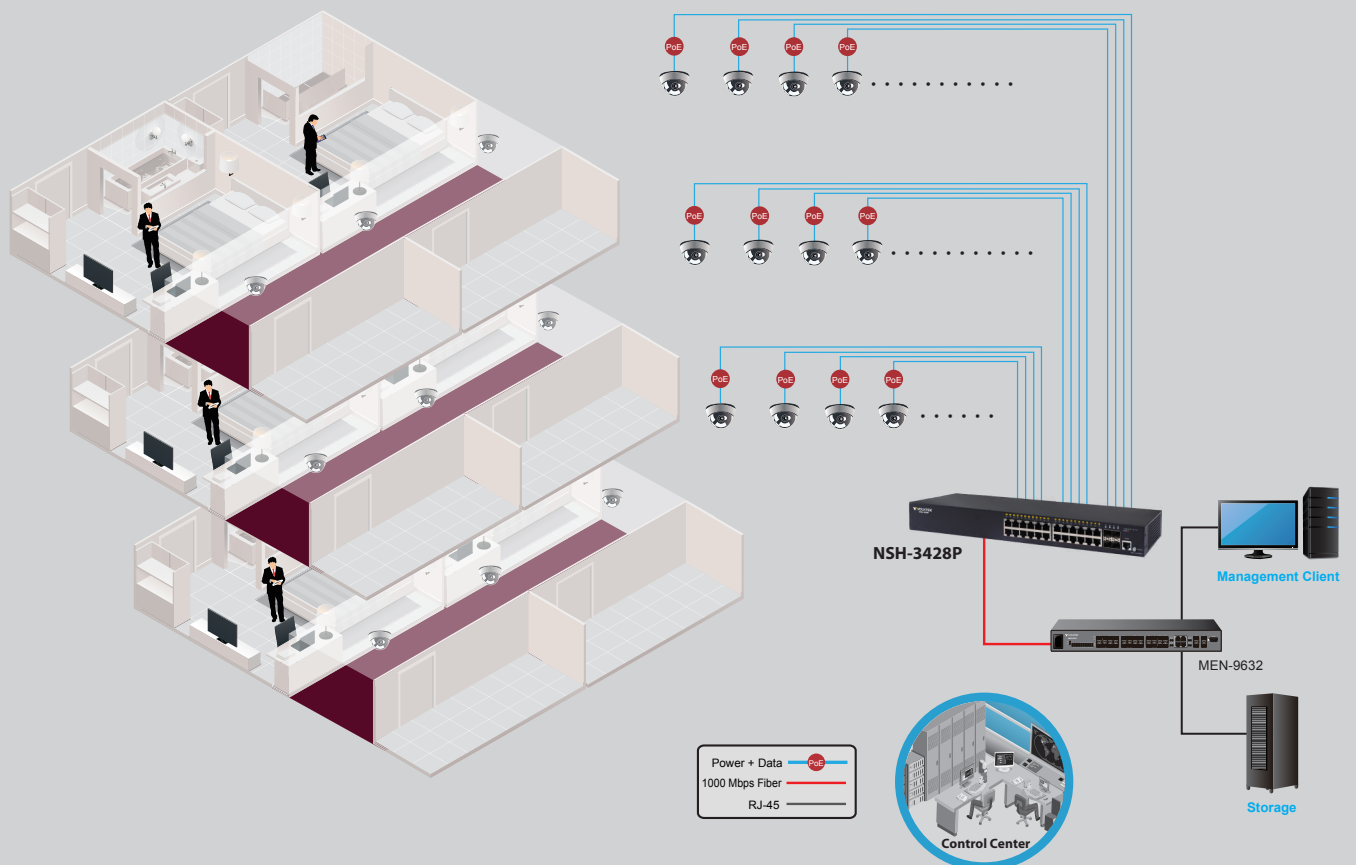
NSH-3428P provides 24-port 10/100/1000Base-T and 4-slot Gigabit SFP for optical connectivity to settle lengthen communication within the heighten infrastructure.



Surveillance Applications

Provide Suitable Network Infrastructure

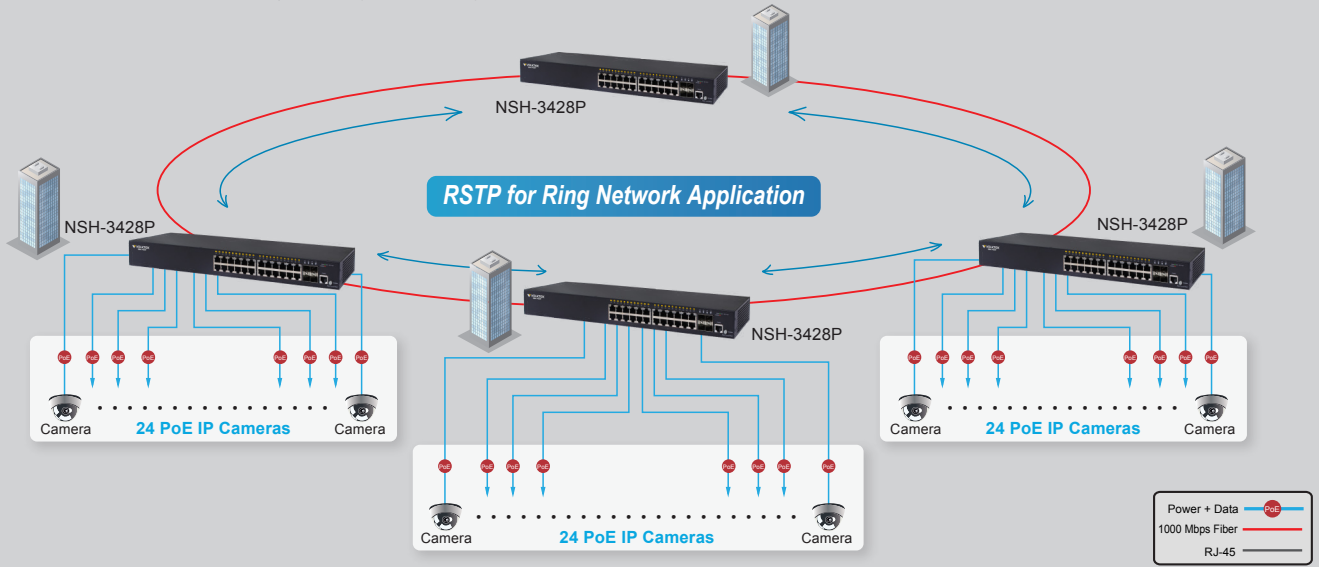
The NSH-3428P is a Managed L2 Gigabit PoE+ Switch equipped with 24 Gigabit RJ45 ports. The switch supports high performance PoE+ (802.3af/at) standard and provides power to connected PD devices via CAT 5e twisted cables with an extendible PoE power budget 740W, up to 30W per port. The switch can easily satisfy up to 24 numbers of high-powered devices such as Wireless AP, IP Cameras or VoIP Phones which gives a cost effective suitable network infrastructure.



Surveillance Applications

Maintain Link Redundancy and Loop Free Network

NSH-3428P supports Rapid Spanning Tree Protocol (IEEE 802.1w RSTP) which provides redundant links to achieve faster convergence and loop free surveillance network ensuring reliability and security.



Specifications

Standards	
IEEE 802.3	10Base-T
IEEE 802.3u	100Base-TX
IEEE 802.3ab	1000Base-T
IEEE 802.3z	1000Base-SX/LX
IEEE 802.3x	Flow Control
IEEE 802.1d	STP
IEEE 802.3w	RSTP
IEEE 802.1p	Class of Service
IEEE 802.1q	VLAN Tagging
IEEE 802.3az	Energy Efficient Ethernet
IEEE 802.3af	PoE
IEEE 802.3at	PoE plus
Network Management	
Configuration	Command Line Interface, Telnet, Web GUI, Syslog SNMP v1/v2c, Management VLAN, SNMP, Firmware Upgradable, Configuration Upload/Download
VLAN	IEEE 802.1Q Tag-based VLAN, Port-based VLAN
Traffic Control & Network Redundancy	IGMP snooping, QoS, Rate Limitation, Storm Control, Port Isolation, LACP, RSTP
Diagnostics	LED status, SNMP trap, E-mail alarm, Port Mirroring, RMON, Port Statistic.
Performance	
Switching Capacity	56Gbps
Forwarding Rate	41.7Mpps
Packet Buffer	12Mb
MAC Address Table	16K
Jumbo Frames	10K
MTBF	370,636hrs
Heat Dissipation	1678.743(Btu/H)
Power	
Input Voltage	100-240 VAC, 50-60Hz
Power Consumption	20W (System Only)
PoE+ Functions	
PoE+ Functions	Up to 24 IEEE 802.3af/802.3at powered devices PoE Power Budget 370W PoE Power Budget 740W (With Optional Extended Power Module)

Interface	
Ports	4 x Gigabit SFP 24 x RJ-45 10/100/1000 Ports (24 x PoE Ports) 1 x Console Port
Mechanical and Environment	
Rack Space	19"
Form Factor	Rackmount
Dimension (W x D x H)	44 x 22 x 4.4 cm (17.3 x 8.6 x 1.7 in)
Weight	3.1 kg (6.85lb)
Operating Temperature	0°C to 50°C
Storage Temperature	-40°C to 70°C
Altitude	3000 m
Operating Humidity (non-condensing)	10% to 90%
Storage Humidity (non-condensing)	10% to 90%
Standards and Certifications	
Safety	CSA (CSA 22.2 NO 60950-1 & UL 60950-1) CB(IEC/EN60950-1)
Electromagnetic Compatibility	CE Mark FCC Class A EN 55022 (CISRP 22) Class A EN 61000-3-2/3 VCCI
WEEE	YES
RoHS	YES
Ordering Information	
NSH-3428P	Managed L2 24 x 10/100/1000 + 4 Gigabit SFP, PoE+ Switch, 0°C ~ 50°C
Optional Accessories	
RPS-3000	Optional Extended Power Module Shelf
MPS-460	Optional Extended Power Module, 460W
MEN-9632	Managed 24-slot 100FX/GbE SFP, 4G Combo Aggregation Switch
GBM-104	1000Base-SX 1.25G, Multi-mode SFP, 500m
GBM-123	1000Base-LX Bi-di Single Mode SFP Module, 10Km

*Specifications subject to change without notice.