INS-8608P
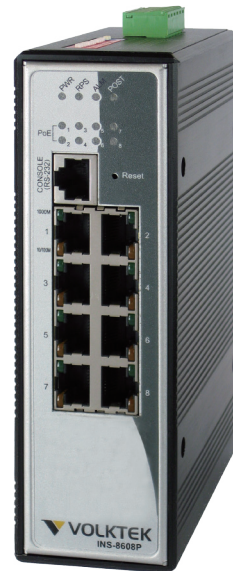
Managed Industrial PoE Plus Ethernet Switch

8-port 10/100/1000BASE-T
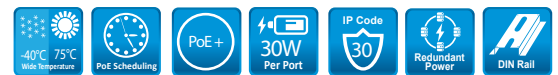
Description

Volktek's INS-8608P Managed Industrial switch is equipped with 8 port 10/100/1000Base-T that are PoE+ compliant. Engineered with hardened components and enclosed in a rugged case, the switch can perate in wide temperatures from -40°C to 75°C and also has an excellent tolerance capability to high vibration and shock. As an Industrial switch, the INS-8608P suits your heavy industrial environments and yet contains all the standard features of other switches.

PoE+ function on 8 ports 10/100/1000 Base-T complies with IEEE 802.3at standards and allows them to supply up to 30W per port for network attached devices such as WLAN Access Points, VoIP phones and IP surveillance cameras that can be powered by Ethernet connectivity. The INS-8608P eliminates the need for installing additional power outlets or adapters, thus network power planning is simplified and overall installation and maintenance costs are reduced. In addition, the Layer 2 switch offers a full complement of management functions to allow easy-to-use configuration and monitoring.

RoHS

CE FC

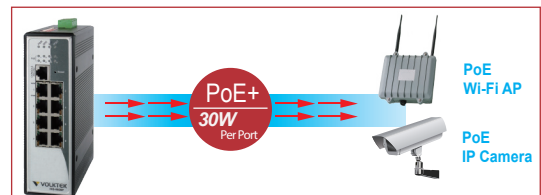| -40°C 75°C Wide Temperature | PoE Scheduling | PoE+ | 30W Per Port | IP Code 30 | Redundant Power | DIN Rail |

Features Highlight

Robust Switch Performance

INS-8608P is built with IP30 aluminum case protection, surge and ESD protection to deliver robust performance and withstand extreme conditions in Industrial environments. In case of any abnormal hardware condition, the switch automatically sends warnings through email and relay output with real-time alarm messages. This assists the system administrators to immediately react to emergency events and diagnose the faults more efficiently for smoother network operations.

Cold **Hot**

-40°C **75°C**

High-Power Budget for PoE Network Devices

To reduce the required time and cost of installing additional electrical sources, the INS-8608P implements PoE plus technology. The switch supplies power over the same cable that is used to carry network traffic and delivers a high power budget (30W per port) to suit various power requirements. Using SNMP and Web interface, the PoE+ functions on each port can be enabled and disabled to save power and energy.

PoE+ 30W Per Port

PoE Wi-Fi AP

PoE IP Camera

Intelligent PoE+ for Powered Devices

The INS-8608P is designed with intelligent PoE+ features to utilize power more efficiently. To monitor real-time status of PDs, the switch sends alive-checking packets to PDs. This reduces management burden and increases system reliability. Using power scheduling mechanism of the switch, administrators can set power on each port to a desired hourly/weekly schedule and can enable or disable the power output to these devices accordingly.

PoE Scheduling

Daytime AM06:00~PM06:00

PM06:00~PM10:00 **Night**

☑ Power On
⊘ Power Off

PoE Alive-Checking

PoE Camera is "No Response!"

"Restart" the PoE Device

Alive!

PoE Camera

PoE Camera

Redundant Power System

Mission-critical industrial applications need to operate without any interruptions because even a minimum network downtime can hugely impact the overall output. Providing continuous power and as well as data to such applications is now made easy with INS-8608P's redundant power system. The switch is designed with standard industrial terminal block for redundant power. In case the primary power supply fails, the secondary power will enable the switch to provide continuous service.

VOLKTEK

Features Highlight

Efficient network monitoring and proactive capability

In a network, the issues that impact network performance can be quickly resolved with the INS-8608P's most accepted and enhanced traffic management, monitoring and analysis protocols such as SNMP and RMON. SNMP allows end users to centrally manage different levels in a network and RMON gives the capability to monitor the network performance. Administrator can ensure a reliable network by identifying connectivity and performance issues and isolating the problem remotely on individual switches. This avoids high OPEX and provides administrators the control they need to manage a healthy and efficient network.

Bandwidth management to prevent unpredictable network status
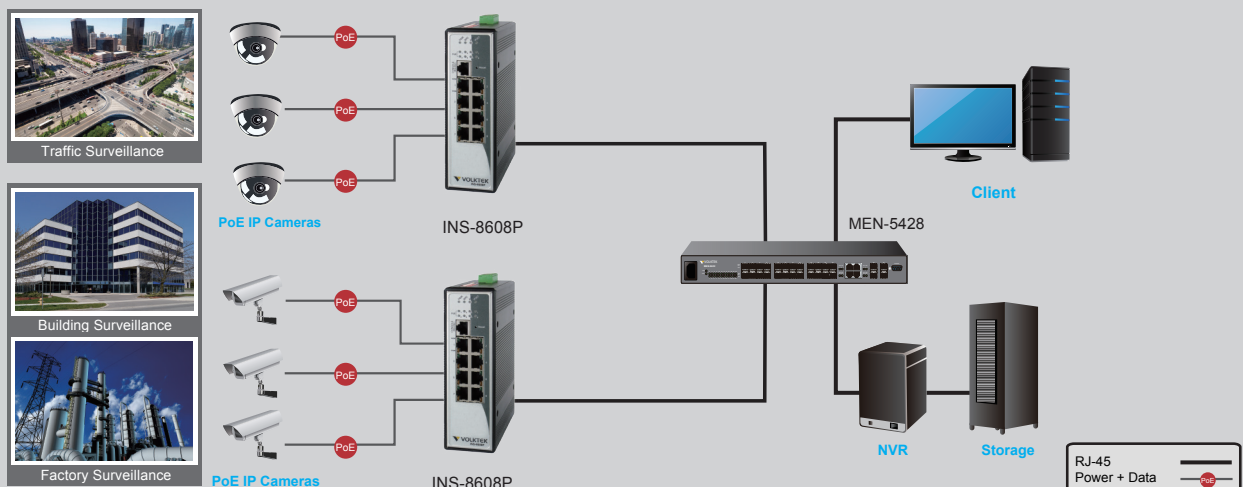
Industrial applications need different levels of services delivered to them reliably without any transmission delays and interruptions. The INS-8608P has comprehensive QoS mechanisms which assign priority to applications and sends only specific dedicated traffic to them. In addition, bandwidth management function of the switch allocates high bandwidths to mission-critical communications and reduce the bandwidth to applications that are less critical. With full control of limiting the bandwidth, the administrators can prevent unpredictable errors and utilize the bandwidth more effectively.

Redundant Ring and Fast Recovery for Surveillance System

Even few seconds of missed communications due to link failures, especially in IP surveillance systems, can cause inconvenience and recovering it becomes very critical. The INS-8608P Xpress Ring rapidly reacts to such link failures and recovers it within less than 10ms, a much faster fail-over time to support nonstop transmissions. And to handle the heavy traffic load of video and data, the switch implements.
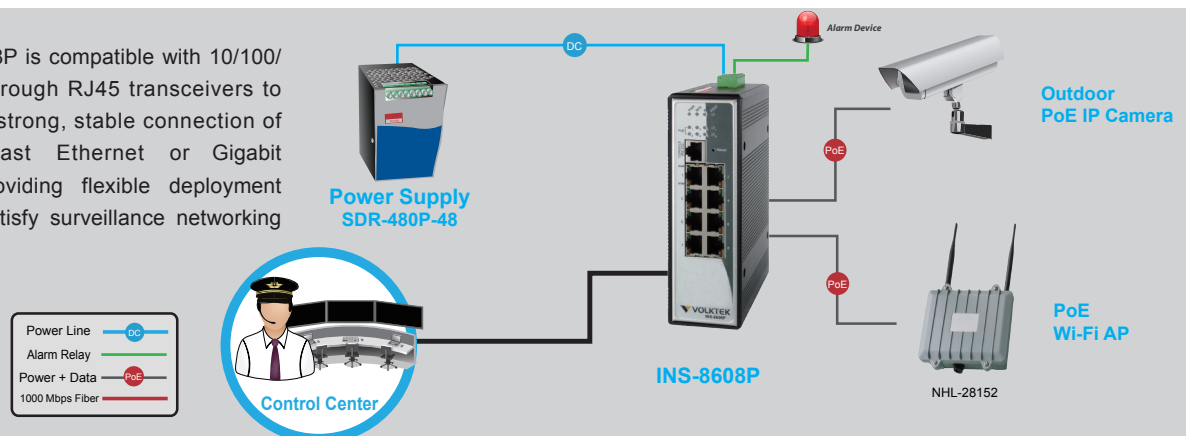
Surveillance Applications

The INS-8608P combines high-power PoE+, robust performance and ease surveillance systems in harsh industrial environments. With highly reliable and secure features ensure continuous operations in some special requirements for transportation, factory and outdoor places where high vibration degree, shock and wide range temperatures are present.

Traffic Surveillance
Building Surveillance
Factory Surveillance
PoE IP Cameras
INS-8608P
PoE IP Cameras
INS-8608P
MEN-5428
Client
NVR
Storage
RJ-45
Power + Data

Applications

The INS-8608P is compatible with 10/100/1000Mbps through RJ45 transceivers to guarantee a strong, stable connection of Ethernet, Fast Ethernet or Gigabit Ethernet, providing flexible deployment options to satisfy surveillance networking requirements.

Alarm Device
Power Supply
SDR-480P-48
Power Line
Alarm Relay
Power + Data
1000 Mbps Fiber
Control Center
Outdoor
PoE IP Camera
INS-8608P
PoE
Wi-Fi AP
NHL-28152

Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX
IEEE 802.3ab	1000BASE-T
IEEE 802.3x	Flow Control
IEEE 802.3ad	Link Aggregation
IEEE 802.1ab	LLDP
IEEE 802.1d	STP
IEEE 802.1w	RSTP
IEEE 802.1p	CoS Prioritization
IEEE 802.1q	VLAN Tagging
IEEE 802.1x	Port Authentication
IEEE 802.3af	Power over Ethernet
IEEE 802.3at	Power over Ethernet Plus

Network Management	
Configuration	Command Line Interface, Telnet, Web GUI, SNMP v1 /v2c/v3, Management VLAN, System log, Firmware Upgradable, Configuration Upload/Download
VLAN	IEEE 802.1Q, GARP/GVRP support, Port-based VLAN, 4K active VLAN support
Redundancy	Xpress Ring, Dual Homing, ERPS, STP/RSTP, LACP
Security	Access Control List, SSH, Port Security, 802.1x Port Authentication, DHCP snooping, MAC limitation
Traffic control	IGMP snooping/Querier, QoS, Flow Control, Abnormal Traffic Detection, Rate Limitation, Storm Control, Port Isolation, Loop Detection
Diagnostics	LED status, SNMP trap, E-mail alarm, Port Mirroring, Port Statistic, SNTP, RMON, Syslog

Power	
Input Voltage	Primary inputs: 48V~57V DC
	Redundant inputs: 48V~57V DC
Power Consumption	18W (System)
	260W (with 8 PoE plus fully loaded)
Alarm Relay	One relay output with current carrying capacity of 1 A @ 24V DC

PoE+ Functions	
PoE+ Functions	Per port up to 30W

Interface	
Ports	8 x 10/100/1000Base-T (PoE RJ-45)
	1 x Console Port (RJ-45 to RS-232)

Mechanical and Environment	
Housing	Aluminum (IP30 Protection)
Mounting	DIN-Rail
Operating Temperature	-40°C~75°C
Storage Temperature	-40°C~85°C
Operating Humidity	10 to 95% RH (non-condensing)
Storage Humidity	5 to 95% RH (non-condensing)
Weight	860g
Dimension (WxHxD)	50x161.5x119.9mm (1.97x6.36x4.72inch)
DIP Switch	Primary/Redundant Power Voltage Drop Alarm setting
LED Panel	PWR, RPS, ALM, POST, PoE ports, 1000, 10/100

Standards and Certifications	
EMI	FCC Part 15 Subpart B Class A
	EN55022 : class A
	EN 55011 : 2009 class A
	EN 61000-6-4
EMS	EN 55024
	EN 61000-6-2
	IEC/EN 61000-4-2 (ESD) : Level 4
	IEC/EN 61000-4-3 (RS) : Level 3
	IEC/EN 61000-4-4 (Burst) : Level 3
	IEC/EN 61000-4-5 (Surge) : Level 3
	IEC/EN 61000-4-6 (CS) : Level 3

Approval & Test	
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

Ordering Information	
INS-8608P	Managed 8-port 10/100/1000 IEEE 802.3af/at, Industrial Managed PoE Switch

Optional Accessories	
Power Supply	SDR-480P-48: 480W DIN-Rail 48V DC Industrial Power Supply, -25°C~70°C
MEN-5428	Managed 24-port 10/100/1000 + 4G Combo Switch

*Specifications subject to change without notice.

Dimension

DIN-Rail Bracket

128.61 [5.06]
119.9 [4.72]
8.71 [0.34]
50 [1.97]
161.5 [6.36]
164.9 [6.49]
53.45 [2.10]
48.1 [1.89]
59.95 [2.36]