## VOLKTEK

## **INS-8624P**

L2+ Managed 4 x 10/100/1000 PoE+ & 2 x FX/GbE SFP Switch

## Description

The INS-8624P managed industrial switch is a Power Source Equipment (PSE) device engineered with rugged hardware to meet the high reliability requirements of Industrial or Outdoor PoE applications. Built in a well-protected IP30 aluminium housing, the switch withstands wide operating temperatures ranging from -40°C to 75°C and operates consistently even in harsh industrial environments. The INS-8624P supports QoS, IGMP snooping, SFP DDMI, PoE and other device management features to fulfill the needs of high performance managed surveillance networks.

PoE+ function on 4-10/100/1000 copper ports of the INS-8624P complies with IEEE 802.3at standards and allows them to supply up to 30W per port for network attached powered devices such as WLAN Access Points, VoIP phones and IP surveillance cameras. Two gigabit fiber slots can be configured as dual fiber ring ports to quickly recover network failures and provide an easy way to establish redundant gigabit network. Thus, INS-8624P ensures a reliable and highly available managed industrial networks while delivering all the benefits of PoE power.

## **Features Highlight**

#### **Robust Performance and Protection**

Well-protected in an IP30 aluminium casing, the switch provides high level of immunity against EMI and EMS found in industrial environments. Along with those, the INS-8624P is built with various protection features such as ESD Protection, Surge Protection, Over Current Protection, Reverse Polarity Protection and Short Circuit Protection to ensure continuous operation of mission-critical applications even in unstable power conditions.

#### High-Power Budget for PoE Network Devices

To fulfill the growing demand of high-bandwidth, high-power PoE+ for network applications and eliminating the cost of electrical cabling and circuits, the INS-8624P is designed under IEEE 802.3at standard PoE plus. With 120W PoE power budget capability for the whole system, the switch allows simple "plug and play" PoE for various types of high power consuming PoE devices. This makes the INS-8624P a very convenient solution for applications far away from power outlets satisfying PoE extension applications in much longer distances.

#### Innovative PoE+ for Powered Devices

The INS-8624P is designed with intelligent PoE+ features to utilize power more efficiently. With user-configurable power budget limit feature, the switch limits power output to devices to ensure that power consumption does not exceed user defined parameters. And 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.











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## **Features Highlight**

#### DIN Rail to Power Adapter (AC to DC) & Terminal Block

The INS-8624P is an ideal solution to prevent the failure of single power circuits, which provide power redundant options to facilitate high power PoE+ usage. Either "DIN-Rail Power Adapter" to convert AC to DC for board operation in an easily and firmly installation with hardened connection, or "6-pin Terminal Block" which supports primary and secondary power input. Categorized by its compact design, DIN-Rail Power Adapter can easily fit in smaller infrastructures and is an extremely simple installation. Saving your time and space, this adapter can be easily DIN-Rail-mounted next to INS-8624P in surveillance applications that have little space available.



#### Future-proof Fiber Connectivity with Dual SFP Ports

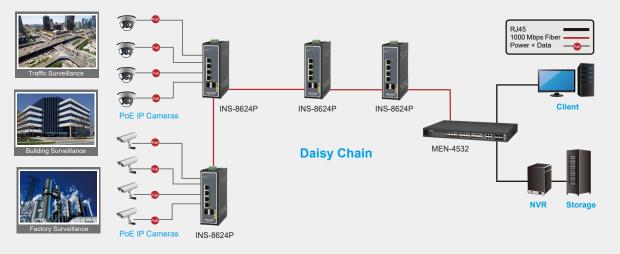
With two gigabit fiber slots, the INS-8624P easily establishes fiber channel for gigabit Ethernet connectivity and allows you to take advantage of fiber based daisy chain topologies. The switch provides long distance, high-speed fiber connectivity while offering enhanced noise immunity and data security across deployed systems. The INS-8624P is a well-suited robust, cost-effective and future-proof solution for fiber based surveillance networks.

#### Efficient network monitoring and proactive capability

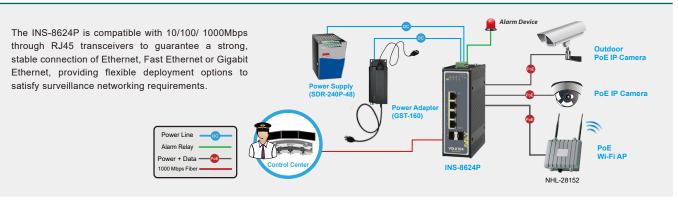
The INS-8624P supports the most accepted and enhanced traffic management, monitoring and analysis protocols such as SNMP and RMON. SNMPv1/v2c allows end users to centrally manage different levels in a network and RMON gives the capability to monitor the network performance. In addition, QoS, IGMP and VLAN give the capability to monitor the network performance for powered devices in surveillance applications. This avoids high OPEX and provides administrators the control they need to manage a healthy and efficient network.

#### Surveillance Applications

The INS-8624P combines high-power PoE+, robust performance for surveillance systems in harsh industrial environments. With small size, 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.



### Applications



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### **Specifications**

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX
IEEE 802.3ab	1000BASE-T
IEEE 802.3u	100BASE-FX
IEEE 802.3z	1000BASE-SX/LX
IEEE 802.32	Nway Auto-negotiation
IEEE 802.3x	Flow Control
IEEE 802.3ad	Link Aggregation
IEEE 802.3af	Power over Ethernet
IEEE 802.3at	Power over Ethernet Plus
IEEE 802.3az	Energy Efficient Ethernet (EEE)
IEEE 802.1AB	
IEEE 802.1D	STP
IEEE 802.1W	RSTP
IEEE 802.1p IEEE 802.1Q	Class of Service
	VLAN Tagging
IEEE 802.1X	Port Authentication
Interface	
Ports	4 x 10/100/1000BASE-T (PoE RJ45)
	2 x GbE SFP Slots
DIP Switch	Power voltage drop alarm setting (PWR & RPS)
LED Panel	PWR, RPS, ALM, SFP, PoE, 1000, LNK/ACT
Features	
Performance	Jumbo frame Size: 10KBytes
	MAC Table Entries: 8K
	Active VLAN: 4K
	Switch Fabric: 12Gbps
	L2 Forwarding Rate: 11.9Mpps
	CLI, Telnet/SSH, HTTP, SNMP v1/v2c/v3, SNMP
Management	Trap, MVLAN, Firmware Upgradable, Configuration
	Backup/Restore, Syslog, SNTP, LLDP, DHCP
	Client/Relay/Option 82, e-mail Alarm, Server
	Control, Mirroring, DDM, SFP Info,
	Auto-Provisioning, EEE, RMON Statistics
Reliability	STP/RSTP, Dual Homing, LACP, Static Trunk,
	Code Doducedou au
	Code Redundancy
	IEEE 802.1Q, Port-based VLAN, MAC-based
VLAN	,
VLAN	IEEE 802.1Q, Port-based VLAN, MAC-based
VLAN Traffic Control	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN, QinQ
	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN, QinQ IGMP Snooping/Throttling, QoS, Flow Control,
	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN, QinQ IGMP Snooping/Throttling, QoS, Flow Control, Rate Limit, Storm Control, Traffic Monitor,
Traffic Control	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN, QinQ IGMP Snooping/Throttling, QoS, Flow Control, Rate Limit, Storm Control, Traffic Monitor, Port Isolation, Loop Detection
	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN, QinQ IGMP Snooping/Throttling, QoS, Flow Control, Rate Limit, Storm Control, Traffic Monitor, Port Isolation, Loop Detection ACL, SSH, Port-based 802.1x, Port Security,
Traffic Control	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN, QinQ IGMP Snooping/Throttling, QoS, Flow Control, Rate Limit, Storm Control, Traffic Monitor, Port Isolation, Loop Detection ACL, SSH, Port-based 802.1x, Port Security, MAC Search, Static MAC, DHCP Snooping, DHCP
Traffic Control	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN, QinQ IGMP Snooping/Throttling, QoS, Flow Control, Rate Limit, Storm Control, Traffic Monitor, Port Isolation, Loop Detection ACL, SSH, Port-based 802.1x, Port Security, MAC Search, Static MAC, DHCP Snooping, DHCP Sever Screening, ARP Inspection, BPDU Guard/Filter, Root Guard, Managed Host
Traffic Control	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN, QinQ IGMP Snooping/Throttling, QoS, Flow Control, Rate Limit, Storm Control, Traffic Monitor, Port Isolation, Loop Detection ACL, SSH, Port-based 802.1x, Port Security, MAC Search, Static MAC, DHCP Snooping, DHCP Sever Screening, ARP Inspection, BPDU

Power		
Input Voltage	Primary inputs: 48~57VDC	
	Redundant inputs: 48~57VDC	
Connection	Teminal Block, Mini-DIN	
Power Consumption	System: 10W	
Alarm Relay	PoE Power Budget: 120W	
	One relay output, 1A @ 24V DC	
Mechanical and Environment		
Housing	Aluminum (IP30 Protection)	
Mounting	DIN-Rail	
Operating Temperature	-40°C~75°C (-40°F~167°F)	
Storage Temperature	-40°C~85°C (-40°F~185°F)	
Operating Humidity	5 to 95% RH (non-condensing)	
Storage Humidity	5 to 95% RH (non-condensing)	
Weight	740 g (1.6 lb)	
Dimension (WxHxD)	50 x 160 x 120 mm (1.97 x 6.3 x 4.72 in)	
Certifications		
ЕМІ	FCC Part 15 Subpart B Class A	
	EN 55022: class A	
	EN 55011: 2009 class A	
	EN 61000-6-4	
EMS	EN 55024	
	EN 61000-6-2	
	EN 61000-4-2 (ESD)	
	EN 61000-4-3 (RS)	
	EN 61000-4-4 (Burst)	
	EN 61000-4-5 (Surge)	
	EN 61000-4-6 (CS)	
	EN 61000-4-8 (PFMF)	
Shock	IEC 60068-2-27	
Freefall	IEC 60068-2-32	
Vibration	IEC 60068-2-6	
Ordering Information		
INS-8624P	L2+ Managed 4 x 10/100/1000 PoE+ & 2 x FX/GbE	
	SFP Switch	
Optional Accessories		
Power Supply	SDR-480P-48: 480W DIN-Rail 48V DC Industrial	
	Power Supply, -25°C~70°C (-13°F~158°F)	
GBM-104	1000BASE-SX 1.25G, Multi-mode SFP, 500m	
GBM-123TS	1000BASE-LX, Bi-Di SFP TX:1310/RX:1550	
	Single Mode, 10Km, 0°C~70°C (32°F~158°F)	
GBM-123RS	1000BASE-LX, Bi-Di SFP TX:1550/RX:1310	
	Single Mode, 10Km, 0°C~70°C (32°F~158°F)	

Note :

\* The SFP communication distance upon the request.

 $^*$  Industrial SFP with wide operating temperature from -40°C~85°C (-40°F~185°F) is available upon request.

\* Specifications subject to change without notice.

### Dimension

