VOLKTEK

INS-8424P

Unmanaged 4 x 10/100/1000 PoE+ & 2 x GbE SFP Switch

Description

The INS-8424P Industrial switch is a Power Source Equipment (PSE) device specifically engineered with field-Industrial components to meet the high reliability requirements of Outdoor PoE applications. Built in a well-protected IP40 aluminum housing, the switch withstands wide operating temperatures ranging from -40°C to 75°C and operates consistently even in harsh industrial environments. Although unmanaged, the switch supports Auto MDI/MDIX and eco-friendly IEEE802.3az EEE (Energy Efficient Ethernet) to ensure an efficient industrial network while delivering all the benefits of PoE power.

PoE+ function on 4-10/100/1000 copper ports of the INS-8424P 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 of the switch can be configured under daisy chain topologies offering fiber advantages of safe, reliable and long distance gigabit connectivity required for today's surveillance systems.

RoHS

Features Highlight

Robust Performance and Protection

Well-protected in a IP40 aluminum housing, the switch provides high level of immunity against electromagnetic and radio frequency interferences found in industrial environments. Along with it, the INS-8424P is built with various protection features such as ESD Protection, Surge Protection, Over Voltage/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

The INS-8424P is capable of delivering power up to 30W per port to both IEEE 802.3af PoE and IEEE 802.3at PoE+ compliant powered devices. Thereby, powered devices located in both indoor and remote outdoor locations can be powered without installing additional power outlets or cabling and significantly reduce your CAPEX.

Future-proof Fiber Connectivity with Dual SFP Ports

With two gigabit fiber slots, the INS-8424P 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-8424P is a well-suited robust, cost-effective and future-proof solution for fiber based surveillance networks.

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

The INS-8424P is an ideal solution to prevent the failure of single power circuit, providing power redundant options to facilitate high power PoE+ usage. "DIN-Rail Power Adapter" functions as primary power source which converts AC to DC for board operation in an easy and firm installation with hardened connection, while "6-pin Terminal Block" supports primary and secondary power input. Categorized by its compact design, DIN-Rail Power Adapter can easily fit in smaller infrastructures and is extremely simple to install. Saving your time and space, this adapter can be easily DIN-Rail-mounted next to INS-8424P in surveillance applications that have little space available.

Easy Plug-and-play Operation

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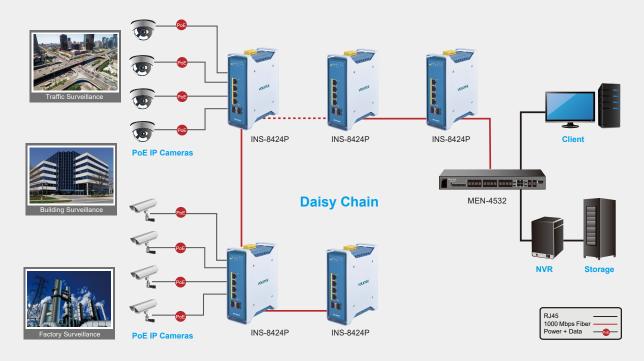
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Surveillance Applications

The INS-8424P combines high-power PoE+, robust performance for surveillance systems in harsh industrial environments. With its small size, highly reliable and secure features ensure continuous operations in some special requirements for transportation, factory and outdoor places where wide range temperatures are present.

Traffic Surveillance

Building Surveillance

Factory Surveillance

PoE IP Cameras

PoE IP Cameras

INS-8424P   INS-8424P   INS-8424P

Daisy Chain

INS-8424P   INS-8424P

MEN-4532

Client

NVR   Storage

RJ45	
1000 Mbps Fiber	
Power + Data	PoE

Applications

The INS-8424P 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 industrial networking requirements

DC

DC

Alarm Device

Power Supply
SDR-480P-48

Power Adapter
(IRA-120/IRA-160)

Control Center

INS-8424P

Outdoor
PoE IP Camera

PoE IP Camera

PoE
Wi-Fi AP

Power Line	DC
Alarm Relay	
Power + Data	PoE
1000 Mbps Fiber	

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Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX
IEEE 802.3ab	1000BASE-T
IEEE 802.3z	1000BASE-SX/LX
IEEE 802.3	Nway Auto-negotiation
IEEE 802.3x	Flow Control
IEEE 802.3af	Power over Ethernet
IEEE 802.3at	Power over Ethernet Plus
IEEE 802.1p	Class of Service

Interface	
Ports	4 x 10/100/1000BASE-T (PoE RJ45)
	2 x GbE SFP Slots
DIP Switch	Primary/Redundant Power Voltage Drop Alarm setting
LED Panel	PWR, RPS, ALM, SFP, PoE, 1000, LNK/ACT

Features	
Performance	Throughput: 14,880 pps to 10 Mbps ports
	148,800 pps to 100 Mbps ports
	1,488,000 pps to 1000 Mbps ports
	MAC table size: 8K
	Switch fabric: 12Gbps
	Jumbo Frame size: 10KBytes
Functions	VLAN Passthru
PoE+ Functions	Up to 4 IEEE 802.3at powered devices
	Supports PoE Power up to 30W for each PoE port
	Auto detect powered device (PD)
	Remote Power Feeding up to 100m

Power	
Input Voltage	Primary inputs: 48V~57V DC
	Redundant inputs: 48V~57V DC
Connection	Terminal Block, Mini-DIN
Power Consumption	System: 10W
	PoE Power Budget: 120W
Alarm Relay	One relay output, 1A @ 24V DC

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.

Mechanical and Environment	
Housing	Aluminum (IP40 Protection)
Mounting	DIN-Rail
Wide 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	
EMI	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	
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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)

Dimension