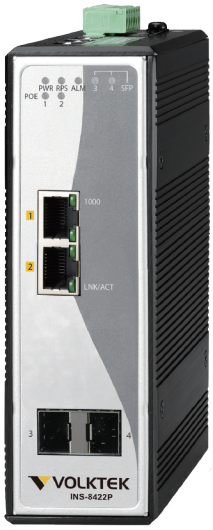
INS-8422P

Unmanaged Industrial PoE Plus Ethernet Switch

2-port IEEE 802.3at PoE Plus + 2-slot Gigabit SFP



RoHS CE FC

-40°C 75°C | IP Code 30 | PoE+ | 30W Per Port | DIN Rail

Description

The INS-8422P 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 IP-30 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 2-10/100/1000 copper ports of the INS-8422P 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 to offering fiber advantages of safe, reliable and long distance gigabit connectivity required for today's surveillance systems.

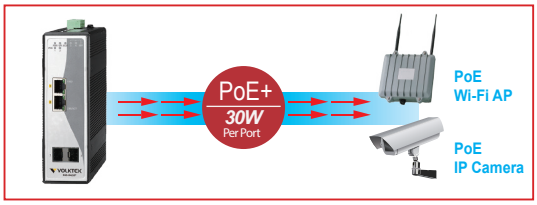
Features Highlight

Robust Performance and Protection

Well-protected in a IP-30 aluminum housing, the switch provides high level of immunity against electromagnetic and radio frequency interferences found in industrial environments. Along with it, the INS-8422P is built with various protection features such as ESD Protection (8KV), Surge Protection (6KV), 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-8422P 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-8422P 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-8422P 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

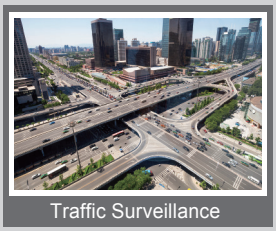
The INS-8422P is an ideal solution to prevent the failure of single power circuit, providing power redundant options to facilitate high power PoE+ usage. "DIN-Rail Power Adapter" functions as primary power source which converts AC to DC for board operation in an easy and firm installation with hardened 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-8422P in surveillance applications that have little space available.

Easy Plug-and-play Operation

The INS-8422P is an easy-to-setup and ready-to-use solution for industrial and outdoor networks. Featuring Auto-MDI/MDIX and Auto-negotiation on all ports, the INS-8422P automatically detects and configures the best mode of operation over a link. This eliminates the need of user setup or configuration procedure and simplifies installation. The LEDs on the switch allow you to easily monitor device power/link status. In addition, the INS-8422P is designed for DIN-Rail to simplify network deployment in surveillance systems.

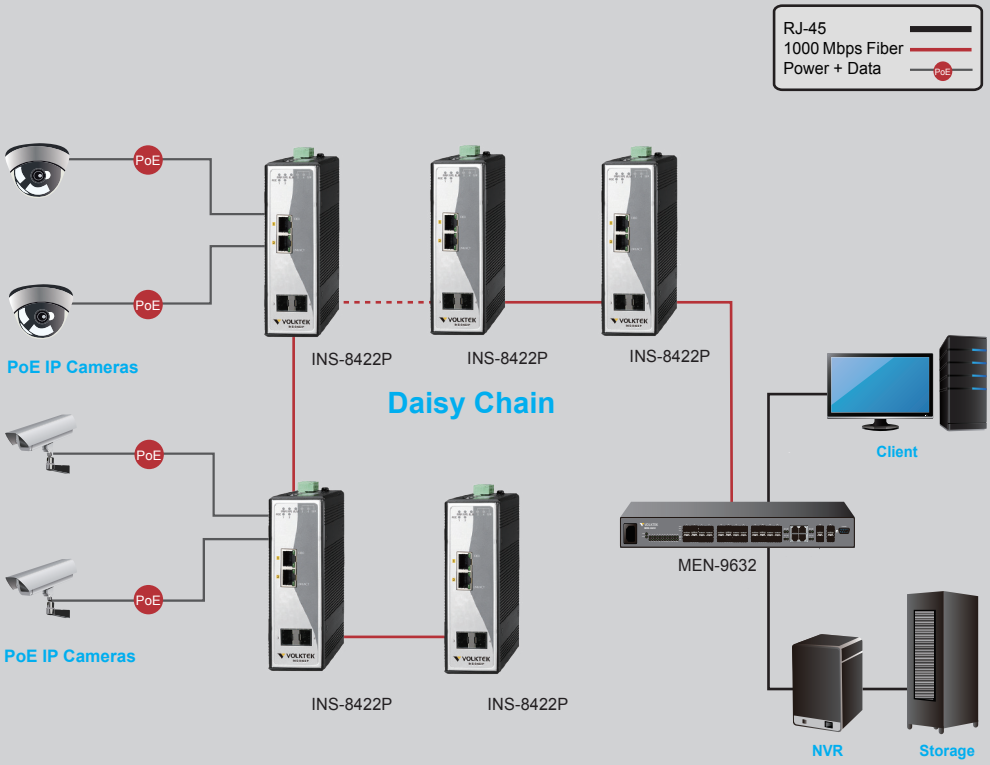
Surveillance Applications

The INS-8422P 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

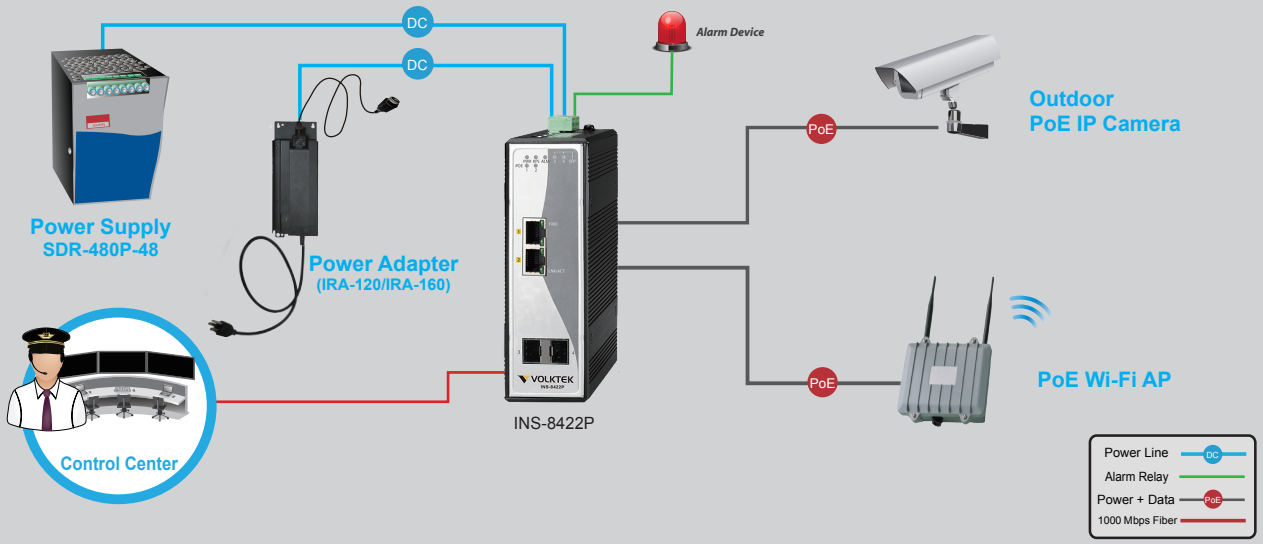
Building Surveillance

Factory Surveillance



Applications

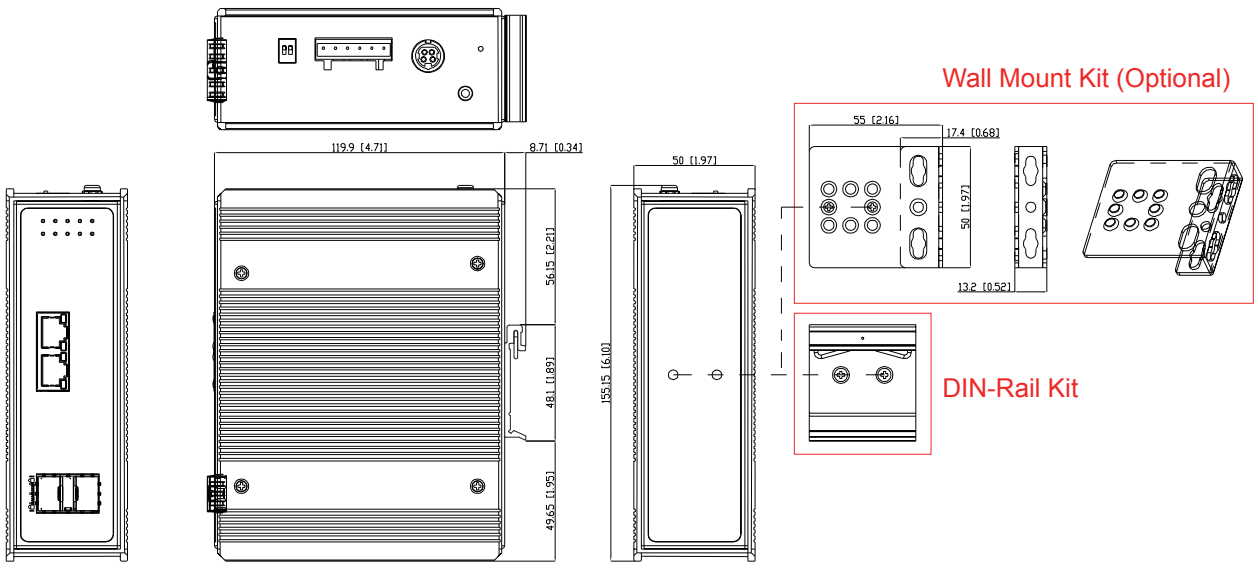
The INS-8422P is compatible with 10/100/1000Mbps through RJ45 transceivers to guarantee a strong, stable connection of Ethernet, Fast Ethernet or Gigabit Ethernet, providing flexible deployment options to satisfy industrial networking requirements



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 802.3af	PoE
IEEE 802.3at	PoE plus
IEEE 802.3az	Energy Efficient Ethernet
Performance	
Throughput	14,880 pps to 10 Mbps ports 148,800 pps to 100 Mbps ports 1,488,000 pps to 1000 Mbps ports
Switch fabric	8Gbps
Packet buffer	4.1Mbit
MAC table size	8K
Jumbo Frame size	10K
Power	
Input Voltage	Primary: 48V (48~57V DC)
	Redundant: 48V (48~57V DC)
Power Connection	4-pin DC-Jack (Primary Power Input)
	6-pin Terminal block (Primary/Redundant Power Input)
Power Input Polarity Protection	Present
Power Voltage Drop Alarm	Primary/Redundant Power Input
Power Consumption	8W (System)
	70W (with 2 PoE plus fully loaded)
ESD Protection	8KV/15KV (Contact/Air)
Surge Protection	6KV (Line-to-Ground)
PoE+ Functions	
PoE+ Functions	Up to 2 IEEE 802.3at powered devices
	Supports PoE Power up to 30W for each PoE port
	Auto detect powered devices (PDs)
	Remote Power feeding up to 100m
Interface	
Ports	2 x Gigabit SFP slots
	2 x 10/100/1000Base-T (PSE)

**Industrial SFP with wide operating temperature (-40°C~85°C) is available upon request*
**Specifications subject to change without notice.*

Mechanical and Environment		
Housing		Aluminum Case (IP30 protection)
Mounting		DIN-Rail, Wall Mount (Optional)
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		529g
Dimension (WxHxD)		50x155.15x119.9 mm (1.97x6.10x4.71 inch)
DIP Switch		Primary/Redundant Power Voltage Drop Alarm setting
LED Panel		PWR, RPS, ALM, SFP slots, PoE ports, 1000, LNK/ACT
Standards and Certifications		
Safety		EN60950
FCC		Part 15 Subpart B Class A
CE	EMI	EN55022 class A
	EMS	EN 55024 IEC/EN 61000-4-2 (ESD): Level 3 IEC/EN 61000-4-3 (RS): Level 3 IEC/EN 61000-4-4 (EFT): Level 3 IEC/EN 61000-4-5 (Surge): Level 3 IEC/EN 61000-4-6 (CS): Level 3 IEC/EN 61000-4-8 (PFMF): Level 3
Approval & Test		
Shock		IEC 60068-2-27 (Processing)
Freefall		IEC 60068-2-32 (Processing)
Vibration		IEC 60068-2-6 (Processing)
Ordering Information		
INS-8422P		2-port IEEE 802.3af/at PoE+, 2-slot Gigabit SFP Unmanaged Industrial PoE+ Ethernet Switch
Optional Accessories		
Power Supply		SDR-480P-48: 480W DIN-Rail 48V DC Industrial Power Supply, -25°C~70°C
Power Adapter		IRA-120: 120W, 52V, Industrial Grade Power Adapter (-30°C~60°C for 110V AC input / -30°C~70°C for 220V AC input)
		IRA-160: 160W, 52V, Industrial Grade Power Adapter (-30°C~60°C for 110V AC input / -30°C~70°C for 220V AC input)
DIN Rail/Wall Mount Holder		DR-120 (for IRA-120) / DR-160 (for IRA-160)
MEN-9632		Managed 24-slot 100FX/GbE SFP, 4G Combo Aggregation Switch
GBM-104		1000Base-SX 1.25G, Multi-mode SFP, 500m
GBM-104-2		1000Base-SX 1.25G, Multi-mode, 3.3V, 1310nm, 2Km
GBM-104-10		1000Base-LX 1.25G, Single mode SFP, 10Km
GBM-123		1000Base-LX Bi-di Single Mode SFP Module, 10Km

Dimension