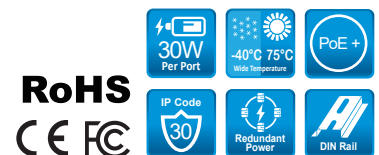# VOLKTEK

SEN-9428P-24V-RW

Umanaged 8 x 10/100/1000 PoE+ & 2 x FX/GbE SFP Switch, Railway Approval

Description

Switch when used in railway applications has to hold certain certification to prove its ability whether it can be best fit for it or not. SEN-9428P-24V-RW is certified with and EN 50155 and EN 50121-4 to use in railway applications so that it makes you feel trustworthy to use for surveillance or ticketing network in railway and bus stations. EN 50155, EN 50121-4 and EN 61373 certificates guarantee trustworthy operation in critical environments where vibration and shock are common place. With IP30 protection it exhibits extreme tolerance in harsh temperature environment ranging from -40°C to 75°C.

SEN-9428P-24V-RW is built with 24V input and its Power Booster technology boosts power up to 30W per port with available 24V voltage to feed surveillance cameras, wireless access points, IP phones and other PoE enabled devices. Complied with 8 PoE+ (IEEE 802.3af/at) Gigabit copper ports, the switch eliminates the need of running separate cables for power and data. 2 x FX/GbE SFP slots gives the advantages of configuring daisy chain topologies offering full-proof fiber advantages for a safe, reliable and long distance Gigabit connectivity.
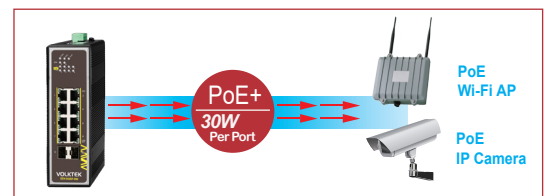
Features Highlight

Robust Switch Performance

SEN-9428P-24V-RW is enclosed within IP30 aluminum case and can able to sustain harsh temperature ranging between -40°C and 75°C. Along with this, the switch is built with various protection features such as ESD Protection, Surge Protection and Reverse Polarity Protection to deliver non-stop PoE service to the Powered Devices.

High-Power Budget for PoE Network Devices

SEN-9428P-24V-RW is capable of delivering PoE power up to 30W per port (IEEE 802.3af/at) to PoE+ compliant powered devices. Addition to this, the switch allows simple "plug and play" PoE for various types of high power consuming PoE devices. Thereby, irrespective of their location, powered devices can be powered without installing additional power outlets or cabling and significantly reduce your CAPEX.

Efficient Power Booster Support

There are many places such as small factories, workstations where the voltage supply is not sufficient for PoE operation. Hence to deal with this situation, SEN-9428P-24V-RW is designed with innovative power booster technology which can boost DC voltage from 24V DC to 48~57V DC for demanding IP surveillance saving additional cost and space for external voltage converter.

Redundant Power Supply

To guarantee power runs continuously the switch is designed to be simultaneously connected to two power supplies and an alarm through a standard industrial terminal block. If one power supply stops working the switch will start feeding its power on the alternative power supply and the alarm will go off to notify technicians about the event.

Advanced QoS Support

Understanding the need of smoother data transmissions for specific surveillance applications, the SEN-9428P-24V-RW supports IEEE 802.1p Quality of Service (QoS) which enhances bandwidth utilization to ensure time sensitive data gets delivered efficiently to mission-critical applications without any delay even during burst of high traffic. Addition to the beneficial fetures, the switch is also configured with efficient Storm Control functionalities which can only allow the traffic of a predefined rate. Both the QoS and Storm Control function can easily managed by DIP Switch without any burden of manual enable and disable.
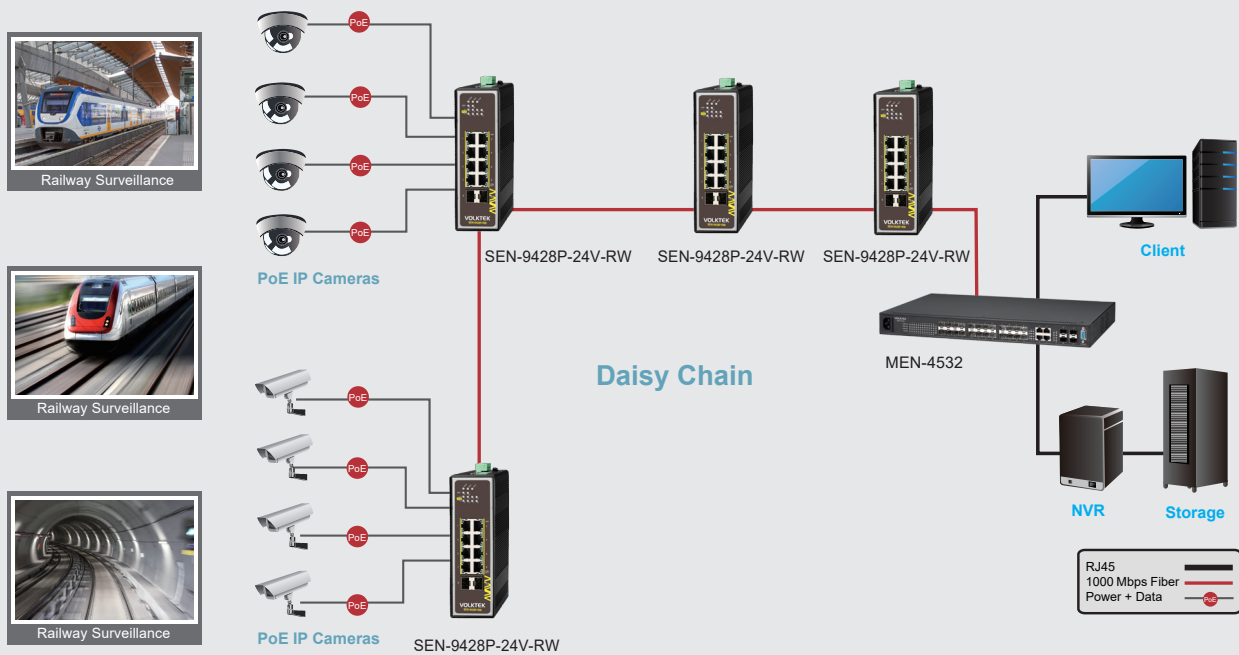
VOLKTEK

Features Highlight

Eco-friendly Green Ethernet Design

To address the concerns of increasing power consumption, SEN-9428P-24V-RW 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 the energy usage significantly and help you save operational costs.

Applications

Sufficient PoE Power with Cost-saving Fiber Connectivity

The intelligent PoE+, compactable size, rugged design of SEN-9428P-24V-RW ensure continuous operations in some special requirements for transportation, factory and outdoor places where high vibration degree, shock and wide range temperatures are present. Addition to this the dual FX/GbE SFP ports which can easily make daisy chain topologies to power more number of PoE+ enable power devices as well as saves the amount of fiber cabling connecting to the control room. Due to daisy chain architecture only a single fiber connects to the control room which in turn saves CAPEX.

Railway Surveillance

Railway Surveillance

Railway Surveillance

PoE IP Cameras

SEN-9428P-24V-RW   SEN-9428P-24V-RW   SEN-9428P-24V-RW

Client

Daisy Chain

MEN-4532

PoE IP Cameras   SEN-9428P-24V-RW

NVR   Storage

RJ45
1000 Mbps Fiber
Power + Data

VOLKTEK

Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX/FX
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 802.3az	Energy Efficient Ethernet (EEE)
IEEE 802.1p	Class of Service

Interface	
Ports	8 x 10/100/1000BASE-T (PoE RJ45) 2 x FX/GbE SFP Slots
DIP Switch	Power voltage drop alarm setting (PWR & RPS), Broadcast strom control setting (STORM), Port-based QoS setting (QoS on P1 & P2), Fiber port speed setting (100FX on P9 & P10)
LED Panel	PWR, RPS, ALM, SFP, PoE, 1000, LNK/ACT

Features	
Throughput	14,880 pps to 10 Mbps ports 148,800 pps to 100 Mbps ports 1,488,000 pps to 1000 Mbps ports
Performance	Max Jumbo Frame Size: 10KBytes MAC Table Entries: 8K Switch Fabric: 20Gbps
Functions	Flow Control, Storm Control, LLDP Filter, VLAN Passthru, Port Priority(p1-2), 802.1p/Tag QoS, EIP QoS (via TCP/UDP #), PROFINET QoS (via VLAN 0), GOOSE QoS (via Ether-type)
PoE+ Functions	Up to 8 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 input: 24~57VDC Redundant: 24~57VDC
Connection	Teminal Block
Power Consumption	System: 10W PoE Power Budget: 124W @ 24V DC 240W @ 48V DC
Alarm Relay	One relay output with current carrying capacity of 1A @ 24V DC

Mechanical and Environment	
Housing	Aluminum Case (IP30 protection)
Mounting Kit	DIN-Rail
Operating Temperature	-40°C~75°C (-40°F~167°F) 70°C Railway Certified
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	930 g (2.1 lb)
Dimension (WxHxD)	50 x 160 x 120 mm (1.97 x 6.3 x 4.72 in)

Standards and Certifications		
CE	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
Rail Traffic		EN 50155 EN 50121-4

Ordering Information	
SEN-9428P-24V-RW	Umanaged 8 x 10/100/1000 PoE+ & 2 x FX/GbE SFP Switch, Railway Approval

Optional Accessories	
Power Supply	SDR-480-48: DIN-Rail 480W, 48VDC, Industrial Power Supply with PFC Function SDR-240-48: DIN-Rail, 240W, 48VDC, Industrial Power Supply with PFC Functio
DIN-Rail Holder	DR-160 (for GST-160)
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

*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

DIN-Rail Bracket