

# VOLKTEK

## SEN-8428PL

### Lite Managed PoE+ Industrial Switch 8 x 10/100/1000 PoE+ & 2 x FX/GbE SFP

#### Description

Realizing the essentiality in ease of use for 24/7 surveillance for today's society, Volktek develops SEN-8428PL Lite Managed Industrial PoE+ switch. The SEN-8428PL is engineered with hardened components and enclosed in a case which can operate in wide temperature from -10°C to 60°C, and playful even in harsh environments providing reliable surveillance.

The switch is compiled with intelligent PoE+ (IEEE 802.3af/at) function on 8-Gigabit copper ports and allows to supply up to 30W per port power budget over the single Ethernet cable to satisfy Powered Devices such as Wireless AP, VoIP phones and IP cameras eliminating the need of external power outlets. The 2-slot 100FX/Gigabit SFP give the advantages of configuring ring topologies for a safe, reliable and long distance Gigabit connectivity. In addition, the switch offers an easy to use of management functions to allow configuration and monitoring. Designed with sufficient beneficial features, SEN-8428PL can be considered as a reliable option for harsh outdoor surveillance.



RoHS CE FC



#### Features Highlight

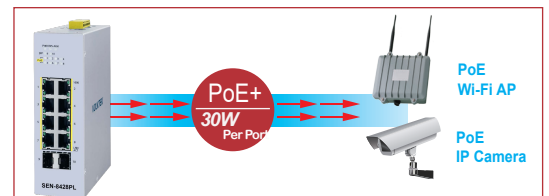
##### Robust Switch Performance

With a hardened metal case, surge and ESD protection, the SEN-8428PL provides a high level of immunity against electromagnetic interference and heavy electrical surges, thus facilitating easy deployment in demanding environments. In addition, the SEN-8428PL offers high performance switch architecture with eight 10/100/1000BASE-T ports and two 100FX/Gigabit Ethernet SFP slots to meet the requirements of high-bandwidth access in wide operating temperatures.



##### 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 SEN-8428PL is designed under IEEE 802.3at standard PoE+. With 240W PoE power budget capability for whole system, the switch allows simple "plug-n-play" PoE for various types of high power consuming PoE devices. This makes the SEN-8428PL a very convenient solution for applications far away from power outlets satisfying PoE extension applications in much longer distances.



##### Intelligent PoE Alive Checking

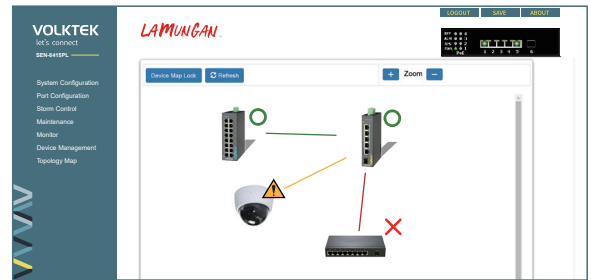
The SEN-8428PL is designed with intelligent PoE+ features to utilize power more efficient. To monitor real-time status of PDs, the switch sends alive-checking packets to PDs. If a PD fails to respond, the switch's PD live check feature detects the failure and reactivates the PD. This reduces management burden and increases system reliability.



## Features Highlight

### Introducing the LAMUNGAN

LAMUNGAN is Volktek's embedded Element Management System that allows users to view the topology map of connected devices and neighboring switches along with the link status. Its LLDP feature allows it to advertise its identities and capabilities on the wired Ethernet. This map like feature simplifies the network connection viewing and helps patterning by clicking on the icon.

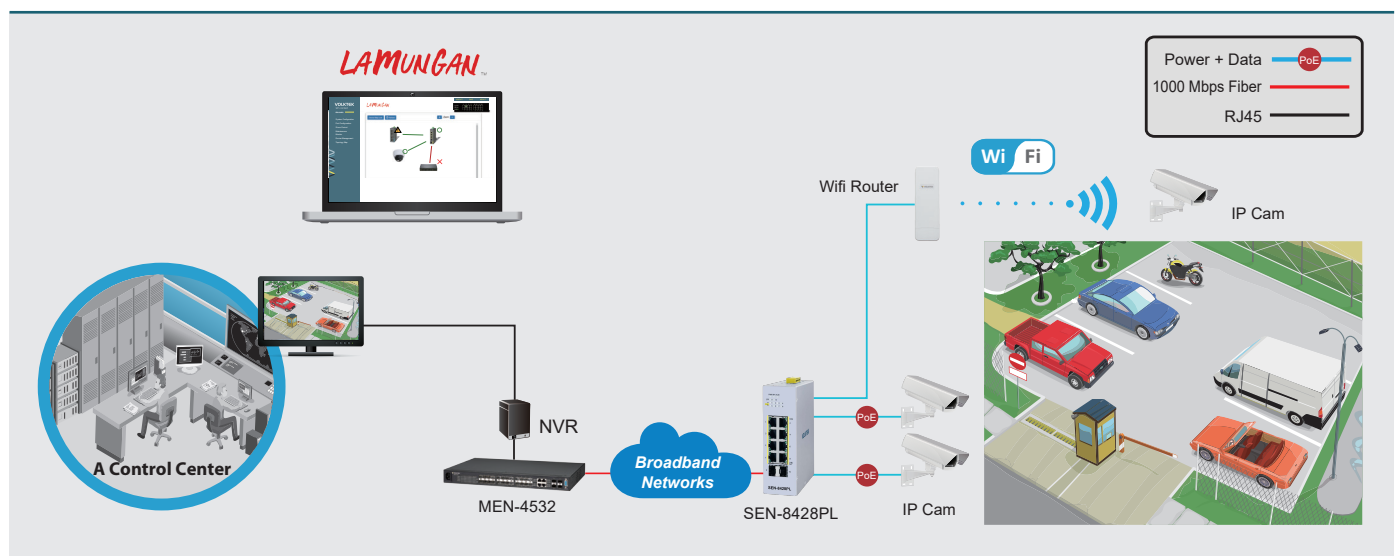
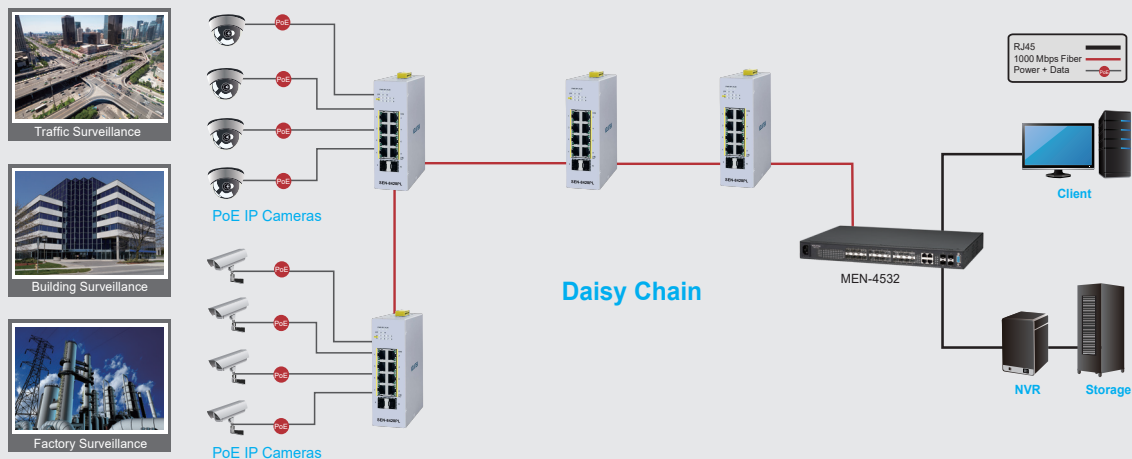


### Future-proof Fiber Connectivity with Dual 100FX/Gigabit SFP Slots

With two multirate SFP slots, the SEN-8428PL easily establishes fiber channel for gigabit Ethernet connectivity and allows to take advantage of fiber based daisy chain topology. The switch provides long distance, high-speed fiber connectivity while offering enhanced noise immunity and data security across deployed systems. The SEN-8428PL is a well-suited robust, cost-effective and future-proof solution for fiber based surveillance networks.

## Applications

The SEN-8428PL 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.



## 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 802.3      | 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 802.1AB    | LLDP  |
| IEEE 802.1D     | STP   |
| IEEE 802.1w     | RSTP  |
| IEEE 802.1p     | Class of Service  |
| IEEE 802.1Q     | VLAN tagging  |
| IEEE 802.1X     | Port Authentication   |
| Interface       |   |
| Ports           | 8 x 10/100/1000BASE-T (PoE RJ45)<br>2 x 100FX/GbE SFP   |
| DIP Switch      | Power voltage drop alarm setting (PWR & RPS),<br>Broadcast storm control setting (STORM),<br>Port-based QoS setting (QoS on P1 & P2),<br>Fiber port speed setting (100FX on P9 & P10)   |
| LED Panel       | PWR, RPS, ALM, SFP, PoE, 1000, LNK/ACT  |
| Features        |   |
| Performance     | Jumbo frame Size: 10KBytes<br>MAC Table Entries: 8K<br>Switch Fabric: 20Gbps  |
| Management      | CLI, Telnet, SSH, HTTP, HTTPS, SNMP v1/v2c,<br>SNMP v3, SNMP Trap, Management VLAN (MVLAN),<br>Firmware upgradable, Configuration Backup/Restore,<br>Syslog, SNTP, LLDP, DHCP Client, Port Mirroring<br>Server (service) control, Port Utilization,<br>Alarm Information, ModbusTCP, Power Down trap<br>Topology Map, Dashboard, Installation Wizard<br>Port Configuration (enable/disable,speed/duplex),<br>ONVIF, Port Statistic, System reboot from remote side<br>User Account with authority |
| Reliability     | STP/RSTP, ERPS v1/v2, Code redundancy   |
| VLAN            | 802.1Q VLAN, Port-based VLAN (Port Isolation)   |
| Traffic Control | 802.1p QoS, Flow Control, Traffic Monitor<br>(Abnormal Traffic Detection),<br>Storm Control, Port Isolation, Loop Detection<br>Storm alarm threshold per port   |
| Security        | ACL (Access control list), Port Security (MAC limit)<br>Port-based 802.1X, BPDU Guard<br>BPDU Filter, ROOT Guard, Trusted Managed Host  |
| PoE/PoE+        | PoE Scheduling, PD Alive Check, PoE Power on/off,<br>PoE Priority, Power budget control per system,<br>Power budget control per port, Power delay   |

| Power                      |   |
|----------------------------|---|
| Input Voltage              | Primary inputs: 48~57VDC<br>Redundant inputs: 48~57VDC  |
| Connection                 | Terminal Block  |
| Power Consumption          | System: 10W<br>PoE Power Budget: 240W   |
| Alarm Relay                | One relay output, 1A @ 24VDC  |
| Mechanical and Environment |   |
| Housing                    | Metal (IP40 Protection)   |
| Mounting                   | DIN-Rail  |
| Operating Temperature      | -10°C~60°C (14°F~140°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                     | 560 g (1.23 lb)   |
| Dimension (WxHxD)          | 50 x 160 x 120 mm (1.97 x 6.36 x 4.72 in)   |
| Certifications             |   |
| EMI                        | FCC Part 15 Subpart B Class A<br>EN 55032: class A<br>EN 55011: 2009 class A<br>EN 61000-6-4  |
| EMS                        | EN 55024<br>EN 61000-6-2<br>EN 61000-4-2 (ESD)<br>EN 61000-4-3 (RS)<br>EN 61000-4-4 (Burst)<br>EN 61000-4-5 (Surge)<br>EN 61000-4-6 (CS)<br>EN 61000-4-8 (PFMF) |
| Shock                      | IEC 60068-2-27  |
| Freefall                   | IEC 60068-2-32  |
| Vibration                  | IEC 60068-2-6   |
| Ordering Information       |   |
| SEN-8428PL                 | Lite Managed 8 x 10/100/1000 PoE+ &<br>2 x FX/GbE SFP Switch  |
| Optional Accessories       |   |
| Power Supply               | SDR-480P-48: 480W DIN-Rail 48V DC Industrial<br>Power Supply, -25°C~70°C (-13°F~158°F)  |
| GBM-104                    | 1000BASE-SX 1.25G, Multi-mode SFP, 500 m  |
| GBM-123TS                  | 1000BASE-LX, Bi-Di SFP TX:1310/RX:1550<br>Single Mode, 10 km, 0°C~70°C (32°F~158°F)   |
| GBM-123RS                  | 1000BASE-LX, Bi-Di SFP TX:1550/RX:1310<br>Single Mode, 10 km, 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

