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.















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.





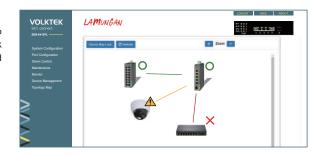
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Features Highlight

Introducing the LAMUNGAN

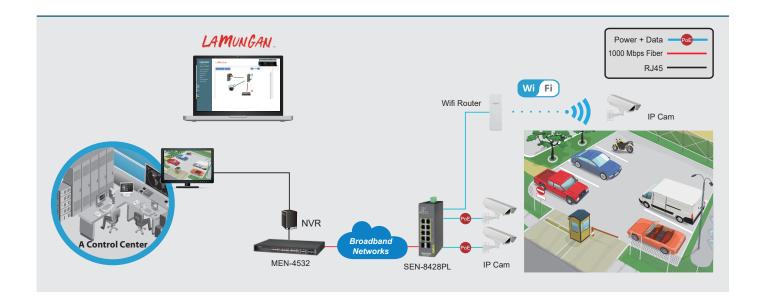
LAMUNGAN is Volktek's embedded Element Management System that allows users to view the topology map of connected devices and neighboring switches along with the link status. Its LLDP feature allows it to advertise its identities and capabilities on the wired Ethernet. This map like feature simplifies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



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Specifications

Standards	10D105 T
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	1 ort / diriontiodion
Interface	8 x 10/100/1000BASE-T (PoE RJ45)
Ports	2 x 100FX/GbE SFP
	Power voltage drop alarm setting (PWR & RPS),
DIP Switch	
	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	
	Jumbo frame Size: 10KBytes
Performance	MAC Table Entries: 8K
	MAC Table Entries: 8K Switch Fabric: 20Gbps
	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c,
	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN),
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Performance	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client, Port Mirroring
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Performance Management	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client, Port Mirroring Server (service) control, Port Utilization, Alarm Information, ModbusTCP, Power Down trap Topology Map, Dashboard, Installation Wizard Port Configuration (enable/disable,speed/duplex), ONVIF, Port Statistic, System reboot from remote side User Account with authority
Performance Management Reliability	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client, Port Mirroring Server (service) control, Port Utilization, Alarm Information, ModbusTCP, Power Down trap Topology Map, Dashboard, Installation Wizard Port Configuration (enable/disable,speed/duplex), ONVIF, Port Statistic, System reboot from remote side User Account with authority STP/RSTP, ERPS v1/v2, Code redundancy
Performance Management Reliability VLAN	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client, Port Mirroring Server (service) control, Port Utilization, Alarm Information, ModbusTCP, Power Down trap Topology Map, Dashboard, Installation Wizard Port Configuration (enable/disable,speed/duplex), ONVIF, Port Statistic, System reboot from remote side User Account with authority STP/RSTP, ERPS v1/v2, Code redundancy 802.1Q VLAN, Port-based VLAN (Port Isolation)
Performance Management Reliability	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client, Port Mirroring Server (service) control, Port Utilization, Alarm Information, ModbusTCP, Power Down trap Topology Map, Dashboard, Installation Wizard Port Configuration (enable/disable,speed/duplex), ONVIF, Port Statistic, System reboot from remote side User Account with authority STP/RSTP, ERPS v1/v2, Code redundancy 802.1Q VLAN, Port-based VLAN (Port Isolation) 802.1p QoS, Flow Control, Traffic Monitor
Performance Management Reliability VLAN	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client, Port Mirroring Server (service) control, Port Utilization, Alarm Information, ModbusTCP, Power Down trap Topology Map, Dashboard, Installation Wizard Port Configuration (enable/disable,speed/duplex), ONVIF, Port Statistic, System reboot from remote side User Account with authority STP/RSTP, ERPS v1/v2, Code redundancy 802.1Q VLAN, Port-based VLAN (Port Isolation) 802.1p QoS, Flow Control, Traffic Monitor (Abnormal Traffic Detection),
Performance Management Reliability VLAN	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client, Port Mirroring Server (service) control, Port Utilization, Alarm Information, ModbusTCP, Power Down trap Topology Map, Dashboard, Installation Wizard Port Configuration (enable/disable,speed/duplex), ONVIF, Port Statistic, System reboot from remote side User Account with authority STP/RSTP, ERPS v1/v2, Code redundancy 802.1Q VLAN, Port-based VLAN (Port Isolation) 802.1p QoS, Flow Control, Traffic Monitor (Abnormal Traffic Detection), Storm Control, Port Isolation, Loop Detection Storm alarm threshold per port
Management Reliability VLAN Traffic Control	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client, Port Mirroring Server (service) control, Port Utilization, Alarm Information, ModbusTCP, Power Down trap Topology Map, Dashboard, Installation Wizard Port Configuration (enable/disable,speed/duplex), ONVIF, Port Statistic, System reboot from remote side User Account with authority STP/RSTP, ERPS v1/v2, Code redundancy 802.1Q VLAN, Port-based VLAN (Port Isolation) 802.1p QoS, Flow Control, Traffic Monitor (Abnormal Traffic Detection), Storm Control, Port Isolation, Loop Detection Storm alarm threshold per port ACL (Access control list), Port Security (MAC limit)
Performance Management Reliability VLAN	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client, Port Mirroring Server (service) control, Port Utilization, Alarm Information, ModbusTCP, Power Down trap Topology Map, Dashboard, Installation Wizard Port Configuration (enable/disable,speed/duplex), ONVIF, Port Statistic, System reboot from remote side User Account with authority STP/RSTP, ERPS v1/v2, Code redundancy 802.1Q VLAN, Port-based VLAN (Port Isolation) 802.1p QoS, Flow Control, Traffic Monitor (Abnormal Traffic Detection), Storm Control, Port Isolation, Loop Detection Storm alarm threshold per port ACL (Access control list), Port Security (MAC limit) Port-based 802.1X, BPDU Guard
Management Reliability VLAN Traffic Control	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client, Port Mirroring Server (service) control, Port Utilization, Alarm Information, ModbusTCP, Power Down trap Topology Map, Dashboard, Installation Wizard Port Configuration (enable/disable,speed/duplex), ONVIF, Port Statistic, System reboot from remote side User Account with authority STP/RSTP, ERPS v1/v2, Code redundancy 802.1Q VLAN, Port-based VLAN (Port Isolation) 802.1p QoS, Flow Control, Traffic Monitor (Abnormal Traffic Detection), Storm Control, Port Isolation, Loop Detection Storm alarm threshold per port ACL (Access control list), Port Security (MAC limit) Port-based 802.1X, BPDU Guard BPDU Filter, ROOT Guard, Trusted Managed Host
Performance Management Reliability VLAN Traffic Control Security	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client, Port Mirroring Server (service) control, Port Utilization, Alarm Information, ModbusTCP, Power Down trap Topology Map, Dashboard, Installation Wizard Port Configuration (enable/disable,speed/duplex), ONVIF, Port Statistic, System reboot from remote side User Account with authority STP/RSTP, ERPS v1/v2, Code redundancy 802.1Q VLAN, Port-based VLAN (Port Isolation) 802.1p QoS, Flow Control, Traffic Monitor (Abnormal Traffic Detection), Storm Control, Port Isolation, Loop Detection Storm alarm threshold per port ACL (Access control list), Port Security (MAC limit) Port-based 802.1X, BPDU Guard BPDU Filter, ROOT Guard, Trusted Managed Host PoE Schedulng, PD Alive Check, PoE Power on/off,
Management Reliability VLAN Traffic Control	MAC Table Entries: 8K Switch Fabric: 20Gbps CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client, Port Mirroring Server (service) control, Port Utilization, Alarm Information, ModbusTCP, Power Down trap Topology Map, Dashboard, Installation Wizard Port Configuration (enable/disable,speed/duplex), ONVIF, Port Statistic, System reboot from remote side User Account with authority STP/RSTP, ERPS v1/v2, Code redundancy 802.1Q VLAN, Port-based VLAN (Port Isolation) 802.1p QoS, Flow Control, Traffic Monitor (Abnormal Traffic Detection), Storm Control, Port Isolation, Loop Detection Storm alarm threshold per port ACL (Access control list), Port Security (MAC limit) Port-based 802.1X, BPDU Guard BPDU Filter, ROOT Guard, Trusted Managed Host

Power	
POWEI	Primary inputs: 48~57VDC
Input Voltage Connection	Redundant inputs: 48~57VDC
	Terminal Block
Connection	System: 10W
Power Consumption	PoE Power Budget: 240W
Alarm Relay	One relay output, 1A @ 24VDC
Mechanical and Environment	
Housing	Metal (IP30 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	970 g (2.21 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
	EN 55032: 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)
Lino	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	
SEN-8428PL	Lite Managed 8 x 10/100/1000 PoE+ &
	2 x FX/GbE SFP Switch
Optional Accessorie	
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, 500 m
GBM-123TS	1000BASE-LX, Bi-Di SFP TX:1310/RX:1550
GDIVI-12313	Single Mode, 10 km, 0°C~70°C (32°F~158°F)
GBM-123RS	1000BASE-LX, Bi-Di SFP TX:1550/RX:1310
	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

