VOLKTEK

IEN-8428L
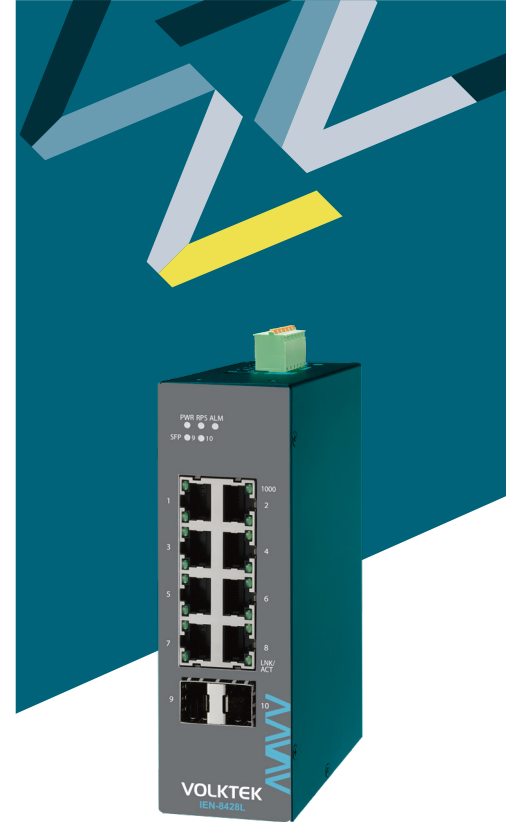
Lite Managed Gigabit Industrial Switch

8 x10/100/1000 RJ45 & 2 x FX/GbE SFP

Description

The IEN-8428L is a Lite Managed Industrial Switch specifically designed to suit your heavy industrial environments and contains all necessary standard features to deploy in automation systems. Engineered with hardened components and enclosed in a rugged IP30 case, the IEN-8428L can operate in wide temperatures from -10OC to 60OC and has excellent tolerance capability to high vibration and shock.

Despite the fact that the IEN-8428L is perfectly designed to operate in extreme industrial conditions; the switch is equipped with a variety of management functions that let you configure communication parameters as you desire and monitor the network behavior in number of different simple ways. In addition, the switch is built with dual redundant power inputs to ensure reliability and maximize network up time. Other integrated features of the switch such as Auto-negotiation, Rate limitation and QoS optimizes your network performance and provide a secure network, offering a cost-effective solution in a small but powerful package.

RoHS C€ FC

-10°C 60°C | IP Code 30 | Surge Protection | ESD Protection | Auto Negotiation | Redundant Power | GREEN Solutions | Wall Mount | DIN Rail
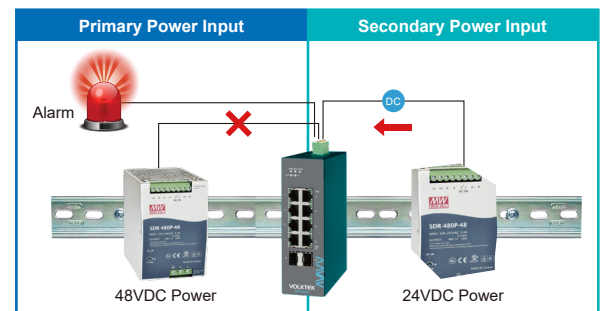
Features Highlight

Robust Performance and Protection

Well-protected in an IP30 casing, the switch provides high level of immunity against EMI and EMS found in industrial environments. Along with those, the IEN-8428L is built with various protection features such as ESD Protection, Surge Protection, Over Current Protection, Reverse Polarity Protection and Short Circuit Protection to ensure continuous operation of mission-critical applications even in unstable power conditions.

Cold -10°C   Hot 60°C

Redundant Power Input

When taking the failure impact of mission-critical applications into consideration, the IEN-8428L development uses a standard of industrial terminal block along with wide-range redundant power inputs extending from 12 up to 60VDC. The redundant power provides continuous service even if the primary power fails, which results in a reliable and consistent network. In addition to this, the switch is also equipped with an alarm feature to notify the occurrence of power failure. This solution provides you with a quicker respond time and faster troubleshooting.

Primary Power Input | Secondary Power Input
Alarm
48VDC Power | 24VDC Power

Eco-friendly Green Ethernet Design

To address the concerns of increasing power consumption, IEN-8428L 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.

GREEN Solutions

Auto Negotiable Link Speed Control

To establish a fair and efficient communication among the devices which is having different link speeds, IEN-8428L provides an auto negotiation feature which balances the data transmission speed between the switch and the connec ted PLCs.
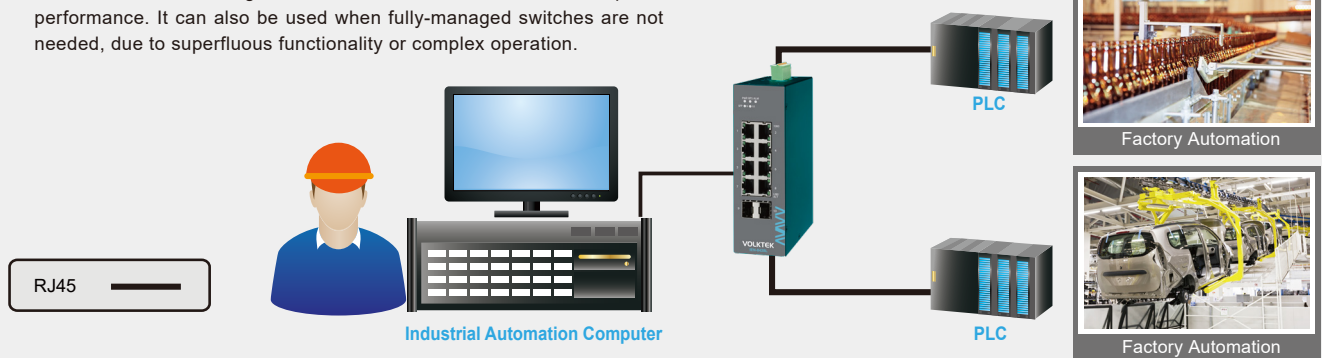
VOLKTEK

Features Highlight

Strong Protection Against Electrical Threats

IEN-8428L is incorporated with enhanced Reverse Polarity Protection function to provide safety against wrong combinations of positive and negative poles, which prevents huge internal circuitry damage. The Over Current Protection is designed with a secured fuse component to safeguard the device during sudden increase of current flow. In addition, a Power Isolation concept is used to separate the transmitted data from grounded noise enabling steady and noise free transmission.
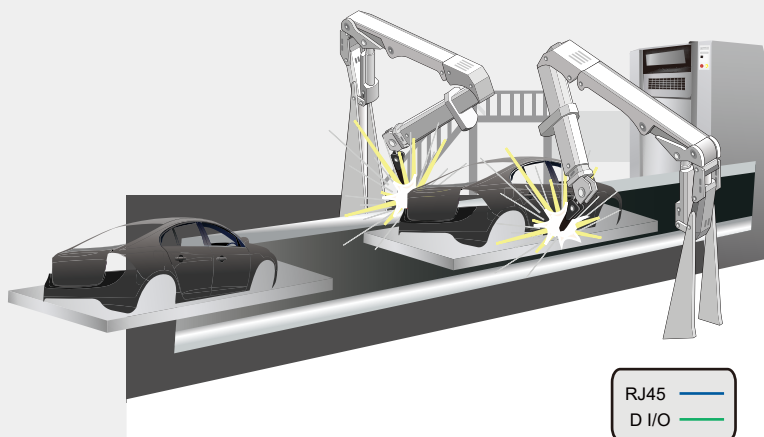
Applications

In designing the IEN-8428L, the absolute necessary management functions were integrated to enable the configuration and monitoring of the switches. This allows the IEN-8428L switches to bring added value to areas where unmanaged switches cannot deliver the required performance. It can also be used when fully-managed switches are not needed, due to superfluous functionality or complex operation.

RJ45

Industrial Automation Computer

PLC

PLC

Factory Automation

Factory Automation

Factory Automation

▶ **Relay Output Alarm for Power Failure**

The IEN-8428L is built with relay contact outputs that trigger alarms to notify network engineers in the event of power failure, and enables them to quickly respond and resolve high priority issues.

RJ45
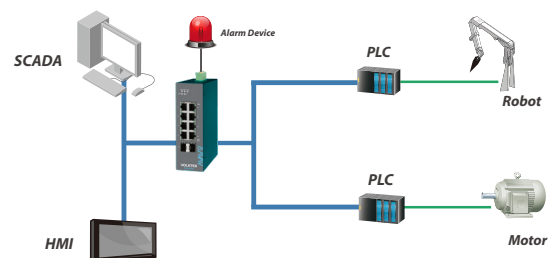D I/O

SCADA

Alarm Device

PLC

Robot

PLC

Motor

HMI

▶ **Redundant Power input**

The IEN-8428L has dual power inputs to provide a redundant system against power supply disruptions. In case of one power source failure, the other acts as a backup to remain continuous network power for critical industrial applications.

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 802.3x	Flow Control
IEEE 802.1ab	LLDP
IEEE 802.3az	Energy Efficient Ethernet (EEE)

Interface	
Ports	8x10/100/1000BASE-T (RJ45)
	2-Slot 100FX/Gigabit SFP
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, 1000, LNK/ACT

Features	
Performance	Jumbo frame Size: 10KBytes
	MAC Table Entries: 8K
	Switch Fabric: 20Gbps
	L2 Forwarding Rate: 14.8Mpps
Management	Web GUI, SNMP v1/v2c, Firmware Upgradable, Configuration Backup/Restore, SNTP, LLDP, DHCP Client, Mirroring, ONVIF Discovery
Traffic Control	Port Priority, Flow Control, Storm Control, Loop Detection

Power	
Input Voltage	Primary inputs：12~60VDC
	Redundant inputs：12~60VDC
Power Consumption	System：13W
Alarm Relay	One relay output, 1 A @ 24V DC

Note :

* The SFP communication distance upon the request.
* Industrial SFP with wide operating temperature from -40°C~85°C is available upon request.
* Specifications subject to change without notice.

Mechanical and Environment	
Housing	Aluminum (IP30 Protection)
Mounting	DIN-Rail
Operating Temperature	-10°C~60°C
Storage Temperature	-40°C~85°C
Operating Humidity	10 to 95% RH (non-condensing)
Storage Humidity	5 to 95% RH (non-condensing)
Weight	540g
Dimension (WxHxD)	50x160x120mm (1.97x6.3x4.72inch)

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	
IEN-8428L	Lite Managed 8 x 10/100/1000 RJ45 & 2 x FX/GbE SFP Switch

Optional Accessories	
Power Supply	SDR-480P-48: 480W DIN-Rail 48V DC Industrial Power Supply, -25°C~70°C
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

DIN-Rail Bracket