

# VOLKTEK

## IEN-8424L

Lite Managed Gigabit Industrial Switch  
4 x 10/100/1000 RJ45 & 2 x FX/GbE SFP

### Description

The IEN-8424L 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-8424L can operate in wide temperatures from -10°C to 60°C and has excellent tolerance capability to high vibration and shock.

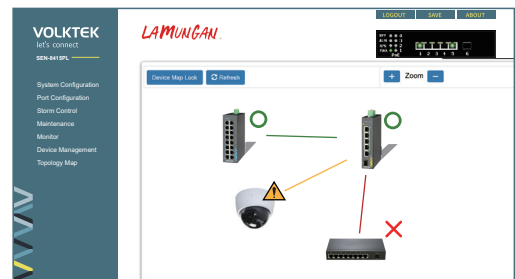
Despite the fact that the IEN-8424L is perfectly designed to operate in extreme industrial conditions; the switch is equipped with a variety of management functions that let you configure communication parameters as you desire and monitor the network behavior in number of different simple ways. In addition, 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.



### Features Highlight

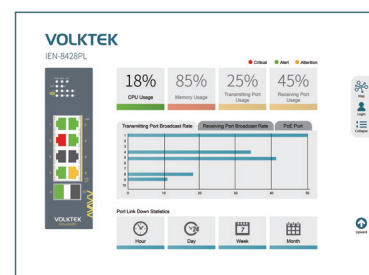
#### Introducing the LAMUNGAN

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.



#### Dashboard

The dashboard is an intelligent system provides apparent views of real-time switch parameters in an engaging, easy-view format for the end-users. Dashboard's at-a-glance designs with the color scheme enable the users for easy understanding and troubleshooting within the device and connected network.



#### Wizard

The wizard is a smart assistant who provides the switch setup interfaces for the users. It allows users to go through a series of well-defined steps with easily manageable dialog boxes. It minimizes the complex setup procedures and easier to perform for an unfamiliar user.

#### 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-8424L 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.



## Features Highlight

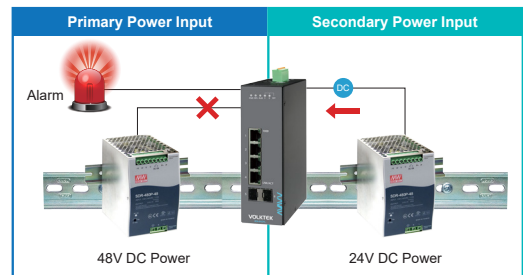
### Strong Protection Against Electrical Threats

IEN-8424L 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.



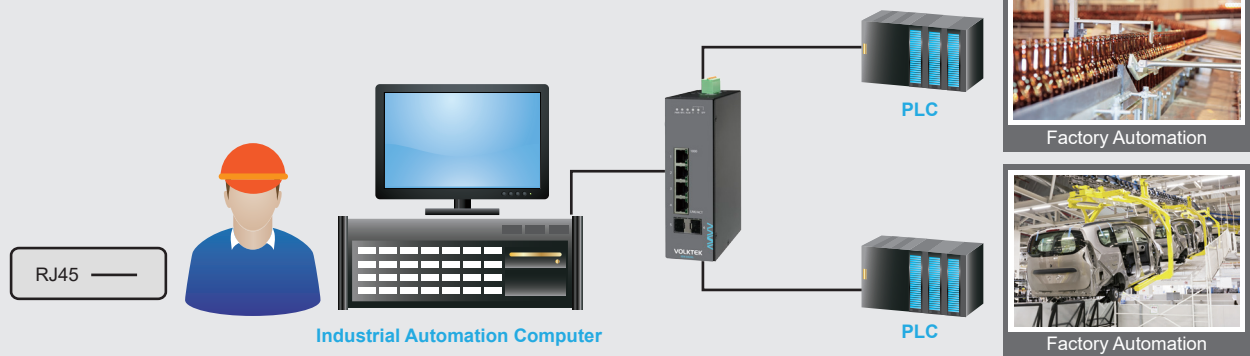
### Redundant Power Input

When taking the failure impact of mission-critical applications into consideration, the IEN-8424L development uses a standard of industrial terminal block along with wide-range redundant power inputs extending from 12 up to 60V DC. 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.

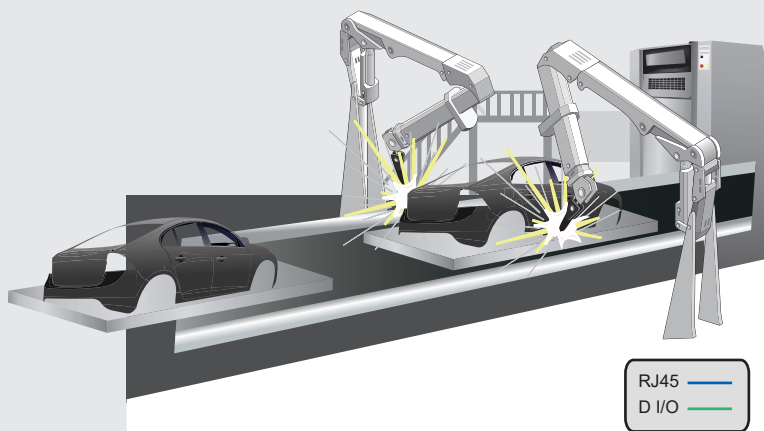


## Applications

In designing the IEN-8424L, the absolute necessary management functions were integrated to enable the configuration and monitoring of the switches. This allows the IEN-8424L 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.



## Factory Automation

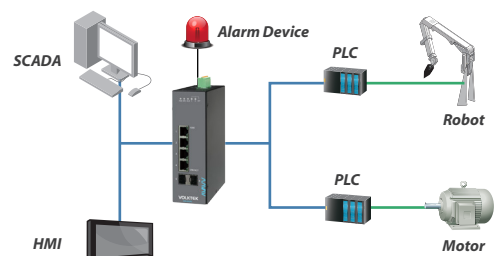


### ► Redundant Power input

The IEN-8424L 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.

### ► Relay Output Alarm for Power Failure

The IEN-8424L 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.



## 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 802.1ab	LLDP
IEEE 802.1az	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	4 x 10/100/1000BASE-T (RJ45) 2 x 100FX/GbE SFP
DIP Switch	Primary/Redundant Power Voltage Drop Alarm setting
LED Panel	PWR, RPS, ALM, SFP, 1000, LNK/ACT
Features	
Performance	Jumbo frame Size: 10KBytes MAC Table Entries: 8K Switch Fabric: 12Gbps
Management	CLI, Telnet, SSH, HTTP, HTTPS, SNMP v1/v2c, SNMP v3, SNMP Trap, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, STP, 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
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 (Abnormal Traffic Detection), Storm Control, Port Isolation, Loop Detection Storm alarm threshold per port
Security	ACL (Access control list), Port Security (MAC limit) Port-based 802.1X, BPDU Guard BPDU Filter, ROOT Guard, Trusted Managed Host
Power	
Input Voltage	Primary inputs: 20~60VDC Redundant inputs: 20~60VDC
Connection	Terminal Block
Power Consumption	System: 10W
Alarm Relay	One relay output, 1 A @ 24V DC
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	696g (1.53 lbs)
Dimension (WxHxD)	50 x 160 x 120 mm ( 1.97 x 6.3 x 4.72 in)
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)
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Ordering Information	
IE8-8424L	Lite Managed 4 x 10/100/1000 RJ45 & 2 x FX/GbE SFP Switch
Optional Accessories	
Power Supply	SDR-120-48: 120W 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 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)

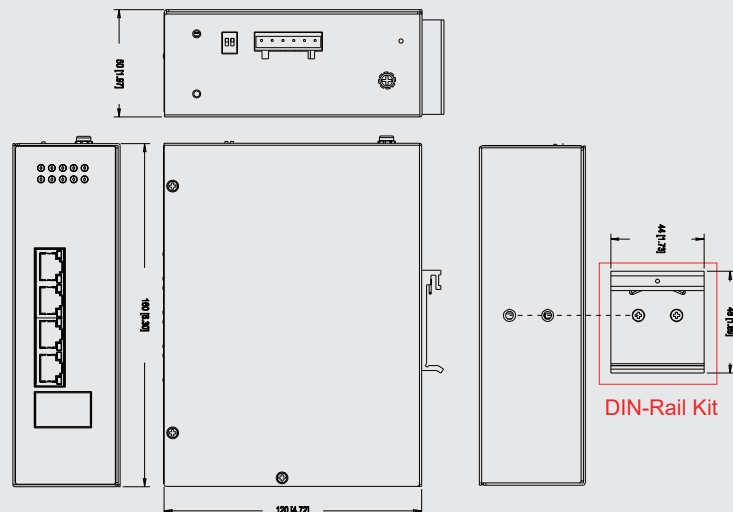
**Note :**

\* 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



DIN-Rail Kit