INDUSTRIAL PoE SWITCH

Lite Managed Industrial PoE Switch

LINK AMERICAN STANDARD

PS-3140

Scope of Application

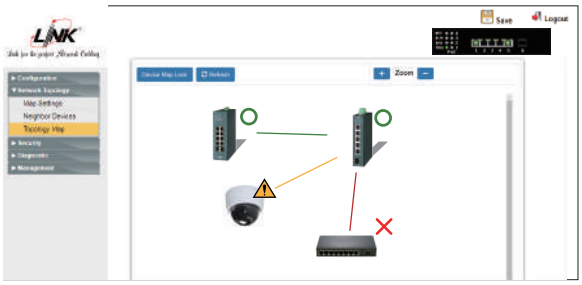
The PS-3140 is a Lite Managed Industrial Switch specifically designed to suit your heavy industrial environments or outdoor installation in cabinet and contains all necessary standard features to deploy in automation systems. PS-3140 is working on OSI Layer 2 and engineered with hardened components and enclosed in a rugged IP30 case, the PS-3140 can operate in wide temperatures from -40°C to 75°C and has excellent tolerance capability to high vibration and shock.

Despite the fact that the PS-3140 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

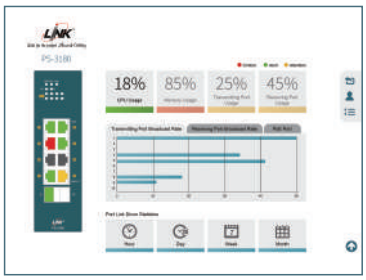
Introducing the Topology Map

Topology Map 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.



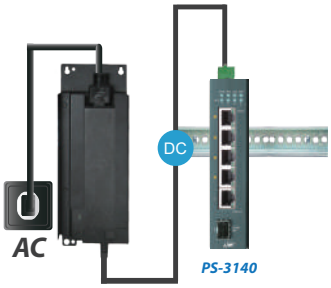
Robust Switch Performance

With a aluminum case, surge and ESD protection, the PS-3140 provides a high level of immunity against electromagnetic interference and heavy electrical surges, thus facilitating easy deployment in demanding environments. In addition, the PS-3140 offers high performance switch architecture with five 10/100/1000Base-T ports and one 100Base-FX/1000Base-X Ethernet SFP slot to meet the requirements of high-bandwidth access in wide operating temperatures.

Features Highlight

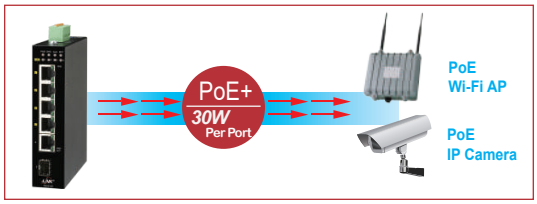
AC Power Adapter (AC to DC) & Terminal Block

The PS-3140 is ideal solution to prevent the failure of single power circuit, in which provides you options to facilitate the 802.3at High Power PoE usage. Either “AC Power Adapter” to convert AC to DC for board operation in an easily and firmly installation with hardened connection to the switch unit OR “Terminal Block” which supports primary (PWR) and standby (RPS) can be used to powering PoE network. Categorized by its compact design, AC Power Adapter can easily fit in smaller infrastructures and is extremely simple in installation. Saving your time and space, this adapter can be easily installed next to switch unit in surveillance applications that have little space available. The second optional power supply through “Terminal Block” provides a low-cost, simple solution to the problem of an inadvertent failure of the internal power-supply, which can result in the shutdown of switching device, the PoE devices attached to its ports, or an entire network.



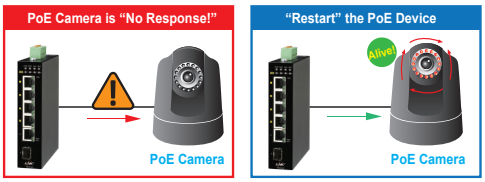
High-Power Budget for PoE Network Devices

To fulfill the growing demand of high-bandwidth, high-power PoE for network applications and eliminating the cost of electrical cabling and circuits, the PS-3140 is designed under IEEE 802.3at standard PoE+. With 120W 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 PS-3140 a very convenient solution for applications far away from power outlets satisfying PoE extension applications in much longer distances.



Intelligent PoE Alive Checking

The PS-3140 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.



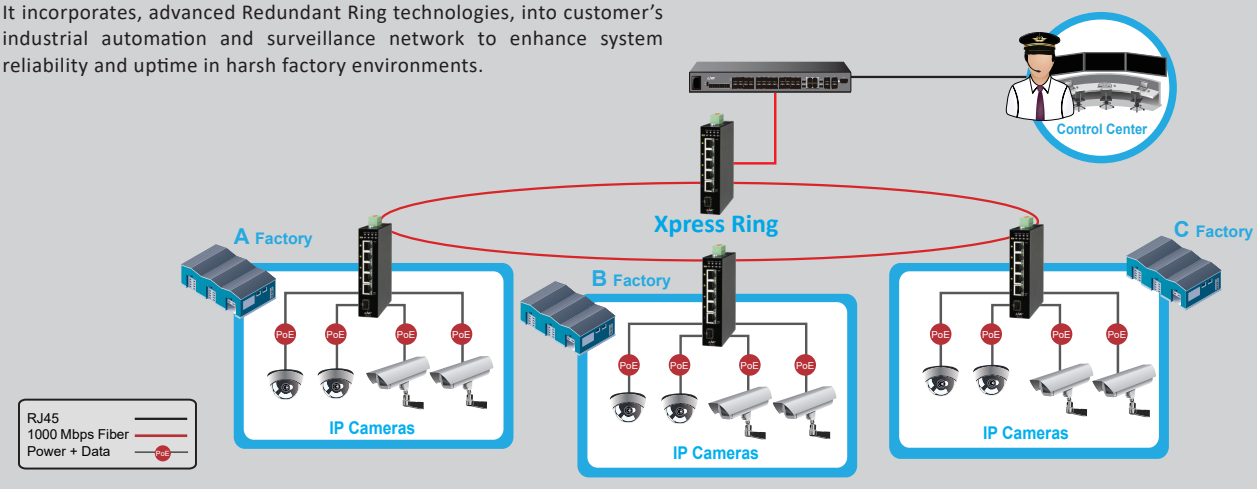
Simplied Installation w/ Compact Size

The PS-3140 provides varied choice of deployment locations even in small space, harsh environments, quick and easy installtion way by its compact size. Every PS-3140 is equipped with auto MDI/MDI-X and auto-negotiation on all ports for simple connection to other switches and hubs. When a compliant device is attached, the power supplied will automatically detect and classify to fit the device. With diagnostic LEDs panel, the PS-3140 allows you to know switch status and simplify troubleshooting.

Applications

Redundant Ring

It incorporates, advanced Redundant Ring technologies, into customer’s industrial automation and surveillance network to enhance system reliability and uptime in harsh factory environments.



Technical Data

Standards	
IEEE 802.3	10Base-T
IEEE 802.3u	100Base-TX, 100Base-FX
IEEE 802.3ab	1000Base-T
IEEE 802.3z	1000Base-SX/LX
IEEE 802.3x	Flow Control
IEEE 802.3af	PoE
IEEE 802.3at	PoE+
IEEE 802.3az	Energy Efficient Ethernet (EEE)
IEEE 802.1ab	LLDP
IEEE 802.1Q	VLAN Tagging
IEEE 802.1d	Spanning Tree Protocol (STP)
IEEE 802.1w	Rapid Spanning Tree Protocol (RSTP)
IEEE 802.1p	QoS
IEEE 802.1x	Port-based authentication
Interface	
Ports	4 x 10/100/1000Base-T, RJ45 port with PoE/PoE+ 1 x 10/100/1000Base-T, RJ45 port 1 x 100Base-FX/1000Base-X, SFP port
DIP Switch	ALM: PWR, RPS
LED Panel	PWR, RPS, ALM, SFP, PoE, 1000, LNK/ACT
Performance	
Switching Capacity	12Gbps
Forwarding Rate	8.93Mpps
Packet Buffer Size	4.1Mbit
MAC Table Size	8K
Jumbo Frame Size	10KBytes
BER	<1E-12
Features	
Management	CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, Syslog, Management VLAN, SNTP, Configuration Backup/Restore, DHCP Client, Port Mirroring, Firmware upgradable, LLDP Server (service) control, Port Utilization, IPv4 Client Alarm Information, ModbusTCP, Power Down trap Topology Map, Dashboard, Installation Wizard Port Configuration (enable/disable, speed/duplex), ONVIF, Port Statistic, User Account with authority System reboot from remote side, Web GUI
Reliability	STP/RSTP ERPS v1/v2, Code redundancy
VLAN	4094 VLAN IDs available Port-based VLAN, Port Isolation
Traffic Control	QoS, Flow Control, IGMP v1/v2/v3 Snooping, 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
PoE/PoE+	PoE Scheduling, PD Alive Check, PoE Power on/off, PoE Priority, Power budget control per system, Power budget control per port, Power delay

Power		
Input Voltage		Primary: 48V to 57V DC Redundant: 48V to 57V DC
Power Connection		4-pin DC-Jack (48V DC)(Primary Power Input) 6-pin Terminal block (Primary/Redundant Input)
Input Polarity Protection		Present
Voltage Drop Alarm		Primary/Redundant Power Input
Alarm Relay		One relay output with current carrying capacity of 1A @ 24V DC
Power Consumption		System: 10W PoE Power Budget: 120W
ESD Protection		8KV, 15KV (contact/air)
Surge Protection		6KV
Mechanical and Environment		
Housing		Metal (IP30 Protection)
Mounting		DIN-Rail
Operating Temperature		-40°C to 75°C
Storage Temperature		-40°C to 85°C
Operating Humidity		5% to 95% RH (non-condensing)
Storage Humidity		5% to 95% RH (non-condensing)
Weight		290g
Dimension (WxHxD)		31 x 136 x 109.5 mm
Certifications		
Safety		UL/IEC/EN 60950-1
FCC		Part 15 Subpart B Class A
CE	EMI	EN 55011 EN 55032 EN 61000-6-4
	EMS	EN 55024 EN 61000-6-2 IEC/EN 61000-4-2 (ESD) IEC/EN 61000-4-3 (RS) IEC/EN 61000-4-4 (Burst) IEC/EN 61000-4-5 (Surge) IEC/EN 61000-4-6 (CS) IEC/EN 61000-4-8 (PFMF)
Shock		IEC 60068-2-27
Freefall		IEC 60068-2-32
Vibration		IEC 60068-2-6
Ordering Information		
PS-3140		4-Port Lite Managed GIGABIT PoE SWITCH 4 GE (PoE) + 1 RJ (GE) + 1 SFP (GE)
Power Adapter (Included)		90W, 48V, Industrial Grade AC Power Adapter (-30°C to 60°C for 220V AC input) (P/N: PS-9001)

Note :

** The SFP communication distance upon the request (support 550m to 120km).*

** Specifications subject to change without notice.*

Drawing