PS-1040T

Unmanaged Industrial PoE+ Switch

4-Port 10/100/1000Base-T PoE/PoE+ with 1-Port GE + 1-Port Gigabit SFP Uplink

Description

The PS-1040T is a Unmanaged Hardened PoE+ Ethernet Switch perfectly suited in harsh environments and an ideal solution to deploy in surveillance systems. The switch is working on OSI Layer 2 and designed to meet the requirements of both power and data transmission over single Ethernet cable to PoE appliances and devices without the need for power outlets, eliminating additional cost of electrical cabling and circuits.

The switch's rugged case and hardened components withstand high degree of vibration, shock and wide operating temperatures from -40°C to 75°C. Switch features 5-port 10/100/1000Base-T and 1-port Gigabit SFP to satisfy new and evolving network demands in longer distances via its fiber port. With 4 IEEE802.3af/at compliant ports, each of them allows to supply up to 30W in controllable ways to satisfy the growing demand of high power consuming network devices such as WLAN AP, VoIP phones and IP surveillance cameras, and other powered devices in long distances up to 100 meters with Cat.5e cables or above.

RoHS CE FC

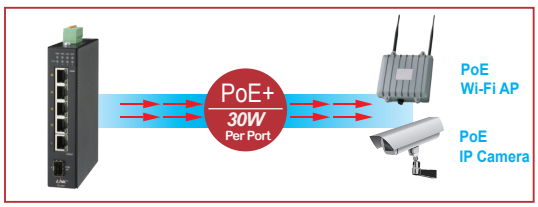
Features Highlight

Robust Switch Performance

With a hardened metal case, surge and ESD protection, the PS-1040T provides a high level of immunity against electromagnetic interference and heavy electrical surges, thus facilitating easy deployment in demanding environments. In addition, the PS-1040T offers high performance switch architecture with five 10/100/1000Base-T ports and one Gigabit Ethernet SFP port to meet the requirements of high-bandwidth access in wide operating temperatures.

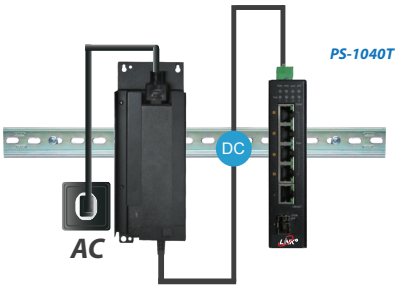
High-Power Budget for PoE Network Devices

To reduce the required time and cost of installing additional electrical sources, the PS-1040T implements PoE technology. The switch supplies power over the same cable that is used to carry network traffic and delivers a high power budget of 120W to suit various power requirements. Using SNMP and Web interface, the PoE functions on each port can be enabled and disabled to save power and energy.



DIN Rail to Power Adapter (AC to DC) & Terminal Block

The PS-1040T 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 "DIN-Rail 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) 48VDC and standby (RPS) 48VDC can be used to powering PoE network. Categorized by its compact design, DIN-Rail Power Adapter can easily fit in smaller infrastructures and is extremely simple in installation. Saving your time and space, this adapter can be easily mounted 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.

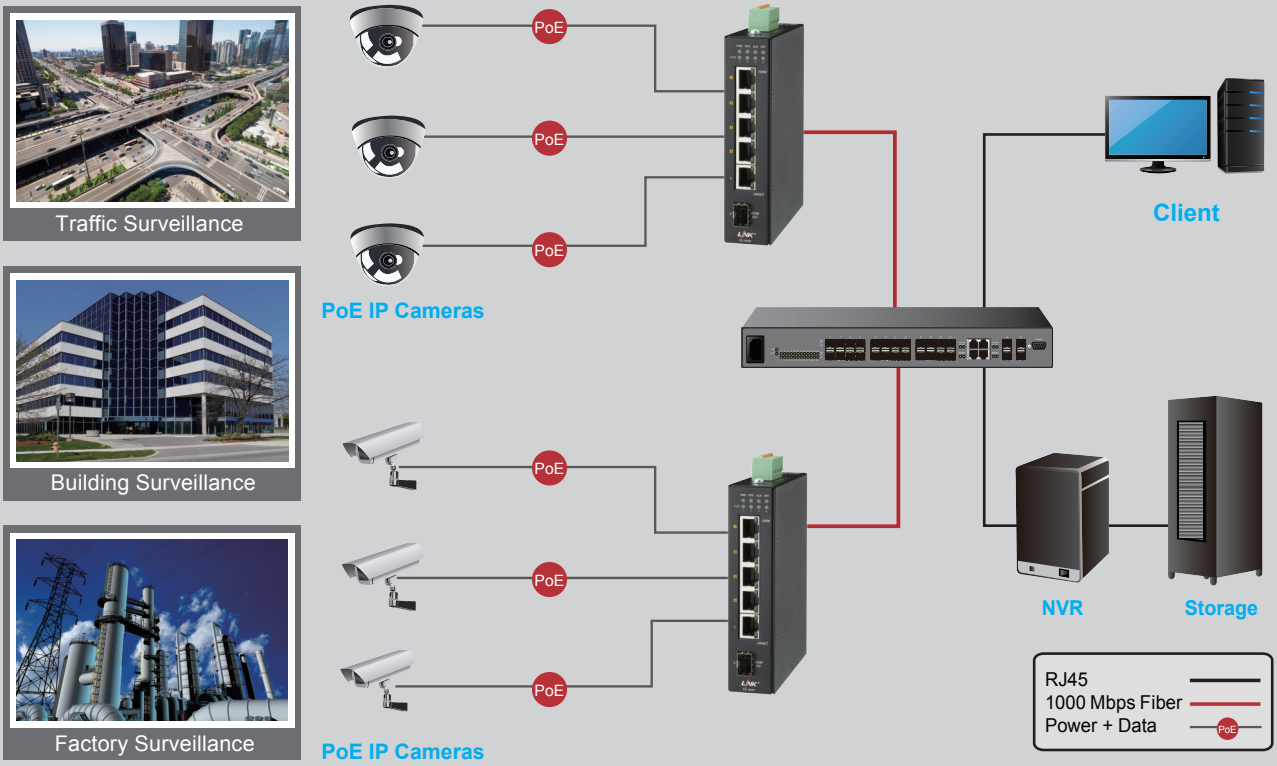


Simplified Installation w/ Compact Size

The PS-1040T provides varied choice of deployment locations even in small space, harsh environments, quick and easy installation way by its compact size and no configuration required. Every PS-1040T is equipped with auto MDI/MDI-X 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-1040T allows you to know switch status and simplify troubleshooting.

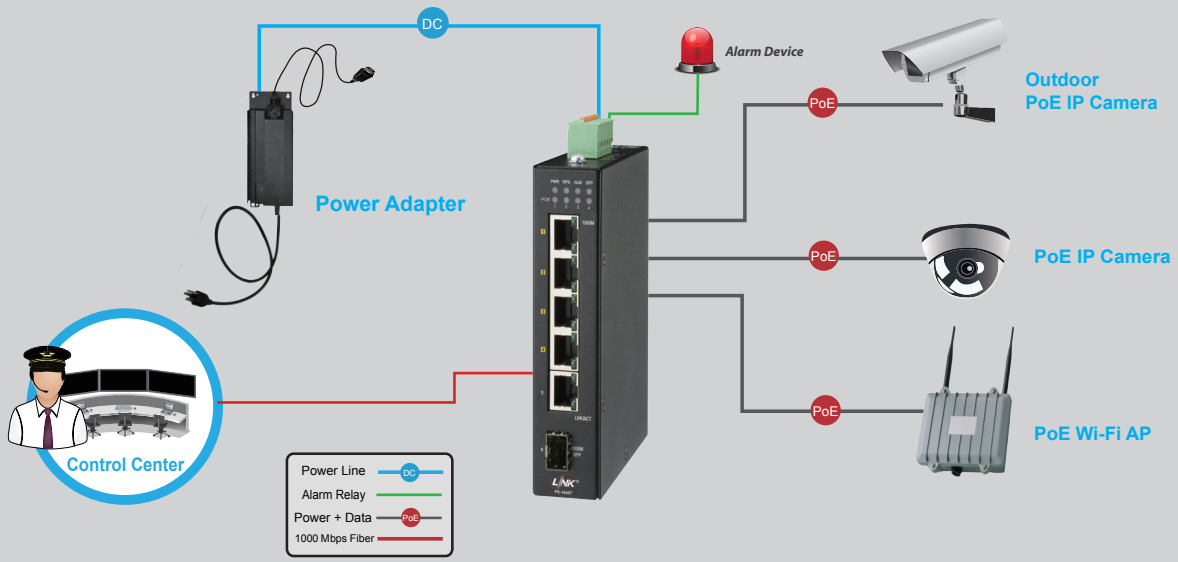
Surveillance Applications

The PS-1040T combines high-power PoE+, robust performance for surveillance systems in harsh environments. With its compact 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.



Applications

The PS-1040T is compatible with 10/100/1000Mbps through RJ45 transceivers to guarantee a strong, stable connection of Ethernet, Fast Ethernet or Gigabit Ethernet, providing flexible deployment options to satisfy industrial networking requirements



Specifications

Standards	
IEEE 802.3	10Base-T
IEEE 802.3u	100Base-TX
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
Performance	
Throughput	14,880 pps to 10 Mbps ports 148,800 pps to 100 Mbps ports 1,488,000 pps to 1000 Mbps ports
Switch fabric	12Gbps
Packet buffer size	4.1Mbit
MAC table size	8K
Static MAC address	256
Jumbo Frame size	10KBytes
MTBF	435,903 hrs.
BER	<1E-12
Power	
Input Voltage	Primary: 48V (48~57V DC) Redundant: 48V (48~57V DC)
Connection	4-pin DC-Jack (Primary Power Input) 6-pin Terminal block (Primary/Redundant Power Input)
Power Input Polarity Protection	Present
Power Voltage Drop Alarm	Primary/Redundant Power Input
Alarm Relay	One relay output with current carrying capacity of 1 A @ 24V DC
Power Consumption	System：10W PoE Power Budget：90W
ESD Protection	8KV, 15KV (contact/air)
Surge Protection	6KV
PoE+ Functions	
PoE+ Functions	Up to 4 IEEE 802.3at powered devices Supports PoE Power up to 30W for each PoE port Auto detect powered device (PD) Remote Power Feeding up to 100m
Interface	
Ports	1x1000Base-X, SFP port 1x10/100/1000Base-T, RJ45 port 4x10/100/1000Base-T PoE/PoE+, RJ45 port

Mechanical and Environment	
Housing	Metal Case (IP30 protection)
Mounting Kit	DIN-Rail, Wall Mount (Optional)
Operating Temperature	-40°C~75°C
Storage Temperature	-40°C~85°C
Operating Humidity	10 to 95% RH (non-condensing)
Storage Humidity	5 to 95% RH (non-condensing)
Weight	515g
Dimension (WxHxD)	31 x 136 x 105 mm
DIP Switch	Primary/Redundant Power Voltage Drop Alarm setting
LED Panel	PWR, RPS, ALM, SFP, PoE, 1000M, LNK/ACT

Standards and Certifications		
FCC	Part 15 subpart B	Class A
CE	EMI	EN55011 EN55022 class A 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)

Approval & Test	
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

Ordering Information	
PS-1040T	Unmanaged Industrial PoE+ Switch 4x10/100/1000Base-T PoE/PoE+, 1x10/100/1000Base-T and 1x1G SFP port
PS-1041M	With 1000Base-SX 1.25G, Multi-mode SFP, 550m
PS-1042M	With 1000Base-SX 1.25G, Multi-mode SFP, 2km
PS-1044S	With 1000Base-LX 1.25G, Single-mode SFP, 20km

Optional Accessories	
Power Adapter	90W, 52V, Industrial Grade Power Adapter (-30°C~60°C for 110V AC input / -30°C~70°C for 220V AC input)

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

Dimension