

# PS-1020

## Unmanaged Industrial PoE+ Media Converter

2-Port 10/100/1000Base-T PoE/PoE+ and 1-Port Gigabit SFP



### Description

The PS-1020 Unmanaged Industrial PoE+ Media Converter is specifically engineered to offer an affordable solution for outdoor surveillance systems. Built to withstand operating temperature from  $-40^{\circ}\text{C}$  to  $75^{\circ}\text{C}$ , the media converter can operate consistently even in harsh industrial environments. The PS-1020 features intelligent functions like Auto MDI/MDIX, LFS (Link Fault Signalling), LLB (Line Loopback), LEDs, DIP switches etc. to provide easy plug-and-play, continuous monitoring thereby minimizing downtime for mission-critical networks.

Featuring two 10/100/1000Mbps PoE+ copper ports, the PS-1020 media converter provides power up to 30W per port to IEEE802.3af/at compliant powered devices such as IP cameras, wireless access points and access control devices. Equipped with one multi-rate 100/1000Mbps SFP port, the media converter offers fiber advantages of secure data transmissions over long distances to mission-critical networks. PS-1020 provides maximum bandwidth flexibility and extended connectivity for workgroups that are ready to expand and migrate from existing fast Ethernet network to gigabit network.

**RoHS** **CE** **FC**

### Features Highlight



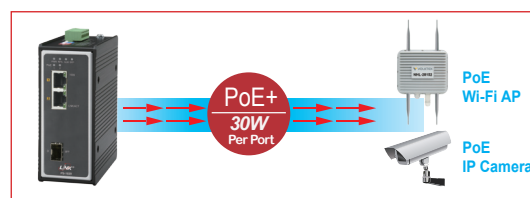
### Robust Performance

With an industrial aluminum housing case, IP30, surge and ESD protection, the PS-1020 provides a high level of immunity against electromagnetic interference and heavy electrical surges, thus facilitating easy deployment in demanding environments. In addition, the PS-1020 offers high performance switch architecture with two 10/100/1000Base-T PoE+ ports and one 100Base-FX/1000Base-X SFP port to meet the requirements of high-bandwidth access in extreme operating temperatures.



### High-Power Budget for PoE Network Devices

The PS-1020 media converter is capable of delivering power up to 30W per port to both IEEE802.3af PoE and IEEE802.3at PoE+ compliant powered devices. Thereby, powered devices located in both indoor and remote outdoor locations can be powered without installing additional power outlets or cabling significantly reducing your CAPEX.

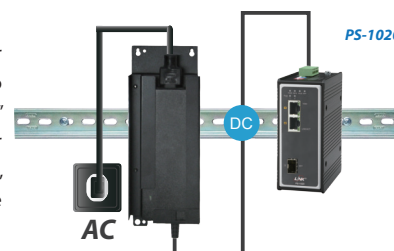


### Fault-tolerant and User-friendly Monitoring

Network administrators can now easily monitor and troubleshoot issues associated with device functionality and link activity using the advanced features of PS-1020. LFS (Link Fault Signalling) enables you to easily detect optical signal strengths and faulty links on both copper and fiber ports. And LLB (Line loop back) allows you to remotely isolate and localize network problems, thereby significantly minimizing network downtime. In addition, the LEDs on the device convey essential diagnostic and status information of device power, link activity on ports etc. allowing you to easily monitor without having to get into tight spaces.

### DIN-Rail-mounted Power Adapter (AC to DC) & 6-pin Terminal Block

The PS-1020 is an ideal solution to prevent the failure of single power circuit, in which provides you power redundant options to facilitate the high power PoE+ usage. Either "DIN-Rail Power Adapter" to convert AC to DC for board operation in an easy and firm installation with hardened connection or "6-pin Terminal Block" which supports primary and secondary power input. Categorized by its compact design, DIN-Rail Power Adapter can easily fit in smaller infrastructures and is extremely simple to install. Saving you time and space, this adapter can be easily DIN-Rail-mounted next to PS-1020 in surveillance applications that have little space available.

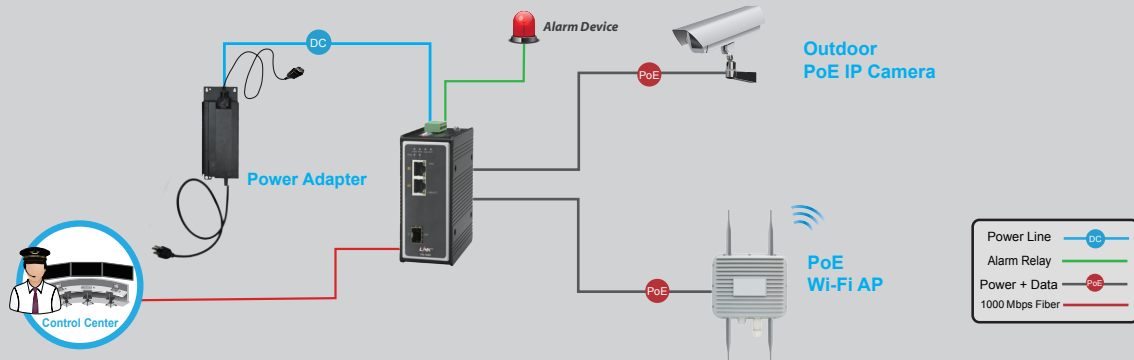


### Easy Plug-and-play Operation

Being compact in size, PS-1020 media converter is an easy-to-setup and ready-to-use solution for surveillance systems. Featuring Auto-MDI/MDIX and Auto-negotiation, the media converter automatically detects and configures the best mode of operation over a link. This eliminates the need for user setup or configuration procedure and simplifies installation, once installed these media converters operate automatically.

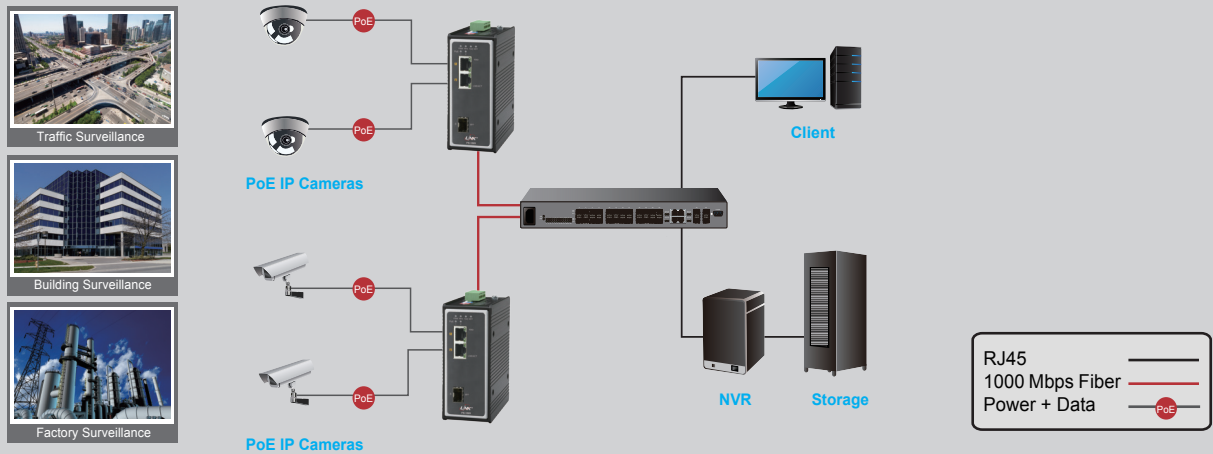
**Applications**

The PS-1020 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



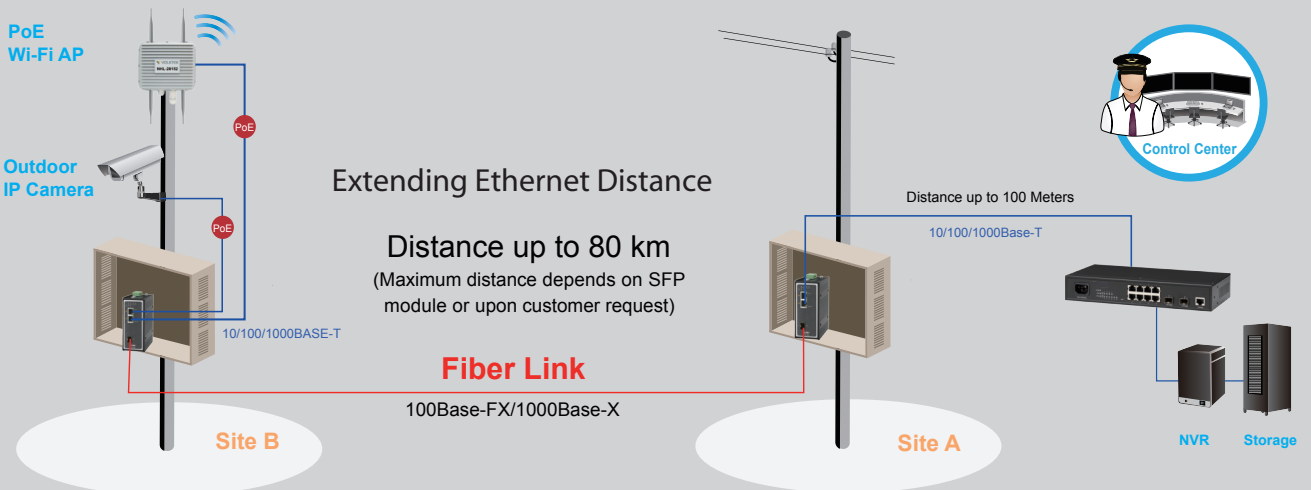
**Surveillance Applications**

The PS-1020 combines high-power PoE+, robust performance for surveillance systems in harsh industrial 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**

**Fiber-Optic Link Capability Enables Extension of Network Deployment**



**Specifications**

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
Interface	
Ports	2x10/100/1000Base-T PoE/PoE+, RJ45 port 1x100/1000Base-X, SFP port
DIP Switch	Primary/Redundant Power Voltage Drop Alarm setting
LED Panel	PWR, RPS, ALM, SFP, PoE, 1000, LNK/ACT
Features	
Performance	Jumbo Frame size: 10KBytes
	MAC table size: 8K
	Fabric: 6Gbps
	Packet buffer: 1Mbit
	MTBF : 2,697,503 hrs.
Management	BER : <1E-12
	Device Monitoring: LFS (Link Fault Signalling)
	Device Management: LLB (Line Loopback)
PoE+	Security: Port Isolation
	IEEE 802.3at powered devices
	Supports PoE Power up to 30W for each PoE port Auto detect powered devices (PDs) Remote Power Feeding up to 100m
Power	
Input Voltage	Primary: 48~57VDC Redundant: 48~57VDC
Power Connection	4-pin DC-Jack (48VDC)(Primary Power Input) 6-pin Terminal block (Primary/Redundant Power 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 : 8W PoE Power Budget : 60W
ESD Protection	8KV, 15KV (contact/air)
Surge Protection	6KV

**Mechanical and Environment**

Housing	Aluminum (IP30 Protection)
Mounting	DIN-Rail
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	460g
Dimension (WxHxD)	50 x 120 x 100 mm

**Certifications**

Safety	EN60950	
FCC	Part 15 Subpart B Class A	
CE	EMI	EN55011
		EN55022
	EMS	EN 55024
		IEC/EN 61000-6-2
		IEC/EN 61000-4-2 (ESD)
		IEC/EN 61000-4-3 (RS)
		IEC/EN 61000-4-4 (EFT)
		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-1020	Unmanaged Industrial PoE+ Media Converter 2x10/100/1000Base-T PoE/PoE+ and 1x1G SFP port
PS-1021M	With 1000Base-SX 1.25G, Multi-mode SFP, 550m
PS-1022M	With 1000Base-SX 1.25G, Multi-mode SFP, 2km
PS-1024S	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)
---------------	---

**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.

**Dimension**
