AI Smart Managed 10/100/1000Mbps Gigabit PoE Fiber Media Converter

Features

- E-link's newly self-developed mobile APP and PC-based intelligent Web management.
- One-click screen display: System current, voltage, temperature; Optical module transmit power, receive power; Ethernet/Fiber port rates, etc.
- APP/Web management functions: Graphical interface presenting detailed device information; SFP module information and DDM data; User-defined optical power thresholds; User-defined scheduled reboot, etc.
- It moves away from traditional complex management interfaces by featuring a lightweight interface with highlighted key parameters, facilitating on-site debugging and maintenance by non-professionals.
- Ethernet port: 1 x 10/100/1000M RJ45
- Fiber port: 1 x 100/1000M SFP
- IEEE 802.3af/at/bt 95W PoE++ PSE



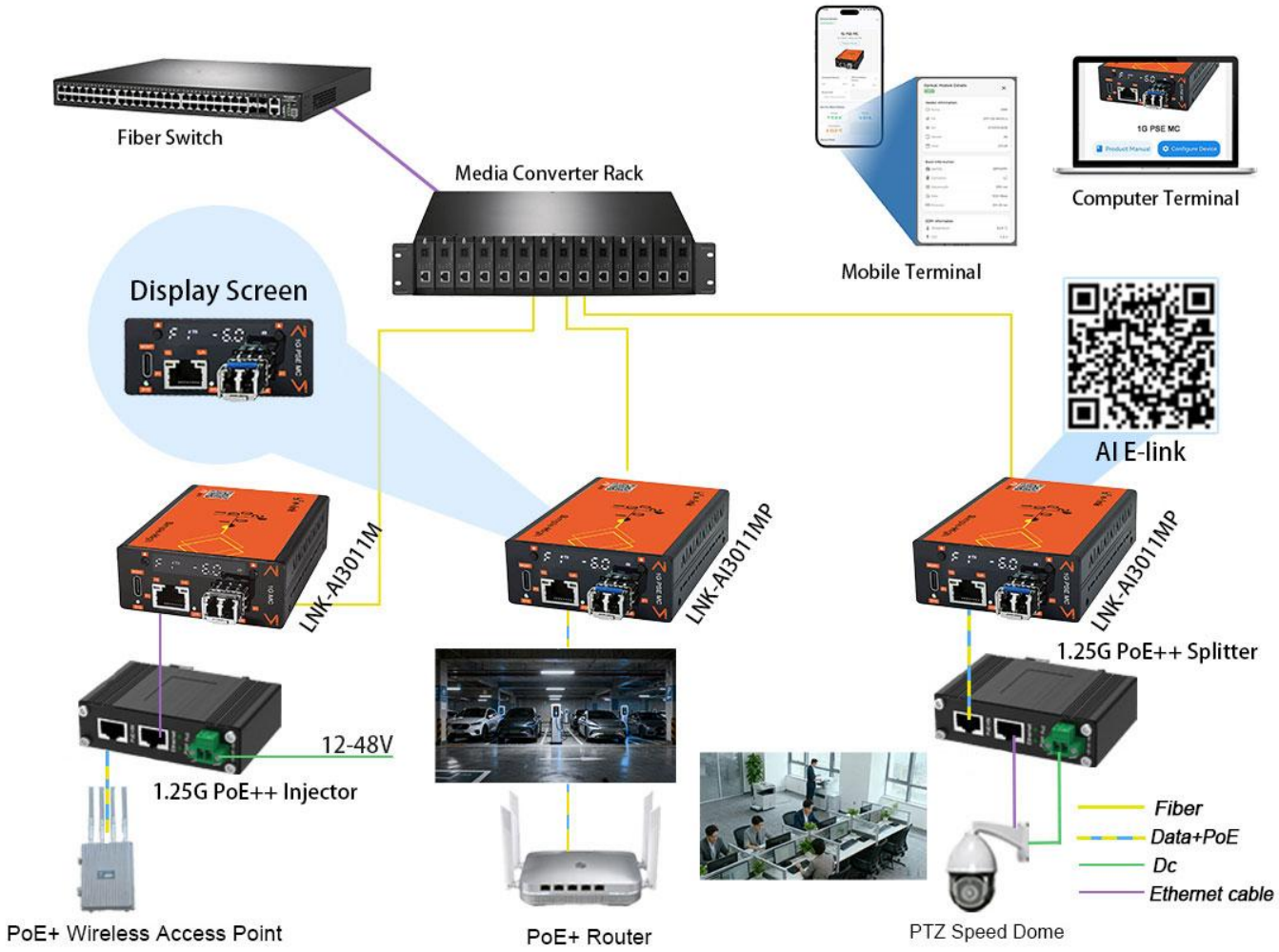
Overview

The LNK-AI3011MP-SFP Series AI Smart Managed PoE Media Converter is an innovative AI-managed device independently developed by E-link. Designed for intelligent operation, it allows users to configure and monitor the device in real time via a mobile app or web interface—eliminating the need for additional test equipment. Key parameters such as power status, SFP and Ethernet port conditions, and detailed SFP module data (including optical power, wavelength, transmission distance, data rate, and temperature) are readily accessible.

Featuring comprehensive functionality, intuitive operation, multiple real-time alarm mechanisms, and efficient maintenance support, this converter significantly reduces both installation complexity and long-term operational costs. It delivers a high-performance, cost-effective line management solution fully adapted to the demands of the AI-driven era.

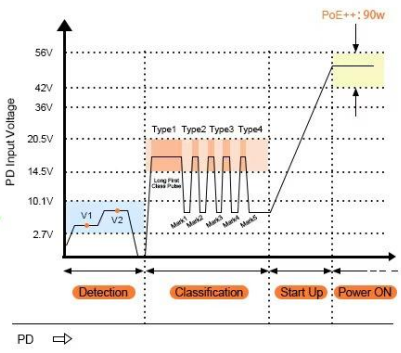
Suitable for a wide range of applications, the converter is ideal for deployment in environments such as forest fire prevention systems, water area monitoring, highway and urban road networks, rail transit, high-end office buildings, petrochemical facilities, and automated equipment communication and monitoring.

Application



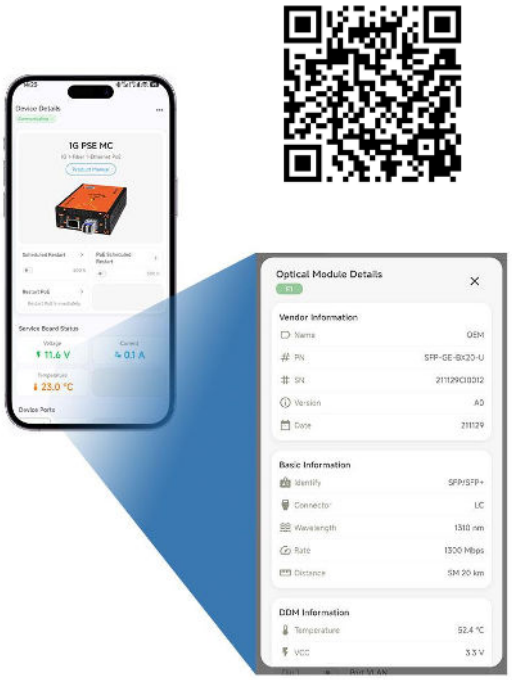


Utilizing hardware IEEE802.3af/at/bt PoE chipset, it automatically powers up PD device with 4 steps (PD Detection -> PoE Classification -> Start Up -> Power ON). Itallocates appropriate power to IEEE802.af/at/bt PoE devices, and no power for non-PoE devices.It ensures high safety for PoE and Non-PoE devices.



E-link App and PC Web

E-link App and PC Web







Technical Indexes

AI Smart Managed 10/100/1000Mbps Gigabit PoE Fiber Media Converter		
Access Mode	100/1000BASE-X SFP to 10/100/1000BASE-T RJ45 PSE IEEE802.3af/at/bt 95W	
Ethernet		
Standards:	Standards Compliance IEEE 802.3 Ethernet	
	IEEE 802.3u Fast Ethernet	
	IEEE 802.3ab Gigabit Ethernet	
Processing Type	Store-and-Forward	
Forward Filter Rate	14,880pps (10Mbps)	
	148,800pps (100Mbps)	
	1,488,000pps (1000Mbps)	
Packet Buffer Memory	1 Mbit	
Max Packet Length	9K Bytes	
AI Smart Managed Functions		
Service Board Status	Temperature	
	Voltage	
	Current	
RJ45 Port Status	Link Status	
	Rate	
	LFP Status	
	PSE Supply Voltage	

	PSE Power Consumption		
	Power Pin Assignment		
SFP Port Status	Link Status		
	PN/SN		
	TX Power		
	RX Power		
	All DDM Information		
DIP Switch	Dip1	LFP	 
	Dip2	10M	
	Dip3	NC	
	Dip4	NC	
Fiber Port Alarm	Support		
Scheduled Reset	Support		
PoE Power Scheduled	Support		
Interface port			
Ethernet Port	10/100/1000BASE-T Ethernet RJ45 interface Auto-negotiation, auto MDI/MDI-X		
	Cable: Cat 3/4/5/6/7 UTP Cable		
SFP Port	1 x 100/1000M SFP (auto detection)		
	Cable: Multi-Mode: 50/125um or 62.5/125um fiber optic cable, distance: 550m/2km; Single Mode: 9/125um fiber optic cable, distance: 20/40/80/100/120/160/200km		
PoE (Power over Ethernet)			
Standard	IEEE 802.3af/at/bt PoE++ PSE (af: 15.4W, at: 30W, bt type3: 60W, bt type4: 95W		
PoE Power Output	95W max.		
Power Pin Assignment	End-span + Mid-span:1/2(+), 4/5(+), 3/6(-), 7/8(-)		
PoE Budget	Up to 95W PoE budget (44-58V DC)		
PoE Power Supply Type	802.3bt, End-span + Mid-span (Please contact customer service)		
PoE Mode	90W IEEE802.3bt compatible with Mode A, Mode B. 30W IEEE802.3at compatible with Mode B, if need Mode A please contact customer service)		
Electrical and Mechanical			

Input Power	44~58V DC, 5.5 x 2.1 mm Power Socket External AC-to-DC Adapter	
Power Consumption	3W Max.	
Dimensions (W x D x H)	93 x 71 x 29 mm	
Weight	100g	
Casing	Aluminum Case	
Mounting Options	Desktop or mounted on standard 14 slots rack	
LED Indicators		
SYS	Green LED Slow Blink: Operating normally	
	Orange LED Blink: Data communication in progress	
P1 1G	Solid On: Ethernet port link rate is 1000M	
	Off: Ethernet port no link or link rate is 10M/100M	
P1 L/A	Solid On: Ethernet port link established	
	Blinking: Data transmission	
	Off: Ethernet port no link	
F1 L/A	Solid On: SFP port link established	
	Blinking: Data transmission	
	Off: SFP port no link	
F1 ALM	Red LED Solid On: Received optical power below threshold	
	Orange LED Solid On: Received optical power near threshold	
	Off: Received optical power normal	
POE	Green LED Slow Blink: Connected PD	
	Red LED Solid On: Abnormal	
	Off: Not connected PD	
Environmental		
Operating Temperature	-20°C to 70°C (-20°F to 162°F)	
Storage Temperature	-40°C to 85°C (-40°F to 185°F)	
Relative Humidity	5% to 95% non-condensing	
MTBF	> 200,000 hrs	
Regulatory Approvals		
ISO9001, CE, FCC Part 15 Class A, RoHS		

Ordering Information

Model	Description
LNK-AI3011MP30-SFP	1-Port 100/1000Base-X SFP to 1-Port 10/100/1000BASE-T AI Smart Managed PoE+ Fiber Media Converter, IEEE802.3at **30W**, Include AC-DC Power Adapter
LNK-AI3011MP60-SFP	1-Port 100/1000Base-X SFP to 1-Port 10/100/1000BASE-T AI Smart Managed PoE++ Fiber Media Converter, IEEE802.3bt **60W**, Include AC-DC Power Adapter
LNK-AI3011MP90-SFP	1-Port 100/1000Base-X SFP to 1-Port 10/100/1000BASE-T AI Smart Managed PoE++ Fiber Media Converter, IEEE802.3bt **95W**, Include AC-DC Power Adapter
SFP Options	► SFP option. Please select your SFP on our SFP Options Page.
	► SFP module is to be purchased separately.