AI Smart Managed 10/100/1000/2500Mbps 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 10/100/1000/2500M RJ45
- Fiber port: 1 x 1.25G/2.5G SFP
- IEEE 802.3af/at/bt 95W PoE++ PSE



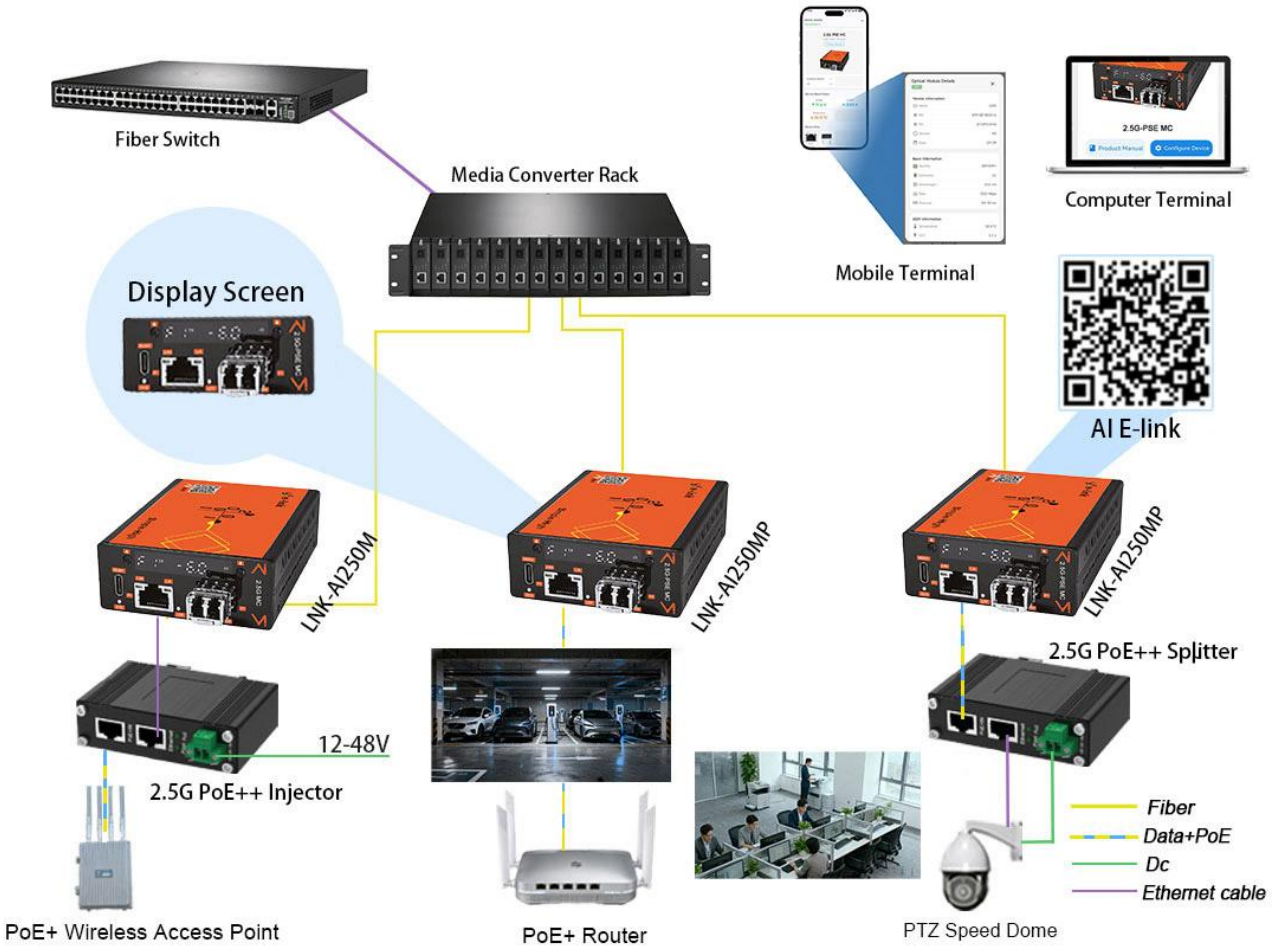
Overview

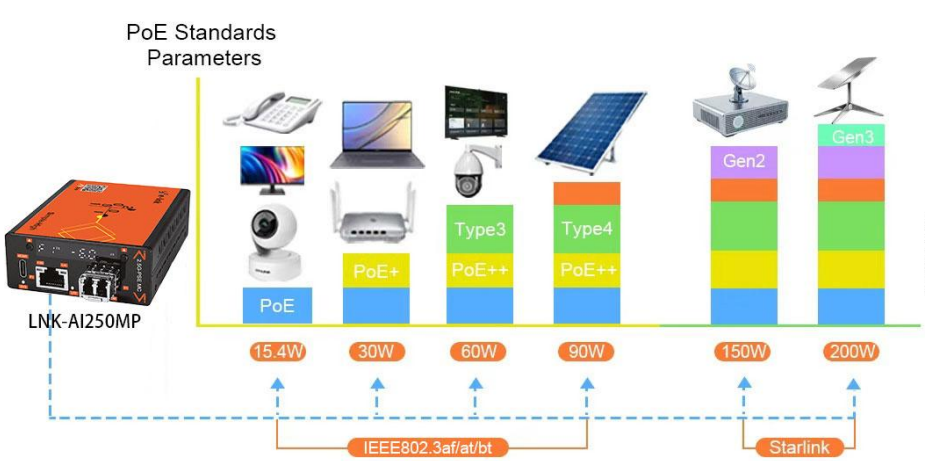
The LNK-AI2500MP-SFP Series AI Smart Managed PoE Media Converter is an innovative, AI-driven device independently designed and developed by E-link. It enables effortless management and configuration through a mobile app or web interface, eliminating the need for external test equipment. Users can monitor real-time status including power supply, SFP and Ethernet port conditions, and detailed SFP module diagnostics such as optical power, wavelength, transmission distance, data rate, and temperature.

Integrating comprehensive features, user-friendly operation, multiple real-time alert mechanisms, and streamlined maintenance, this converter significantly reduces both deployment and operational costs. It delivers a high-performance, cost-effective networking solution tailored to the demands of the AI era.

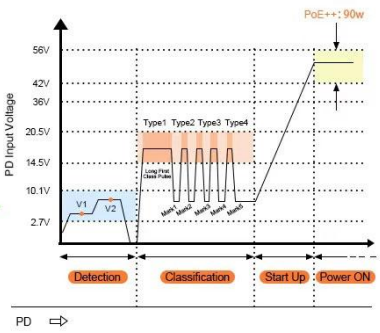
The converter is widely applicable across various sectors, including forest fire prevention, water area monitoring, highways, urban roads, rail transit, high-end office buildings, petrochemical facilities, and communication and monitoring for automated equipment.

Application

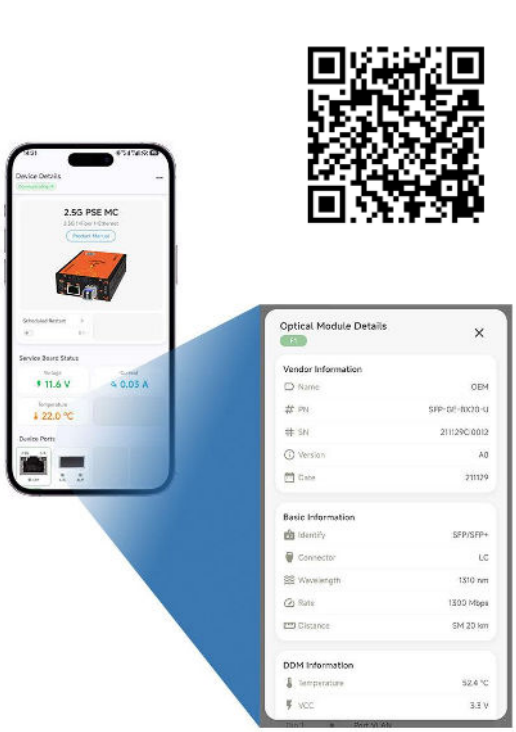


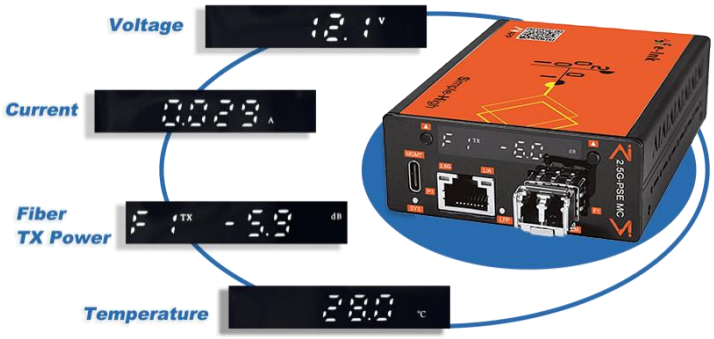


Utilizing hardware IEEE802.3af/at/bt PoE chipset, it automatically powers up PD device with 4 steps (PD Detection -> PoE Classification -> Start Up -> Power ON). Itallocates appropriate power to IEEE802.af/at/bt PoE devices, and no power for non-PoE devices.It ensures high safety for PoE and Non-PoE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



E-link App and PC Web

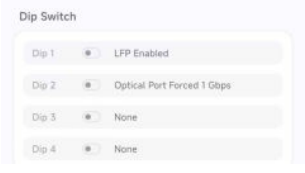
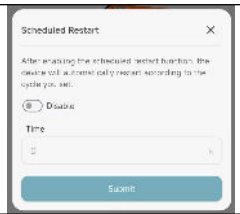


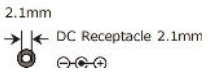




Technical Indexes

AI Smart Managed 10/100/1000/2500Mbps Gigabit Fiber PoE Media Converter	
Access Mode	1000/2500BASE-X SFP/SFP+ to 10/100/1000/2500BASE-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
	IEEE 802.3az (Energy Efficient Ethernet)
	IEEE 802.3bz(2.5GBASE-T)
	IEEE802.3x
Processing Type	Store-and-Forward
Forward Filter Rate	14,880pps (10Mbps)
	148,800pps (100Mbps)
	1,488,000pps (1000Mbps)
	2,976,000pps (2500Mbps)
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	Force fiber port 1.25G	
	Dip3	NC	
	Dip4	NC	
Fiber Port Alarm	Support		
Scheduled Reset	Support		
PoE Power Scheduled	Support		
Interface Port			
Ethernet Port	10/100/1000/2500BASE-T Ethernet RJ45interface Auto-negotiation, auto MDI/MDI-X		
	Cable: Cat 3/4/5/6/7 UTP Cable		
SFP Port	1 x 1.25G/2.5G SFP		

	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 2.5G	Solid On: Ethernet port link rate is 2.5G
	Off: Ethernet port no link or link rate is 10M/100M/1000M
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-AI2500MP30-SFP	1-Port 1000/2500Base-X SFP to 1-Port 10/100/1000/2500BASE-T AI Smart Managed PoE Fiber Media Converter, IEEE802.3at **30W**, Include AC-DC Power Adapter
LNK-AI2500MP60-SFP	1-Port 1000/2500Base-X SFP to 1-Port 10/100/1000/2500BASE-T AI Smart Managed PoE Fiber Media Converter, IEEE802.3bt **60W**, Include AC-DC Power Adapter
LNK-AI2500MP90-SFP	1-Port 1000/2500Base-X SFP to 1-Port 10/100/1000/2500BASE-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.