4-Port 10/100/1000Base-T to 1-Port 100/1000BASE-X

Mini Industrial AI Smart Managed Fiber Ethernet Switch

Features

► Self-developed intelligent management system by E-link, supporting Android mobile APP and PC web UI

► One-click LED screen display real-time data dashboard: system current, voltage, internal temperature, SFP transmit/receive optical power, Ethernet & fiber port link speeds and more

► Rich APP & web management capabilities: intuitive graphical dashboard for full device status; complete SFP information & DDM diagnostic data; customizable optical power alarm thresholds; user-defined scheduled port/device reboot

► Wide 9–54VDC power input

► 4 X Port 10/100/1000Base-T

► 1 X 100/1000BASE-X SFP fiber uplink port

► Mini Size: 98 x 67 x 46 mm

► One-click VLAN isolation

► 10M 250m transmission

► 6KV lightning surge protection on all ports

► Wide operating temperature: -40°C ~ +75°C (-40°F ~ 167°F)



Overview

The LNK-AIMC104GM is a compact AI smart managed industrial fiber switch independently developed by E-link. Each unit is equipped with 4× 10/100/1000Base-T RJ45 ports + 1× 100/1000BASE-X SFP fiber port.

This world-first innovative device combines the dual advantages of managed and unmanaged switches. Engineers can monitor device status via multiple methods: mobile APP, PC web management interface and LED Display without additional test tools.

Data cover:voltage,current, temperature, Ethernet port status, SFP port working status,as well as detailed SFP DDM parameters such as optical power, wavelength, transmission distance, link rate and module temperature.

We innovated this product based on standard switches:

Device function:Fiber Port Alarm, Scheduled System Reset,VLAN Isolation,10M 250m Transmission Support. The redundant-mode supports auto -recover function. If the destination port of a packet is link-down, it forwards the packet to the other port of the backup pair

Meets IP40, aluminum housing, works stably under harsh industrial temperatures from -40℃ to 75℃.

Equipped with dual redundant power supplies, it keeps Ethernet working stably 24X7.

Application Scenarios:

Intelligent Manufacturing & Automation: data transmission and multi-device interconnection

Power & New Energy: Surveillance communication and cluster networking.

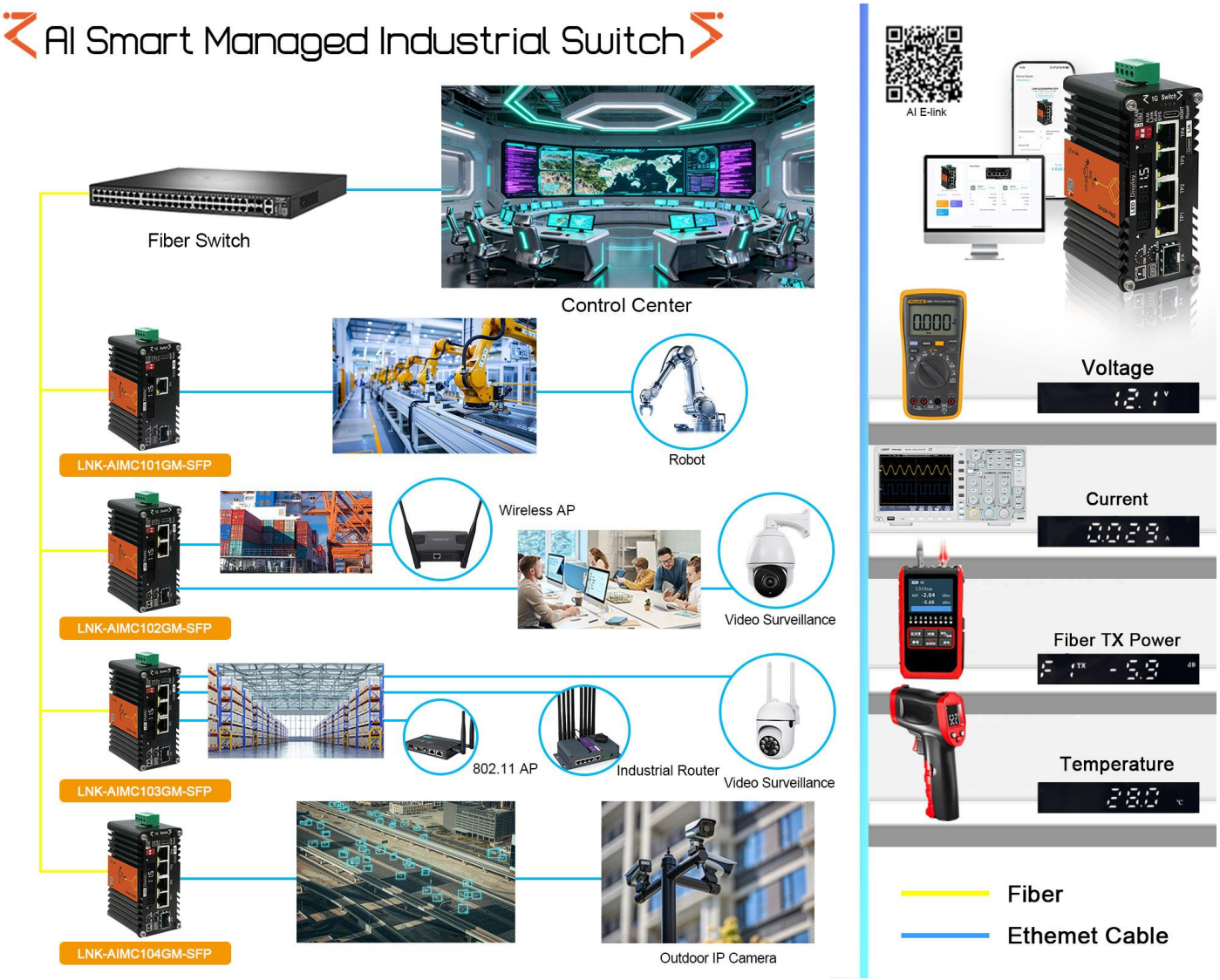
Rail Transit & Tunnel Engineering: Real-time video monitoring and signal transmission.

Oil, Gas & Mining Sites: Stable communication

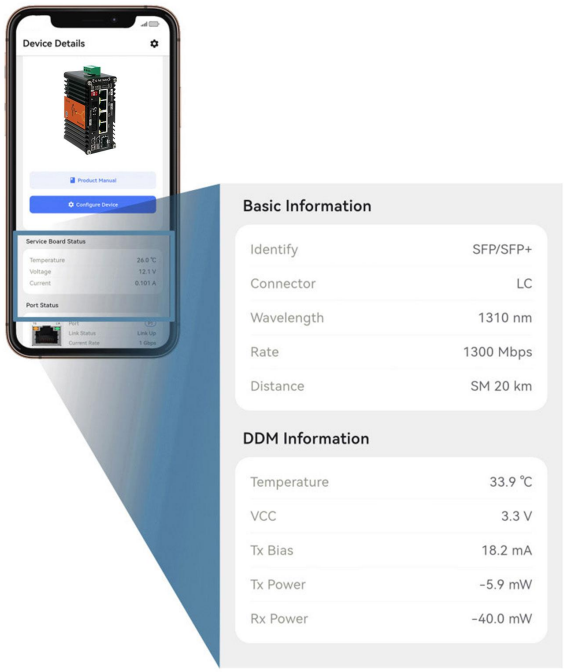
Smart City & New Infrastructure Deployment

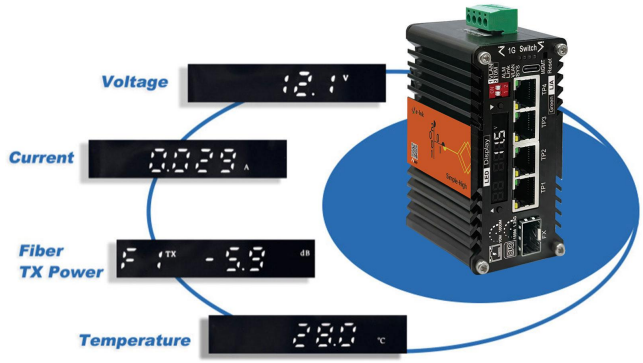
In addition, this product can be used in fields such as autonomous driving, humanoid robots, AI computing, metallurgy, chemical engineering, outdoor research base stations and field weather monitoring.

Application



E-link App and PC Web

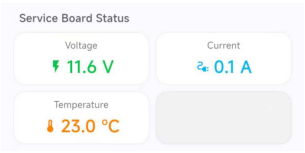
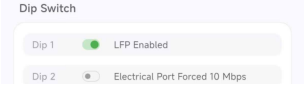


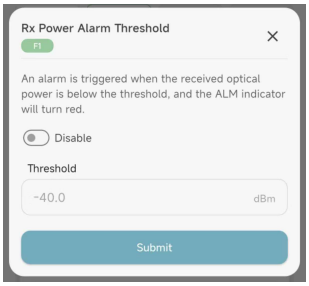
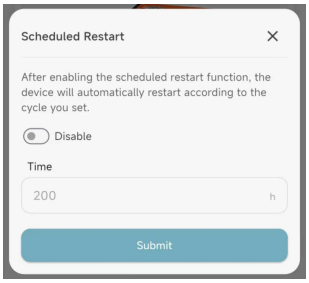




Technical Indexes

Industrial AI Smart Managed Fiber Switch	
Access Mode	1x100/1000BASE-X SFP to 4x10/100/1000BASE-T RJ45
Ethernet	
Standards	Standards Compliance IEEE 802.3 Ethernet
	IEEE 802.3u Fast Ethernet
	IEEE 802.3ab Gigabit Ethernet
	IEEE 802.3x Full-Duplex Flow Control
	IEEE 802.3az Energy Efficient Ethernet (EEE)
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		
Switching Capacity	20Gbps/non-blocking		
PC (Support MacOS, Windows)			
MacOS Browser:	Microsoft Edge 89+ (Release date: 2021-03-04 or later version) Google Chrome 89+ (Release date: 2021-03-02 or later version) Opera 75+ (Release date: 2021-03-24 or later version)		
Windows Browser:	Microsoft Edge 89+ (Release date: 2021-03-04 or later version) Google Chrome 89+ (Release date: 2021-03-02 or later version) Opera 75+ (Release date: 2021-03-24 or later version)		
Mobile App (Support Android, Not Support iOS)			
Mobile Phone APP(Android)	Support all Android Mobile Phone and Android Tablet		
Mobile iPhone APP(iOS)	Not Support iPhone or iPad		
AI Smart Managed Functions			
Service Board Status	Temperature		
	Voltage		
	Current		
RJ45 Port Status	Link Status		
	Rate		
	VLAN		
SFP Port Status	Link Status		
	PN/SN		
	TX Power		
	RX Power		
	All DDM Information		
DIP Switch	DIP1	VLAN	

	DIP2	10M	
Fiber Port Alarm	Support		
Scheduled Reset	Support		
Interface Port			
Ethernet Port	4-Port 10/100/1000BASE-T Ethernet RJ45 interface Auto-negotiation, auto MDI/MDI-X		
	4-Port 10/100/1000BASE-T		
	Cable: Cat 5e or above; Distance: ≤100 meters at 1000M data rate, ≤250 meters at 10M data rate		
SFP Port	1-Port 100/1000BASE-X SFP (Backward compatible with 100BASE-X and 1000BASE-X and transceivers) (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		
Electrical and Mechanical			
Input Power	9~54V DC, 4-pin terminal block		
Power Consumption	5W Max. (When PoE not used)		
Dimensions (W x D x H)	98 x 67 x 46 mm		
Weight	300g		
Casing	Aluminum Case		
Mounting Options	DIN-Rail		
LED Indicators			
SYS	Green LED Blinking: Operating normally		
VLAN	Green Solid On: VLAN On		
	Green Solid Off: VLAN Off		
Link	Green LED Solid On: SFP port link established		
	Green LED Blinking: Data transmission		
	Green LED Off: SFP port no link		
ALM	Red LED Solid On: Received optical power below threshold		
	Red LED Off: Received optical power normal		
TP1-4 L/A	Green LED Solid On: Ethernet port link		
	Green LED Slow Blink: Ethernet port link rate is 10M/100M/1000M		

	Green LED Off: Ethernet port no link
Environmental	
Operating Temperature	-40°C to 75°C (-40°F to 167°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	
EMI: EN55022:2010+AC: 2011, Class A EN 61000-3-2: 2006+A1: 2009+A2: 2009 EN 61000-3-3: 2013 EN55024: 2010	
EMS: IEC 61000-4-2: 2008 (ESD) IEC 61000-4-3: 2010 (RS) IEC 61000-4-4: 2012 (EFT) IEC 61000-4-5: 2014 (Surge) IEC 61000-4-6: 2013 (CS) IEC 61000-4-8: 2009 (PFMF)	

Ordering Information

Model	Description
LNK-AIMC104GM-SFP	Industrial AI Smart Managed 1-Port 100/1000Base-X SFP to 4-Port 10/100/1000BASE-T Fiber Switch, 9V to 54V DC power input
SFP Options	► SFP option. Please select your SFP on our SFP Options Page.
	► SFP module is to be purchased separately.
Mounting Options	► Default DIN-Rail bracket included.
Power Options	► 24W/1A 24VDC Power Supply. Open Wire for Terminal Block
	► Power Supply is to be purchased separately.