

# LA-IS8M3-10G0424PB-UR-L

L3 Managed Industrial Rackmount PoE Switch 24xGE RJ45, 4x10G SFP+

Support DI/DO and RS485, Port 1-4 Support BT 90w



#### **Overview**

LA-IS8M3-10G0424PB-UR-L is the highly reliable Layer 3 managed industrial PoE switches with 24-port 10/100/1000Base-T PoE and 4-port 1G/2.5G/10GBase-X SFP+. They comply with IEEE802.3af PoE, IEEE802.3at PoE+, IEEE802.3bt PoE++ standard protocol, the Max power output consumption per port can reach 90W (1-4 ports). With full gigabit downlink and 10G uplink capability, they can provide high performance and the ability to quickly transfer large amounts of video, voice, and data across a network. They support DI/DO/RS485, G.8032 ERPS, MSTP/RSTP/STP redundancy technologies, Layer 3 static routing & dynamic routing features, powerful Layer 2 management and secure function, which all making them ideal for large-scale industrial networks.

It is also high cost-effective easy-to-use devices, which provide essential industrial Ethernet networking function, including wide range voltage input 44-57VDC, redundant power design with DC/DC, robust IP40 fan-less housing with rack-mount installation, wide operation temperature from -40°C to 75 °C as well as high-level EMI/EMC capability. They are the best choice for heavy industrial factory, transportation, oil & gas, chemical, IP Surveillance and processing automation area where environmental conditions are harsh and critical.



### **Features**

- 24\*10/100/1000Base-T RJ45 PoE, 4\*1G/2.5/10GGBase-X SFP+
- DC/DC redundant power 44-57V input with polarity reverse/over-voltage/over-current protection
- Complies with IEEE802.3af PoE and IEEE802.3at PoE+ standard
- Support USB one key configuration and upgrading
- DI/DO/RS485 are optional
- Layer 3 features: Supports static and dynamic routing, RIP, OSPF, BGP4,ECMP, VRRP.
- Layer 2 features: VLAN; ERPS, STP/RSTP/MSTP; Link aggregation, IGMP snooping, port mirroring, QinQ, 802.1X, port isolation, RMON, NTP client, DHCP snooping/client, Ping/Tracert test, ACL, QoS and SFP DDM function
- Management and maintenance: IPv4 and IPv6 management,PoE management; Support Web, SNMP, CLI, Telnet/SSH management method; Support user management, system log, configuration upload/download through web interface, firmware upgrade via HTTP/TFTP/USB
- Support G.8032 ERPS protocol, recovery time ≤20ms
- Support 6KV surge protection and ESD: Air-15kV, Contact-8kV Protection
- IP40 fan-less and rack-mount hardware design
- Operation temperature: -40 °C ~+ 75 °C

### **Specifications**

Fixed Port	24x10/100/1000Base-T RJ45 PoE, 4x1G/2.5G/2	10GBase-X SFP+
Management Port	1xRJ45 Console port (115200,8,N,1) 1xUSB 2.0 for configuration and firmware update	
Data & Alarm Channel(optional)	1 channel RS485 1 channel DI(digital input) 1 channel DO(digital output)	
Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Ethernet IEEE 802.3ab 1000Base-T Ethernet IEEE 802.3z 1000Base-X Ethernet IEEE802.3x Flow Control and Back Pressure IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1Q VLAN ITU-T G.8032 ERPS IEEE 802.1X Port Authentication Network Cont IEEE 802.1ab LLDP IEEE 802.3ad LACP IEEE802.3af PoE IEEE802.3at PoE+	rol
LED Indicators		
P (Power indicator)	Off: device is power off or failed	On: device power on is normal



S (System status indicator)	Blinking: device initialization	On: device on normal operation
USB (USB status indicator)	Off: USB flash drive not insert or not detected by device	
	On: USB flash drive is detected by device	
	Blinking: device is reading and writing the data from USB flash drive	
ALM (Fault status indicator) Red	Off: Device on normal working state	On: Fault alarm
1-24 (Copper ports indicators) Green	Off: ports link down	
	On: ports link up	
	Blinking: data on TX/RX	
1-24 (PoE status indicators)	Off: PoE not working	
Yellow	On: PoE working	
	Off: ports link down	
25-28(Copper ports indicators) Green	On: ports link up	
oreen.	Blinking: data on TX/RX	
Power Parameter		
Input Voltage	DC 44~57V(802.3af) DC 52~57V(802.3at) redundant power input	
Input Current	9A DC input Max	
Total Power Consumption	Full loading without PoE≤32W PoE power budget ≤ 370W	
Connector	Removable 2*2-pin terminal block	
Reverse Polarity Protection	Support	
Over-Voltage Protection	Support	
Over-Current Protection	Support	
Layer 2 Functions		
Port Aggregation	Support GE port aggregation Support 2.5GE aggregation Support 10GE aggregation Support static aggregation Support LACP dynamic aggregation Up to 64 aggregation groups and up to 8 ports	per group



Port Features	Support IEEE802.3x flow control Support interface counters Support port isolation Port mirroring ( One-to-One, Many-to-One) Support loop detection(Port-based; VLAN-based) Support broadcast storm suppression(broadcast; unknown multicast; unknown unicast)
Mac-Address Table Management	Support static Mac-address management Support dynamic Mac-address Management Support filtering Mac-address Support MAC limit based on port and VLAN Support MAC flapping based on port and VLAN
VLAN	Support access mode Support trunk mode Support hybrid mode
VLAN Classification	Mac Based VLAN IP Based VLAN Protocol Based VLAN
GVRP	Normal mode Fixed mode Forbidden mode
QinQ	Port-based QinQ VLAN-based QinQ (VLAN-stacking; VLAN-mapping) Flow-based QinQ
LLDP	LLDP (Link Layer Discovery Protocol)
Ring Network Protocol	Support IEEE802.1D-STP Support IEEE802.1W-RSTP Support IEEE802.1S-MSTP Support G.8032 ERPS protocol, single ring, sub Ring and major ring Recovery time ≤20ms
L2 Multicast	
IGMP Snooping	Support IGMP snooping
Group Address	Support group address
Security Functions	
ACL	IP Standard ACL MAC extend ACL IP extend ACL IPv6 ACL
QoS	Support QoS Class, remarking



	Support SP, WRR queue scheduling Ingress port-based rate-limit Egress port-based rate-limit Support policy-based QoS	
802.1x	Port access control Mac-address access control RADIUS server	
Port-Security	Port-security	
IP Source Guard	IP Port/MAC binding	
ARP-check	Support ARP-check and ARP packet filtering for illegal users	
Access Control	Support Telnet/SSH/HTTP/HTTPS user access control	
Management & Maintenance fun	ections	
User Management	Support password protection Support user authorization management	
SNMP	Supporting SNMP V1/V2C/V3 version	
Web Management	Web Management Support HTTP V1.1 Support HTTPS	
CLI Management	Console/Telnet command line management	
RMON	Support RMON(Remote Monitoring) alarm	
Firmware Upgrade	Firmware upgrade	
Fault Detection	Ping/Traceroute  Dying gasp  Support optical transceiver DDM function	
Cable Detection	Support copper port cable detection	
	Support 802.3af/802.3at	
	Support PD watchdog	
Del management	Support PoE priority management	
PoE management	Support Max PoE power configuration for each port	
	Support alarm waterline configuration	
	Support reserved power configuration	
NTP	Network Time Protocol	
Syslog/Debug	Syslog/Debug Syslog send to three servers	
Configuration Import/Export	Support FTP/TFTP remote import/export Support USB import/export	
Dual Partition Management	Support dual partition switching	



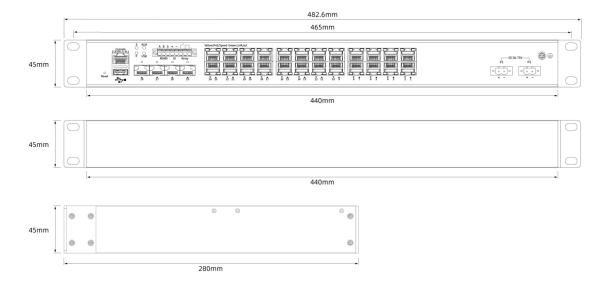
Application Protocol Functions		
DHCP Snooping	DHCP snooping trust port Support remote-id/circuit-id configuration DHCP option-82	
DHCP Client	Support DHCP client	
Telnet Server	Support telnet server	
Telnet Client	Support telnet client	
SSH Server	Support SSH server	
TACACS	Support TACACS(the terminal access controller accesses the control system)	
Sflow	Support network traffic analysis	
TFTP	Support TFTP Client	
Layer 3 Functions		
ARP	ARP table aging	
DHCP Server		
IPv4 / IPv6	Static routing	
	Support ECMP (Equal-cost multi-path routing)	
ECMP	Support the configuration of ECMP Max next-hop	
	Support capacity balanced configuration	
Route policy	IPv4 prefix-list	
VRRP	Virtual Router Redundancy Protocol	
Routing Protocol Specification		
RIP	RIPv1/v2	
OSPFv2	OSPFv2	
	BGP4	
BGP4	BGP Support Routing Recursive ECMP	
	Support to view the number of neighbors and up/down state	
IS-IS	IS-ISv4	
Routing entry	13K	
Switching features		
Switching Capacity	128Gbps	
Packet Forwarding Rate	190.4Mpps	
MAC Address Table	16K	



VLAN	4K
Buffer	12M bit
Forwarding Delay	<5us
Jumbo Frame	Support 10Kbytes
MDX/MIDX	Support
Watchdog	Support
Mechanical Structure	
Case Protection	IP40
Installation Method	Rack mountable
Dimension(W*D*H)mm	440*45*280mm
Weight	LA-IS8M3-10G0424PB-L: 5.3KG: LA-IS8M3-10G0424PB-UR-L: 5.4KG;
Operating environment	
Operating Temperature	-40°C~+ 75°C
Storage/Transportation Temperature	-40°C~+ 85°C
Relative Humidity	Operation humidity: 10%-90%RH Storage humidity: 5%-95%RH
Industrial Standard	
EMS	Surge protection of power: IEC 61000-4-5 DC:6KV/6KV (8/20us)  Surge protection of Ethernet ports: IEC 61000-4-5 6KV/2KV (10/700us)  RS: IEC 61000-4-3 80 MHz-1 GHz: 10 V/m  EFT: IEC 61000-4-4 power 4K, signal 2K  CS: IEC 61000-4-6 10V  ESD: IEC 61000-4-2 Contact: 8K; Air: 15K
EMI	FCC Part 15B Class A
Shock	IEC 60068-2-27
Free Fall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Certification	CE/RoHS/FCC
MTBF	>200,000 hours



### **Dimension**



## **Ordering Information**

PART NO	DESCRIPTION
LA-IS8M3-10G0424PB-UR-L	L3 Managed Industrial Rackmount PoE switch 24xGE RJ45, 4x10G SFP+ Port 1-4 Support BT 90w Redundant dual power supply DC44-57V input Support DI/DO and RS485
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Specifications & design are subject to change without prior notice.

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