

IDSL3LM-02S08G-AC-Z7

Industrial L2+ Managed Switch 8x10/100/1000 Base-T, 2x1000 Base-X
Single Power Input AC100~240V or DC100~240V Optional



Overview

The IDSL3LM-02S08G-AC-Z7 is a high-performance managed industrial Ethernet switch, featuring 2xGigabit SFP optical ports and 8x10/100/1000Base-T Gigabit electrical ports. It is engineered with industrial-grade reliability, including a fanless heat dissipation design, wide operating temperature range, and IP40 protection rating, enabling it to withstand extreme conditions such as high/low temperatures, electrostatic interference, and surges. The switch integrates rich switching and security protocols, and supports Ethernet Ring Protection Switching (ERPS) for public Ethernet, significantly enhancing network flexibility, reliability, and security. It is ideally suited for deployment in harsh environments such as rail transit, safe city projects, intelligent transportation systems, and outdoor monitoring.

Features

- Equipped with 2x1000Base-X (Gigabit SFP optical ports) and 8x10/100/1000Base-T (Gigabit electrical ports) as fixed service ports; supports a Console port for device management.
- Supports a wide input voltage range: AC 100~240V or DC 100~240V; total power consumption is less than 10W.
- Boasts IP40 ingress protection rating and a fanless design, relying on natural heat dissipation for stable operation.
- Achieves a Mean Time Between Failures (MTBF) of 100,000 hours.
- Provides electrostatic discharge (ESD) protection of 8KV~15KV.
- Delivers a switching capacity of 36G and a packet forwarding rate of 26.78Mpps.
- Features a 16K MAC address table, 12M packet buffer, and forwarding delay of less than 10us.
- Supports up to 4K VLANs, automatic MDI/MDIX polarity correction, flow control, and Jumbo Frames (up to 10Kbytes).
- Supports Spanning Tree Protocol variants: STP, RSTP, and MSTP, along with Ethernet Ring Protection Switching (ERPS) for ring network redundancy.
- Supports link aggregation (up to 64 groups) and IGMP Snooping for efficient multicast traffic management.
- Enables port mirroring (both SPAN and RSPAN), port loopback detection, storm control, and real-time interface traffic statistics.
- Offers QoS capabilities, including traffic re-marking, priority mapping, SP/WRR queue scheduling, inbound/outbound rate limiting, and flow-based QoS.
- Includes comprehensive security features: 802.1X authentication, MAC authentication, port security, IP Source Guard, DHCP snooping, DDoS attack protection, and up to 240 ACL rules (supporting IPv4 ACL, IPv6 ACL, MAC-extended ACL, and L4 ACL).
- Supports Layer 3 functions: IPv4/IPv6 static routes (up to 256 routes), ARP entry aging, and a built-in DHCP server.
- Supports QINQ, RMON, NTP client, DHCP client, Ping/tracert network detection, Dying gasp, Digital Diagnostic Monitoring (DDM), device scanning, and port isolation.
- Complies with EMC standards: IEC 61000-4-5 (power surge protection: Level X, 4KV/4KV, 1.2/50us; Ethernet port surge protection: Level 4, 4KV/4KV, 10/700us); IEC 61000-4-3 (radiated immunity: Level 3, 10V/m); IEC 61000-4-4 (electrical fast transient immunity: Level 3, 1V/2V); IEC 61000-4-6 (conducted immunity: Level 3, 10V/m); IEC 61000-4-8 (power frequency magnetic field immunity: Level 4, 30A/m); IEC 61000-4-11 (voltage dips: Level 3, 10V).
- Supports multiple network topologies: ring, star, bus, tree, and hybrid topology.
- Features compact mechanical dimensions: 67125161mm; supports DIN rail mounting; net weight is 1.01KG.
- Offers diverse management methods: CLI, Telnet/SSH, web-based management, and SNMPv1/v2c/v3.
- Supports user management and permission control, system log recording, configuration file upload/download, and firmware upgrade.

Specifications

Fixed Port	8x10/100/1000 Base-T, 2x1000 Base-X
Management Port	Console port
Power Interface	Phoenix terminal, dual power supply redundancy
LED Indicators	PWR, RUN, Link/ACT LED
Cable Type & Transmission Distance	
Twisted-pair	0-100m (CAT5e, CAT6)
Monomode Optical Fiber	20/40/60/80/100KM
Multimode Optical Fibre	550m
Network Topology	
Ring Topology	Support
Star Topology	Support
Bus Topology	Support
Tree Topology	Support
Hybrid Topology	Support
Electrical Specifications	
Input Voltage	1ch AC100~240V or 1ch DC100~240V
Total Power Consumption	<10w
Layer 2 Switching	
Switching Capacity	36G
Packet Forwarding Rate	26.78Mpps
MAC Address Table	16K
VLAN	Support 4K
Buffer	12M
Forwarding Delay	<10us
MDI/MDIX	Support
Flow Control	Support
Jumbo Frame	Support 10Kbytes
Spanning Tree	Support STP/RSTP/MSTP
Ring Protocol	Support ERPS

Link Aggregation	Support 64
Multicast	Support IGMP Snooping
Port Mirroring	Support SPAN,RSPAN
Port Loopback Detection	Support
Storm Control	Support
Interface Counters	Support
QINQ	Support
802.1X	Support
MAC Authentication	Support
Port Isolation	Support
Rmon	Support
NTP Client	Support
DHCP Client	Support
DHCP Snooping	Support
Ping/Tracert Detection	Support
Dying Gasp	Support
DDM	Support
Port Security	Support
IP Source Guard	Support
Device Scanning	Support

Layer 3 Function

Static Routes IPv4/Static Routes IPv6	Support for 256 Static Routes
ARP	ARP Entry Aging
DHCP Server	Support

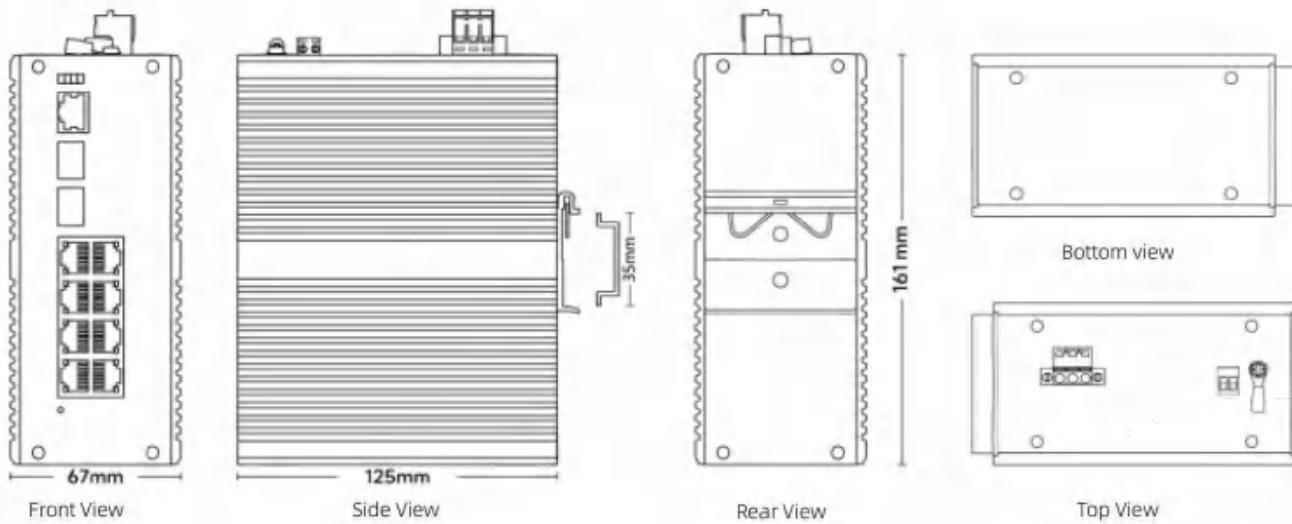
Convergence

ACL	Supports 240 ACL entries Supports IP standard ACL and ACLv6 Supports MAC extended ACL and ACLv6 Supports IP extended ACL and ACLv6 Supports Layer 4 ACL
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QOS	Supports QoS re - marking and priority mapping
	Supports SP (Strict Priority) and WRR (Weighted Round Robin) queue scheduling
	Supports ingress and egress rate limiting
	Supports flow - based QoS
Ddos Attack	Support
Management	
CLI	Support
Console	Support
Telnet/SSH	Support
WEB Management	Support
Management IP	Support IPV4/IPV6
SNMP	Support SNMP V1/V2/V3
User Management	Support
User Rights Management	Support
System Log	Support
Configuration File Download/Upload	Support
Upgrade Firmware	Support
Mechanical Dimensions	
Product Size	67*125*161mm
Installation Method	DIN rail mounting
Weight	1.01KG
Environment	
Operating Temperature	-40°C~+75°C
Storage Temperature	-40°C ~+85°C
Relative Humidity	5%~95% (non-condensing)
Thermal Methods	Fanless design, natural cooling
MTBF	100, 000 hours
EMC & Ingress Protection	
IP Level	IP40
Surge Protection of Power	IEC 61000-4-5 Level X (6KV/6KV)(1.2/50us)
Surge Protection of Ethernet Port	IEC 61000-4-5 Level 4 (4KV/4KV)(10/700us)

RS	IEC 61000-4-3 Level 3 (10V/m)
EFI	IEC 61000-4-4 Level 3 (1V/2V)
CS	IEC 61000-4-6 Level 3 (10V/m)
PFMF	IEC 61000-4-8 Level 4 (30A/m)
DIP	IEC 61000-4-11 Level 3 (10V)
ESD	IEC 61000-4-2 Level 4 (8K/15K)
Free Fall	0.5m
Authentication	
Authentication	CE/FCC/RoHS

Dimension



Ordering Information

PART NO	DESCRIPTION
IDSL3LM-02S08G-AC-Z7	Managed Industrial Switch 8x10/100/1000 Base-T, 2x1000 Base-X Single Power Input, AC100~240V or DC100~240V Optional
IDSL3LM-02S08G-2AC-Z7	Managed Industrial Switch 8x10/100/1000 Base-T, 2x1000 Base-X Dual Power Input, AC100~240V or DC100~240V Optional



<https://www.lanaotek.com>



Specifications & design are subject to change without prior notice.

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