

# 12 Port Gigabit Managed Industrial PoE Switch

## LKIND8



### Overview

The LKIND8 is 8-port industrial Gigabit PoE switch that provides 8 Gigabit POE ports ,4 Gigabit optical ports. This switch can be used as a power supply unit (PSE), max 30W each port, suitable for IEEE802.3af /at compatible powered devices (PDs), it is especially suitable for applications where it is difficult to provide AC power and has high requirements on wiring

costs. Achieve EMC Industry Level 4 protection. Corrugated high-strength aluminum profile housing, IP40 grade, low power design, seismic rail mounting, -40°C -75°C work temperature, can work in harsh environments;

LKIND8 can also support rich network management functions: RUN-Ring (self-healing time <10ms), RSTP, VLAN, QoS, SNMPv1/v2c/v3, IEEE802.1X, SSH/SSL, port mirroring, port aggregation, etc. switching and security management features make it a reliable solution for smart traffic, video surveillance and other harsh industrial environments

## Hardware specification

Standards	<p>IEEE 802.3: Ethernet Media Access Control (MAC) Protocol</p> <p>IEEE 802.3i: 10BASE-T Ethernet</p> <p>IEEE 802.3u: 100BASE-TX Fast Ethernet</p> <p>IEEE 802.3ab: 1000BASE-T Gigabit Ethernet</p> <p>IEEE 802.3z: 1000BASE-X Gigabit Ethernet (optical fiber)</p> <p>IEEE 802.3ad: Standard method for performing link aggregation</p> <p>IEEE 802.3x: Flow control</p> <p>IEEE 802.1p: LAN Layer 2 Qos/Cos protocol for traffic prioritization (multicast filtering)</p> <p>IEEE 802.1q: VLAN Bridge Operation</p> <p>IEEE 802.1d: STP Spanning Tree</p> <p>IEEE 802.1s: MSTP Spanning Tree</p> <p>IEEE 802.1w: RSTP Spanning Tree</p> <p>IEEE 802.3af</p> <p>IEEE 802.3at</p>
Exchange characteristics	<p>MAC address: 8K</p> <p>Port Cache: 2Mbit</p> <p>Backplane bandwidth: 24Gbps</p> <p>Switching Delay: &lt;5us</p> <p>100 Mbps forwarding speed: 148810pps</p>

	<p>Gigabit forwarding speed: 1488100pps</p> <p>100M maximum filter speed: 148810pps</p> <p>Gigabit maximum filtration speed: 1488100pps</p>
Port	<p>Optical port: 4 1000Base-X (SFP)</p> <p>RJ45 port: 8 10/100/1000Base-Tx RJ45 ports</p>
Front panel indicator	<p>Power indicator: P1, P2</p> <p>System indicator: SYS</p> <p>Alarm indicator: ALM</p> <p>Interface indicator: Link&amp; Act X1~X4</p> <p>Network port indicator: POE, Link&amp; Act 1~8</p>
Power supply	<p>Input voltage: 48-56VDC</p> <p>Input method: plug-in 5-core 5.08mm pitch terminal block</p> <p>Support dual DC power backup, built-in over current protection</p> <p>Power supply anti-reverse connection</p>
Power consumption	<p>No-load power: 4W@52VDC</p> <p>Full load power: 96W@52VDC (including POE output)</p>
Physical characteristics	Housing: IP40 grade protection, corrugated high strength metal housing
	Installation: DIN rail mounting
	Dimensions (L× W × H): 163mm×46.5mm×110mm
	Weight: 1kg
Industry Standard	<p>EMI:FCC CFR47 Part 15, EN55022/CISPR22, Class A</p> <p>EMS:</p> <p>IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (air)</p> <p>IEC61000-4-3 (RS): 10V/m (80MHz-2GHz)</p> <p>IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV</p> <p>IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±6kV</p> <p>IEC61000-4-6(CS):3V (10kHz-150kHz); 10V (150kHz-80MHz)</p>

	IEC60068-2-6 (Vibration) IEC60068-2-27 (Shock) IEC60068-2-32 (Free Fall)
Working environment	Working temperature: -40~75° C Storage temperature: -40~75° C Relative humidity: 5%~95%(no condensation)
Certification	CE, FCC, RoHS
MTBF	360,000 hrs
Warranty	3 years

## Software specification

Buttons	AI PoE
	AI Loop protect
	AI VLAN
	AI Extend
Hardware watchdog	Support
Traffic Statistics	Support
Port energy saving	Support
DHCP	DHCP relay
	DHCP Snooping
VLAN	4K VLAN
	802.1Q VLAN, MAC VLAN ,IP VLAN

	Voice VLAN
MAC address table	Follow the IEEE 802.1d standard
	Support MAC address automatic learning and aging
	Support static, dynamic, filtering address table
Safety features	Password protection
	Support user access based on port number, IP address, and MAC address
	HTTPS, SSL V3, TLS V1, SSH V1/V2
	Support IP-MAC-PORT ternary binding
	Support ARP protection, IP source protection, DoS protection
	Support DHCP Snooping and DHCP attack protection
	Support 802.1X authentication, AAA
	Support port security, port isolation
	Support CPU protection
POE management	Support PoE power limit
	Support POE chip status view
	Support setting PoE port priority
	Support setting PoE power supply time period
QoS	Support 8 port queues
	Support port priority, 802.1P priority, DSCP priority
	Support SP, WRR, SP+WRR, Equ priority scheduling algorithm
Spanning tree	Support STP(IEEE 802.1d), RSTP(IEEE 802.1w),MSTP(IEEE 802.1s) protocol
	Support loop protection, root bridge protection, TC protection, BPDU protection, BPDU filtering
Multicast	Support IGMP v1/v2 Snooping
	Support fast leave mechanism
	Support multicast VLAN
	Supports multicast filtering, packet statistics, and unknown multicast

	discards
Storm suppression	Support for multicast suppression
	Support broadcast suppression
	Support for unknown unicast suppression
Link aggregation	Support static aggregation
	Support dynamic aggregation
	Support IP, MAC, and hybrid load balancing modes
	Supports up to 32 aggregation groups
IPv6	Support IPv6 Ping, IPv6 Tracert, IPv6 Telnet
	IPv6 SSH , IPv6 SSL
Management and maintenance	Support web management (HTTP, HTTPS, SSL V3)
	Support CLI (Telnet, SSH V1/V2, local serial port)
	Support SNMP V1/V2/V3,
	Support LLDP, RMON
	Support ARP protection, IP source protection, DoS protection
	Support CPU monitoring, memory monitoring
	Support system log, grading warning
	Support Ping, Tracert detection, cable detection