LinkPower™ LPS3400ATM

Industrial L2+ Managed Gigabit PoE Network
Switch with 2 Gb Fiber Uplink Ports

IEEE802.at PoE Plus 30W	Gigabit & Fiber Ports	Ethernet Surge Protection	Industrial Grade -40°C to +75°C

APPLICATIONS

- **Smart City**
- **IP Video Surveillances**
- **Campus Networks**
- **Wireless Mesh Networks**
- **Border Security Surveillance**
- **Municipal Networks**
- **Energy & Refineries**
- **Hospitality Networks**
- **Hotel Resort Networks**
- **Hotspot Integrations**
- **VOIP Services**
- **Traffic Monitoring**

The LinkPowerTM LPS3400ATM Layer 2+ 6-Port Managed Industrial PoE (Power over Ethernet) IEEE802.3f/at Switch offers 4-Port Gigabit PoE with 2 SFP Uplink Port Network Switch with dual power input redundancy with 48-57V DC and up to 30W Type 4 per PoE port.

The LPS3400ATM Industrial Layer 2+ Managed Gigabit PoE Swtich is designed for industrial and commercial applications, e.g., high performance video surveillance, high bandwidth wireless mesh, carrier wifi installations, and etc. The terminal equipment, i.e., powered devices, such as high power IP camera, high performance wireless AP and industrial IP telephony. With the two port Gigabit fiber ports, it can transfer data up to a distance of 120Km from SFP fiber port to a remote control center and the systems is also offer with powerful anti-electromagnetic interference feature. Additionally, the LPS3400ATM Layer 2+ Managed Gigabit PoE Switch is a Managed network switch with Link Aggregation, VLAN, Trunking, SNMP, and QoS technology to meet the accelerating demand for powering the most demanding outdoor PoE devices. The LPS3400ATM Gigabit PoE Switch provide LED displays internally that show device status for easy power management and troubleshooting. The PoE technology conveniently eliminates the need to install networked devices with multiple wires, such as Inscape Data's IP cameras and SB300/BR300, and B3000/BR3000 wireless products, thereby reducing equipment and installation costs. The LPS3400ATM Gigabit PoE Switch offers the following key features:

KEY SYSTEM FEATURES

- Dual Power Input Redundancy with 48-57V DC
- Compliant to IEEE 802.3, IEEE 802.3u, IEEE 802.3z, IEEE 802.3ab, IEEE 802.3x,IEEE 802.1D, IEEE 802.3af, IEEE 802.1Q, IEEE 802.1p, IEEE802.1x, IEEE 802.1W, SNMP, IGMP standards
- Four 10/100/1000M self-sensing RJ45 port, support IEEE802.3bt Type 3 & Type 4 PoE power supply function
- Four gigabit SFP fiber ports are capable of high bandwidth and long distance transmission
- All ports support auto-flip (Auto MDI/MDIX)

- Each PoE port can provide power 60W and up to 95W
- Supply 30W PoE+ DC power for powered devices
- Port security, allows setting different security level on each port with password, 802.1x, IP&MAC address Guard, RADIUS, & TACACS+
- Support IEEE802.3x full duplex flow control and duplex back pressure flow control
- Two SFP fiber optic ports, support 2.5Gbps uplink network speed
- 8K MAC address table, 12Gbps backplane bandwidth
- Its 4.5KV network port surge protection can adapt to harsh outdoor environment
- Compatible with Port-based VLAN, IEEE 802.1Q VLAN and GVRP protocols, & Dynamic VLAN MAC Address Authentication
- Support authentication features including TACACS+, IEEE 802.1x, HTTPS and SSH, and MAC address port locking
- Support SNMP V1/V2c/V3 for different levels network management • Adopt RMON to effectively improve network surveillance and forecasting capabilities Auto accident report through E-mail and the output of electric relay

PRODUCT SPECIFICATIONS

Model	LPS3400ATMP
Interface Characteristics	
Fixed Port	4*10/100/1000M PoE ports (Data/Power) 2*100/1000M uplink SFP slot ports (Data) 1*RS232 console port(115200,N,8,1) 2 set of V+, V- redundant DC power interface (5 Pin Phoenix terminal)
Ethernet Port	Port 1-4 support 10/100/1000Base-T auto-sensing, full/half duplex MDI/MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meters) 100BASE-TX: Cat5 or later UTP(≤100 meters) 1000BASE-T: Cat5e or later UTP(≤100 meters)
SFP Slot Port	Gigabit SFP optical fiber port, default no include optical modules (optional single-mode / multi-mode, single fiber / dual fiber optical module. LC)
Optical Cable/ Distance	Multi-mode: 850nm/ 0-500M, Single-mode: 1310nm/ 0-40KM, 1550nm/ 0-120KM.
Chip Parameter	
Network	L2+

Management Type	
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	16Gbps
Forwarding Rate@64byte	8.93Mpps
CPU	416MHz
DRAM	1G
FLASH	128M
MAC	8K
Buffer Memory	4M
Jumbo Frame	9.6K
LED Indicator	Power/ System: SYS (Green) , Network: Link (Yellow), Fiber port: L/A (Green), PoE: PoE (Green)
Reset Switch	Yes, (Press and hold for 10 seconds and release, the switch will restore the factory settings)
PoE & Power Supply	
PoE Port	Port 1 to 4, IEEE802.3af/at
PoE Management	Total power limit of PoE power supply PoE output power allocation, PoE on/off & af/at PoE working status, Delay start of power supply PoE output priority configuration,Scheduling of PoE operation and time
Power Supply Pin	1/2(+) 3/6(-)
Max Power Per Port	30W, IEEE802.3af/at
Power Consumption	Standby<8W, Full load af<60W, at<120W
Working Voltage	DC48-57V, 5 Pin industrial Phoenix terminal, support anti-reverse protection.

Power Supply	No, optional 48V/60W or 48V/120W industrial power supply
Physical Parameter	
Operation TEMP / Humidity	-40~+80°C, 5%~90% RH Non condensing
Storage TEMP / Humidity	-40~+85°C, 5%~95% RH Non condensing
Dimension (L*W*H)	145*134.5*47.5mm
Net /Gross Weight	<0.6kg / <0.8kg
Installation	Desktop, 35mm DIN rail
Certification & Warranty	
Lightning Protection	Lightning protection: 6KV 8/20us, Protection level: IP30 IEC61000-4-3(RS):10V/m(80~1000MHz) FCC Part 15/CISPR22 (EN55022): Class B IEC61000-6-2 (Common Industrial Standard) IEC61000-4-9 (Pulsed magnet field): 1000A/m IEC61000-4-10(Damped oscillation): 30A/m 1MHz IEC61000-4-12/18 (Shockwave): CM 2.5KV, DM 1kV IEC61000-4-4(EFT): Power cable: ±4kV, data cable: ±2kV IEC61000-4-16 (Common-mode transmission): 30V, 300V, 1s IEC61000-4-2(ESD): ±8kV contact discharge, ±15kV air discharge IEC61000-4-6 (Radio frequency transmission):10V(150kHz~80MHz) IEC61000-4-5(Surge): Power cable:CM±4kV/DM±2kV, data cable: ±4kV IEC61000-4-8 (Power frequency magnetic field):100A/m, 1000A/m, 1s to 3s
Mechanical Properties	IEC60068-2-6 (anti vibration) IEC60068-2-32 (free fall), IEC60068-2-27 (anti shock)
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS
Warranty	3 years

Network Management Features	
Interface	IEEE802.3X (Full-duplex) Port temperature protection setting Port green Ethernet Energy-saving setting Broadcast storm control based on port speed The speed limit of the message flow in the access port. The minimum particle size is 64Kbps.
Layer 3 Features	Support L2+ network management function, IPV4/IPV6 dual stack management Support L3 routing and forwarding, and support communication between different network segments and different VLAN Support static routing/default routing with a maximum of 128 entries Support ARP protocol maximum entries 1024
VLAN	Port configuration of Access, Trunk, Hybrid. VLAN based on MAC, VLAN based on the protocol Voice VLAN, 4K VLAN based on port, IEEE802.1q, QinQ configuration
Port Aggregation	LACP, Static aggregation Max 3 aggregation groups and 8 ports per group.
Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)
Industrial Ring Network Protocol	G.8032 (ERPS), Recovery time less than 20ms 250 Ring at most, Max 250 devices per ring.
Multicast	MLD Snooping v1/v2, Multicast VLAN IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out
Port Mirroring	Bidirectional data mirroring based on port
QoS	Flow-based Rate Limiting Flow-based Packet Filtering 8*Output queues of each port 802.1p/DSCP priority mapping Diff-Serv QoS, Priority Mark/Remark

	Queue Scheduling Algorithm (SP, WRR, SP+WRR)
ACL	Port-based Issuing ACL, ACL based on port and VLAN L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL based on MAC, Destination MAC address, IP Source, Destination IP, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.
Security	Mac black holes, IP source protection IEEE802.1X & MAC address authentication Broadcast storm control, Backup for host datum SSH 2.0, SSL, Port isolation, ARP message speed limit User hierarchical management and password protection Anti-DoS attack, AAA & RADIUS & TACACS+ certification IP-MAC-VLAN-Port binding, ARP inspection, MAC learning limit
DHCP	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay
Management	One-key recovery Cable Diagnose, LLDP, SNMP V1/V2/V3 NMS platform cluster management (LLDP+SNMP) Download & Management on FTP, TFTP, Xmodem, SFTP NTP, System work log, Ping Test, CPU instant utilization status view Web Management (HTTPS), Console/AUX Modem/Telnet/SSH2.0 CLI
System	Category 5 Ethernet network cable Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later; TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network
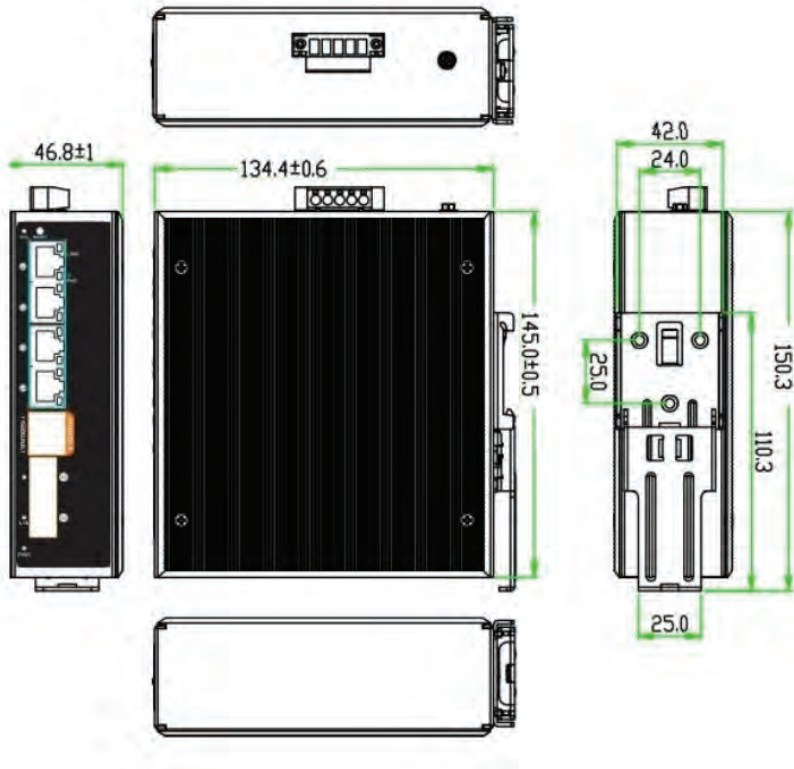
PACKAGE CONTENTS

1. LinkPower LPS3400ATM Gigabit PoE Switch
2. User's Manual
3. Quick Install Guide
4. Warranty Information