

LinkPower™ LPS7844ATM

Industrial L3 Managed 16-Port Gigabit PoE Network Switch with 10 Gb Fiber Uplink Ports



APPLICATIONS

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

The LinkPower™ LPS7844ATM Industrial L3 Managed 16-Port PoE (Power over Ethernet) Network Switch offers 8 PoE Ports, 4 Gigabit RJ45 and 4 10 Gigabit SFP Uplink Ports with dual power input redundancy, 48~57V DC and up to 30W Type 4 per PoE port. The following are the product highlights:

- ***High-performance hardware and software systems***

The 10G L3 Industrial PoE Switch uses top-rated 10G network switching chip, multiple layers PCB design, as well as the in-house switch software. With combination of powerful hardware and software, it offers the product quality from forwarding stability, packet processing speed, and other great Layer 3 network features.

- ***Support the fast ring network protocol, free configuration***

The switch supports stable and reliable fast Ring Protection Protocol (RSTP) / MSTP. It features real ring loop redundancy protection. Besides, there is no need to configure 10G port when users using this switch to reduce probability of network failure.

- ***Stringent network security***

Supports dynamic or static binding by users' definition, such as IP, MAC, VLAN, PORT, etc. Support port isolation, to prevent communication between two neighbor network equipment within the same broadcast domain, for reducing network risk; Supports perfect storm control function which can suppress broadcast, multi-cast, and uni-cast storm; Support specific ARP inspection which can effectively prevent "ARP spoofing attack" created by hackers or attackers via ARP packets.

- ***Convenient management and maintenance***

By easy WEB interface (http and https protocol supported), the user can conveniently operate and configure all kinds of functions in this switch. Support management by CLI, Telnet, Console port.

- 8*10/100/1000M PoE RJ45 ports + 4*10/100/1000M RJ45 ports + 4*10G SFP+ ports.
- Support L3 Switching features, including Static route, default route, ARP, VLAN, TRUNK, mirroring, port isolation/flow control/speed limit, storm control, QOS, ACLs etc.
- Port security, allows setting different security level on each port with password, 802.1x, IP&MAC address guard, RADIUS, & TACACS+.
- Support spanning tree STP, RSTP and MSTP.
- Jumbo frames support up to 9.6K kilobytes.
- Support enhanced management through WEB, CLI, TELNET, SNMP.
- Support cable diagnosis.
- 1-8 port support PoE. Compliant with both IEEE 802.3af/at. Allow PoE configuration for each PoE port.

PRODUCT SPECIFICATIONS

| Model | LPS7844ATM |
|----------------------------------|--|
| Interface Characteristics | |
| Fixed Port | 4*1/10G uplink SFP+ ports (Data) Power off alarm switch port (FAULT) 8*10/100/1000Base-T PoE ports (Data/Power) 4*10/100/1000Base-T uplink RJ45 ports (Data) 2 set of V+, V- redundant DC power ports (6 Pin Phoenix terminal) |
| Ethernet Port | Port 1-12 support 10/100/1000Base-T auto-sensing, full/half duplex MDI/MDI-X self-adaption |
| Twisted Pair | 10BASE-T: Cat3,4,5 UTP(≤100 meters) |
| Transmission | 100BASE-TX: Cat5 or later UTP(≤100 meters) 1000BASE-T: Cat5e or later UTP(≤100 meters) |
| Optical Fiber Port | 1/10G SFP+ optical fiber port, default no include optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC) |

| | |
|------------------------------|---|
| Optical Fiber Port Expansion | Turbo overclocking 2.5G optical module expansion and ring network |
| Optical Cable/Distance | Multi-mode: 850nm / 0~500m, 0~300M(10G), Single-mode: 1310nm / 0~ 40km, 1550nm / 0~120km. |
| Chip Parameter | |
| Network Management Type | L3 |
| Network Protocol | IEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3ae 10GBase-SR/LR, IEEE802.3x |
| Forwarding Mode | Store and Forward(Full Wire Speed) |
| Switching Capacity | 176Gbps |
| Forwarding Rate@64byte | 77.38Mpps |
| CPU | 500MHz |
| DRAM | 2G |
| FLASH | 128M |
| MAC | 32K |
| Buffer Memory | 32M |
| Jumbo Frame | 9.6K |
| LED Indicator | System: SYS (Green), Network: Link (Yellow), PoE: PoE (Green), Fiber port: L/A (Green) |
| Reset Switch | Yes, press and hold the switch for 10 seconds and release it to restore |

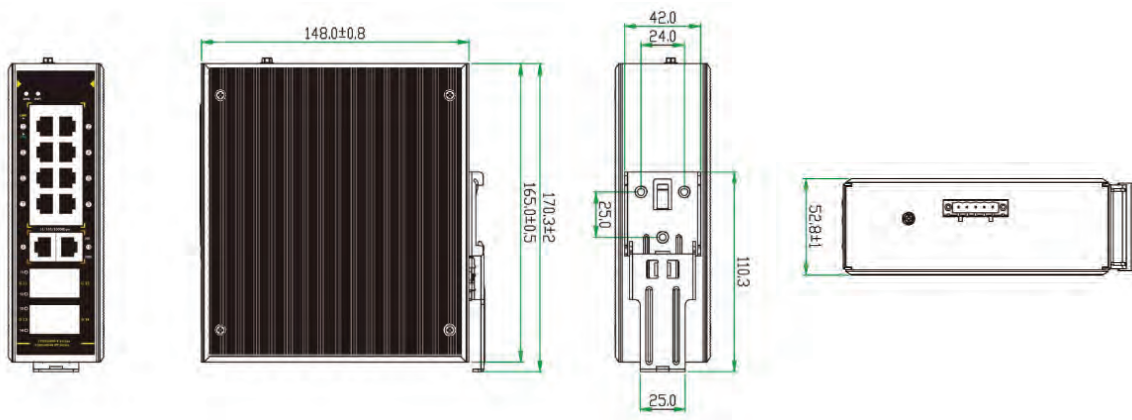
| | |
|-------------------------------------|--|
| | the factory settings |
| PoE & Power Supply | |
| PoE Port | Port 1 to 8, IEEE 802.3 af/at |
| PoE Management | PoE output power allocation, on/off & af/at, PoE working status Total power limit of PoE power supply, Delay start of power supply PoE output priority configuration, Scheduling of PoE operation and time |
| Power Supply Pin | 1/2 (+) 3/6 (-) |
| Max Power Per Port | 30W, IEEE 802.3 af/at |
| Power Consumption | Standby<15W, Full load af<120W, at<240W |
| Working Voltage | DC48-57V, 6 Pin industrial Phoenix terminal, support anti-reverse protection. |
| Power Supply | No, optional 48V/120W or 48V/240W 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) | 166*150*75mm |
| Net /Gross Weight | <1.9kg / <2.4kg |
| Installation | Desktop, 35mm DIN rail |
| Certification & Warranty | |
| Lightning Protection | Lightning protection: 6KV 8/20us, Protection level: IP40 IEC61000-4-2(ESD): ±8kV contact discharge, ±15kV air discharge IEC61000-4-3(RS): 10V/m(80~1000MHz) IEC61000-4-4(EFT): power cable: ±4kV, data cable:±2kV IEC61000-4-5(Surge): power cable: CM±4kV/DM±2kV, data cable: ±4kV IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz) IEC61000-4-8(power frequency magnetic field):100A/m, 1000A/m ,1s to |

| | |
|------------------------------------|--|
| | <p>3s</p> <p>IEC61000-4-9(pulsed magnet field): 1000A/m</p> <p>IEC61000-4-10(damped oscillation): 30A/m 1MHz</p> <p>IEC61000-4-12/18(shockwave):CM 2.5kV, DM 1kV</p> <p>IEC61000-4-16(common-mode transmission):30V, 300V,1s</p> <p>FCC Part 15/CISPR22(EN55022): Class B</p> <p>IEC61000-6-2(Common Industrial Standard)</p> |
| Mechanical Properties | <p>IEC60068-2-6 (anti vibration)</p> <p>IEC60068-2-27 (anti shock)</p> <p>IEC60068-2-32 (free fall)</p> |
| Certification | <p>CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS</p> |
| Warranty | <p>3 years</p> |
| Network Management Features | |
| Interface | <p>IEEE802.3X (Full-duplex)</p> <p>Port temperature protection setting</p> <p>No connection port automatic sleep</p> <p>Port green Ethernet Energy-saving setting</p> <p>Broadcast storm control based on port speed</p> <p>SFP+ optical port DDMI real-time digital diagnosis</p> <p>The speed limit of the message flow in the access port, minimum particle size is 64Kbps.</p> |
| Layer 3 Features | <p>IPV4 Equal Cost Routing</p> <p>NG protocol, maximum 1000 entries</p> <p>ARP protocol, maximum 1000 entries</p> <p>Pingv6, Telnetv6, TFTPv6, DNSv6, ICMPv6</p> <p>IPV4/IPV6 VRRP, the maximum group is 255</p> <p>IPV4/IPV6 VLANIF interface supports up to 128</p> <p>IPV4/IPV6 static route/default route supports up to 128 entries</p> |

| | |
|------------------|--|
| | <p>IPv4 dynamic routing, RIPv1/v2, OSPFv2, BGP4+, 4000 routing entries</p> <p>IPv6 dynamic routing OSPFv3, BGP+, RIPv6, IPv6 management, 1000 routing entries</p> <p>L3 network management function, IPv4/IPv6 dual-stack management</p> <p>L3 routing and forwarding, support communication between different network segments and different VLAN</p> |
| VLAN | <p>Voice VLAN, QinQ configuration, IEEE802.1q</p> <p>VLAN based on MAC, VLAN based on the protocol</p> <p>4K VLAN based on port, Port configuration of Access, Trunk, Hybrid.</p> |
| Port Aggregation | <p>LACP, Static aggregation</p> <p>Max 8 aggregation groups and 8 ports per group.</p> |
| Spanning Tree | <p>STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)</p> |
| Industrial Ring | <p>250 Ring at most, Max 250 devices per ring.</p> |
| Network Protocol | <p>G.8032 (ERPS), Recovery time less than 20ms</p> |
| Multicast | <p>IGMP Snooping v1/v2, Max 1024 multicast groups</p> <p>MLD Snooping v1/v2, Multicast VLAN, Fast log out</p> |
| Port Mirroring | <p>Bidirectional data mirroring based on port</p> |
| QoS | <p>Diff-Serv QoS, Priority Mark/Remark</p> <p>Queue Scheduling Algorithm (SP, WRR, SP+WRR)</p> <p>Flow-based Rate Limiting, Flow-based Packet Filtering</p> <p>8*Output queues of each port, 802.1p/DSCP priority mapping</p> |
| ACL | <p>Port-based Issuing ACL, ACL based on port and VLAN</p> <p>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.</p> |
| Security | <p>Broadcast storm control, Backup for host datum</p> <p>SSH 2.0, SSL, Port isolation, ARP message speed limit</p> <p>AAA & RADIUS, MAC learning limit, Mac black holes</p> <p>User hierarchical management and password protection</p> |

| | |
|------------|--|
| | <p>IP-MAC-VLAN-Port binding, ARP inspection, Anti-DoS attack</p> <p>IP source protection, IEEE802.1X & MAC address authentication</p> |
| DHCP | DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay |
| Management | <p>NMS platform cluster management (LLDP+SNMP)</p> <p>Download & Management on FTP, TFTP, Xmodem, SFTP</p> <p>One-key recovery, Cable Diagnose, LLDP, SNMP V1/V2/V3</p> <p>NTP, System work log, Ping Test, CPU instant utilization status view</p> <p>Web Management (HTTPS), Console/AUX Modem/Telnet/SSH2.0 CLI</p> |
| System | <p>Category 5 Ethernet network cable</p> <p>Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later</p> <p>TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network</p> |

DIMENSIONS



PACKAGE CONTENTS

1. LinkPower LPS7844ATM Gigabit PoE Switch
2. User’s Manual
3. Quick Install Guide
4. Warranty Information



Product Information Online: <http://www.inscapedata.com/>

Corporate Headquarters
 2012 Hartog Dr, San Jose, CA, 95131, U.S.A.
 PHONE +1.408.392.9800 FAX +1.408.392.9812 EMAIL sales@inscapedata.com