# LinkPower™ LPS3400ATMP-300-T1 Outdoor Layer 2+ Managed Gigabit PoE

Network Switch with Gigabit Fiber Uplink





### **APPLICATIONS**

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

The LinkPower™ LPS3400ATMP-300-T1 Layer 2+ 6-Port Managed Outdoor PoE (Power over Ethernet) IEEE802.3bt Switch offers 4-Port Gigabit PoE with 2 SFP Uplink Port Network Switch with dual power input redundancy with 120V~240AC and/ or 48V DC. This is the industry first outdoor weatherproof industrial igabit Ethernet switch that delivers data and high power DC, i.e., up to 95W Type 4 per PoE port, over one single network cable protected with an IP68 compliant weatherproof enclosure, and the total system power is 300W. The outdoor weatherproof rating of the systems is strictly based on how the top cover is closed. For the hinged cover without the four top cover screws, the outdoor weatherproof rating is IP66 and, otherwise, the outdoor rating is IP68 with the four top cover screws securely closed with the enclosure.

The LPS3400ATMP-300-T1 Outdoor 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 weather-proof 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 LPS3400ATMP-300-T1 Layer 2+ Managed Gigabit PoE Series is designed for harsh outdoor environments with features such as a wide working temperature range from -30°C to +70°C and 3KV Ethernet port surge protection that can ensure the reliability of the uninterrupted PoE network operations. The LPS3400ATMP-300-T1 Outdoor 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 LPS3400ATMP-300-T1 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 LPS3400ATMP-T1 Gigabit PoE Switch offers the following key features:

- Dual Power Input Redundancy with 120V~240AC and/or 48V 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 95W PoE++ DC power for powered devices compatible with IEEE802.3af/at
- · 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
- Working temperature from -30°C ~ +70°C at full load
- · 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

\*\* LinkPower LPS Outdoor PoE Series Products are protected under several

of Inscape Data's U.S. Patents.

Model Description	Outdoor 6-Port Layer 2+ Gigabit Managed PoE Switch
Model Name	LPS3400ATMP-300-T1
Port Interface	4 * 10/100/1000 RJ45 Ports, 2 * Gigabit LC Optical Ports
Optical Transmission Distance	20KM, 1310nm
Forwarding Mode	Save and forwarding, link-speed forwarding (Frame Size Range: 64~1536)
Network Media	10BASE-T: UTP Cat 3, 4, 5 (≤100 Meters) , 100BASE-TX: UTP Cat 5/5e/6 (≤ 100 Meters) , 1000BASE-TX: UTP Cat 5/5e/6 (≤100 Meters)
Performance Specification	Bandwidth: 12Gbps (non-blocking) Network Latency (100 to 100M bps): maximum delay less than 50 microseconds Packet forwarding rate: 8.93Mbps@64byts MAC address table: 8K MTBF: 539608 hours Support protection for over-current, over-voltage and reverse connection
Network Protocols and PoE Standards	IEEE 802.3i 10BASET IEEE 802.3u 100BASETX IEEE 802.3x Flow Control IEEE 802.3abt Type 3 60W & Type 4 95W
LED Indicator	Running Light: SYS, Interface Light: LINK, PoE
Power Supply	AC Input voltage: 120V ~ 240V AC DC Input voltage: 48V~57V Power Connector: 3-Pin AC & 4-Pin DC industrial terminal Block System Power : 300W Surge Protection: 6kv TP Port Surge Protection: 4.5Kv
Enclosure Dimension	LxWxH: (12 x 10 x 4 inch, 304.8 x 250.4 x 101.6 mm)
Working Environment	Working Temperature: -30~70℃ Storage Temperature: -40~85℃ Relative Humidity: 5%~95%, non-condensing Storage Humidity: 10%~95%, non-condensing Working Height: 3000M above sea level (10,000ft) Storage Height: 3000M above sea level (10,000ft)
Radiation	CE mark, commercial FCC Part 15 Class B
Certification	CE Mark ,Commercial CE/LVD FCC, RoHS、C-TICK, UL
Warranty	3 Years

# **PACKAGE CONTENTS**

- LinkPower LPS3400ATMP-300-T1 Gigabit PoE Switch
- User's Manual

**Inscape Data** 

- Quick Install Guide
- 3-Year Warranty Information
- APCK0001 AC Power Cable Kit

- PFCK0001-3 Power & Fiber Connector Kit
- ECK0001-4 Ethernet Connector Kit
- WMK0001 Wall Mount Kit with 4 Flanges (Standard)
- MMK0001-L Pole Mount Kit (Optional)

 THE LEADING
 Product Information Online: http://www.inscapedata.com/lps3000-t1-mgt.htm

 OUTDOOR NETWORK
 Corporate Headquarters

 APPLIANCE COMPANY
 1620 Oakland Road, Suite D101, San Jose, CA 95131, U.S.A.

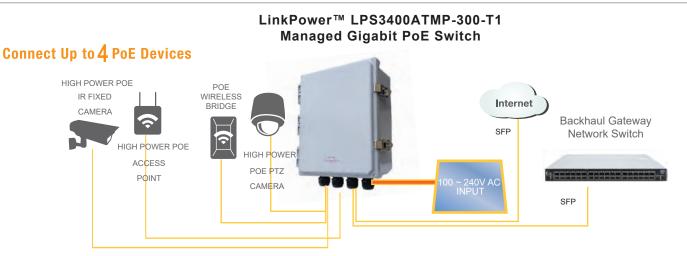
**PHONE** +1.408.392.9800 **FAX** +1.408.392.9812

Total Turnkey Solutions for Outdoor PoE, Wired/Wireless, and IP Video Applications EMAIL sales@inscapedata.com

© Copyright 2018, Inscape Data Corporation, All Rights Reserved. LinkPower, AirEther, AirGoogle and Inscape Data are trademarks of Inscape Data Corporation Disclaimer: While every effort is made to ensure the information given is accurate, Inscape Data Corporation does not accept liability for any errors or mistakes which may arise. All specifications are subject to change without notice.

# SOFTWARE SPECIFICATIONS

Layer 2+ Switchin	Ig
Spanning Tree Protocol (STP)	Standard Spanning Tree 802.1d Rapid Spanning Tree (RSTP) 802.1w
G.8032 ERPS	<50ms ring protection for industrial high reliable application
Aggregation	Link Aggregation Control Protocol (LACP) IEEE 802.3ad; Up to 7 groups ; Up to 14 ports per group
VLAN	Support up to 4K VLANs simultaneously (out of 4096 VLAN IDs); Port-based VLAN; 802.1Q tag-based VLAN, GVRP, Dynamic VLAN MAC Address Authentication
IGMP v1/v2 snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters; supports 1024 multicast groups (source-specific multicasting is not supported)
Security	
Secure Shell (SSH) Protocol	SSH secures Telnet traffic in and out the switch, SSH v1 and v2 are supported
Secure Sockets Layer (SSL), HTTPS	SSL encrypts the http traffic, allowing advance secure access to the browser-based management GUI in the switch
Port Security	Locks MAC Addresses to ports, and limits the number of learned MAC addresses
DHCP Snooping	prevent unauthorized configuration and use of IP addresses, while providing support for IP Source Guard and ARP detection
IP Source Guard	Prevents datagram with spoofed addresses from being in the network
ARP Inspection	Prevent ARP spoofing attacks and ARP
Storm control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port
ACLs	Support for up to 256 entries; Drop or rate limitation based on source and destination MAC VLAN ID or IP address, protocol, port, differentiated services code point (DSCP) / IF precedence, TCP/ UDP source and destination ports, 802.1p priority, Ethernet type, Internet Control Message Protocol (ICMP) packets, IGMP packets, TCP flag
Quality of Service	
Hardware	Support 8 hardware queues
Scheduling	8 COS (Class of Service) queues per port support strict priority and weighted round-robin (WRR)
Classification	Port based; 802.1p (PCP) VLAN priority based;
Rate Limiting	Ingress policer; egress shaping and rate control; per VLAN,per port and flow based
Management	(Web/ SSL, Telnet/ SSH, ping, Trivial File Transfer Protocol (TFTP), SNMP, Syslog)
Web GUI	Built-in switch configuration utility for browser-based device configuration (HTTP/HTTPs).
interface	Supports configuration, system dashboard, maintenance, and monitoring
Dual Image	Dual image provides independent primary and secondary OS files for backup while upgrading
Firmware upgrade	Web browser upgrade (HTTP/ HTTPs) and TFTP; Upgrade through console port as well
Port mirroring	Traffic on a port can be mirrored to another port for analysis with a networ analyzer or RMON probe. Up to <b>N-1 (N is Switch's Ports)</b> ports can be mirrored to sing destination port. A single session is supported.
Other management	Single IP management; HTTP/HTTPs; SSH; RADIUS; TACACS+, DHCP Client; SNTP; cable diagnostics; ping; syslog; Telnet client (SSH secure support)



## STANDARD ACCESSORIES

ECK0001-2 **Ethernet Connector Kit** 





Wall Mounting Kit

WMK0001

APCK0001 **AC Power Cord Kit** 



Mounting Kit (For Pole Diameter from 2" to 4.5")

,,,,,,,,

765432

PD and PSE Eight-Pin RJ45 Modular Jack

8

MMK0001-L Mast

**OPTIONAL ACCESSORIES** 

**ELECTRICAL PIN OUT DIAGRAM** 

Т

WPCK0001-3-4 **DC Power Cord Kit** 

10/100/1000Mbps

POWER PIN OUT

12345678

 $\top \top \top \top \top \top \top \top \top$ 



1+Power

2+Power

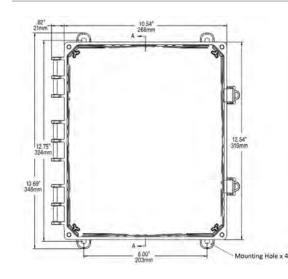
3–Power

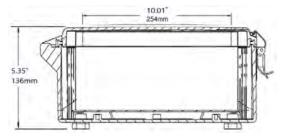
6–Power 7

4 5

8

#### **ENCLOSURE DRAWINS & INTERFACES**





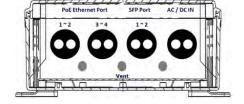


10"x5"x4" (WxLxH) Internal (Hotel) Space for Wiring Storage



**Pole Mount View** 

LPS3400ATMP-T1 Connector Interfaces



To Use Conduit Connectors, the Diameter of Hole Size is 1.0 Inch

- 1. Weatherproof PoE Connector (1~4)
- 2. Weatherproof SFP Cable Connector  $(1 \sim 2)$
- 3. Weatherproof AC / DC Power Cable Connector
- 4. Vent Plug

# THE LEADING OUTDOOR NETWORK APPLIANCE COMPANY Product Information Online: http://www.inscapedata.com/lps3000-t1-mgt.htm

Corporate Headquarters 1620 Oakland Road, Suite D101, San Jose, CA 95131, U.S.A. **PHONE** +1.408.392.9800 **FAX** +1.408.392.9812 EMAIL sales@inscapedata.com

## Total Turnkey Solutions for Outdoor PoE, Wired/Wireless, and IP Video Applications

Inscape

© Copyright 2018, Inscape Data Corporation, All Rights Reserved. LinkPower, AirEther, AirGoogle and Inscape Data are trademarks of Inscape Data Corporation, Revision 1.8 Disclaimer: While every effort is made to ensure the information given is accurate, Inscape Data Corporation does not accept liability for any errors or mistakes which may arise. All specifications are subject to change without notice