LinkPower™ LPS2000-T1

Outdoor Gigabit PoE Network Switch with Gigabit Fiber Uplink

| IEEE 802.3at PoE Plus 30W | Gigabit & Fiber Ports | Ethernet Surge Protection | IP68 All Weather -40°C to +75°C |

LPS2400-T1

LPS2802-T1

APPLICATIONS

- 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™ LPS2000-T1 Outdoor PoE Switch Series offers 4-Port and 8-Port Gigabit Unmanaged IEEE802.3af/at PoE (Power over Ethernet) Network Switch with dual power input redundancy with 120V~240AC and 48V DC with 2-Port Gigabit Fiber and is the industry first outdoor weatherproof industrial Gigabit Ethernet switch that delivers data and power over one single network cable protected with an IP66/68 compliant weatherproof enclosure. 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 LPS2000-T1 Unmanaged Gigabit PoE Series has the following four sub-models:

Product Line	Product Model	PoE Output	Model Description
LPS2000-T1 Outdoor Unmanaged Gigabit PoE Network Switch Series	LPS2400AF-T1	30W per Port / 62W Total	Outdoor Managed 10/100/1000Mbps 4-Port 802.3af/at PoE Switch with 2 SFP Fiber 1.25G Uplink Ports, Up to 30W and an Average of 15.4W per PoE Port, Not to Exceed 62W for a Total of 4 Ports
	LPS2400AT-T1	30W per Port / 120W Total	Outdoor Managed 10/100/1000Mbps 4-Port 802.3af/at PoE Switch with 2 SFP Fiber 1.25G Uplink Ports, Up to 30W per PoE Port
	LPS2802AF-T1	30W per Port / 150W Total	Outdoor Managed 10/100/1000Mbps 8-Port 802.3af/at PoE Switch with 2 SFP Fiber Port 1.25G Uplink Ports, Up to 30W and an Average of 15.4W per PoE Port, Not to Exceed 150W for a Total of 8 Ports
	LPS2802AT-T1	30W per Port / 240W Total	Outdoor Managed 10/100/1000Mbps 8-Port 802.3af/at PoE Switch with 2 SFP Fiber 1.25G Uplink Ports, Up to 30W per PoE Port

The LPS2000-T1 Unmanaged Gigabit PoE Series is designed for industrial and commercial applications, e.g., video surveillance, remote security, wireless mesh, carrier wifi installations, and etc. The terminal equipment, i.e., powered devices, such as weather-proof 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 LPS2000-T1 Unmanaged Gigabit PoE Series is designed for harsh outdoor environments with features such as a wide working temperature range from -30ºC to +70ºC and 3KV Ethernet port surge protection that can ensure the reliability of the uninterrupted PoE operations. The LPS2000-T1 Gigabit PoE Series offers the following key features:
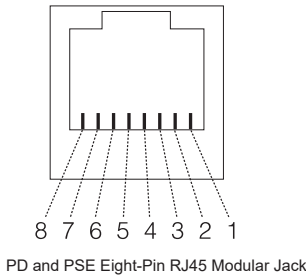
KEY PRODUCT FEATURES

- 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, IEEE 802.1x, IEEE 802.1W, SNMP, IGMP standards
- Up to eight 10/100/1000M self-sensing RJ45 port, support IEEE802.3af/at and PoE+ PoE power supply functions
- Two 1.25 Gigabit SFP fiber ports are capable of high bandwidth and long distance transmission
- 8.8G backplane bandwidth
- 8K MAC address table

- Its 3KV network port surge protection can adapt to harsh outdoor environment
- All ports support auto-flip (Auto MDI/MDIX)
- Each PoE port can provide power up to 15.4W 802.3af and/or 30W for 802.3at
- Supply power for powered devices compatible with IEEE802.3af/at and PoE+
- Support IEEE802.3x full duplex flow control and duplex backpres-sure flow control
- Working temperature from -30˚C ~ +70˚C at full load

*** LinkPower LPS Outdoor PoE Series Products are protected under several of Inscape Data's U.S. Patents. ***

TECHNICAL SPECIFICATIONS

Product Model	LPS2400AF-T1	LPS2400AT-T1	LPS2802AF-T1	LPS2802AT-T1
Product Name	Outdoor Gigabit Unmanaged 4-Port 802.3af/at PoE Switch with 2 SFP Fiber Uplink Ports		Outdoor Gigabit Unmanaged 8-Port 802.3af/at PoE Switch with 2 SFP Fiber Uplink Ports	
Connector	RJ45 Port: 4x10/100/1000BaseT(X) self-detect		RJ45 Port: 8x10/100/1000BaseT(X) self-detect ports	
	Fiber Port: 2x100/1000Base SFP ports			
Switching Performance	Priority Queue: 4			
	MAC Address Table Size: 8 K			
	Packet Buffer Memory: 1Mbit			
	Bandwidth: 12G (Non-blocking)		Bandwidth: 48G (Non-blocking)	
Network Medium	10BASE-T: Cat3/ 4/ 5 UTP (≤100m)			
	100BASE-TX: Cat5 or more UTP (≤100m)			
	1000BASE-TX: Cat5 or more UTP (<=150m)			
	Single mode (9/125um) fiber transmission, the transmission distance can be up to 25km (Default dual fiber, can be customized single fiber)			
Performance Specifications	MTBF: 300,000 hours			
	Database: Telcordia (Bellcore), GB			
Protocols and Standards	IEEE 802.3: CSMA/CD			
	IEEE 802.3i: 10Base-T			
	IEEE 802.3u: 100Base-T			
	IEEE 802.3ab: 1000Base-T			
	IEEE 802.3x: Flow Control			
	IEEE 802.1af: DTE Power via MDI			
	IEEE 802.3af: Power-over-Ethernet standard			
	IEEE 802.3at: Power-over-Ethernet standard			
LEDs Status	PWR, 10/100/1000, PoE , SFP Network			
PoE Spec & Power Supply	AC Input voltage: 120V ~ 240V AC			
	DC Input voltage: 48V			
	Output voltage: 48V DC			
	IEEE802.3af standard, Up to 15.4W per PoE Port, Total PoE Output power is 62W for 4 ports			
	IEEE802.3at standard, Up to 30W per PoE Port, Total PoE Output power is 120W for 4 ports			
	IEEE802.3af standard, Up to 15.4W per PoE Port, Total PoE Output power is 150W for 8 ports			
	IEEE802.3at standard, Up to 30W per PoE Port, Total PoE Output power is 240W for 8 ports			
	Power Pin Assignment: 1/+; 3/6- Mode A			
	Support OCP (Over-Current Protection) and electronic protection			
	Connection: 3-pin pluggable connecting terminal			
Dimensions/Weight	Enclosure: IP68 protection grade, shell Dimension (LxWxH): (12 x 10 x 4 inch, 304.8 x 250.4 x 101.6 mm)			
	Weight: 3.6KG			
	Installation Method: Wall mount / Mast mount			
Working Environment	Operating Temperature: -30℃ ~ +70℃			
Industrial Standard	**EMI:** FCC Part 15 Subpart B Class A, EN 55022 Class A			
	EMS: EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3, EN 61000-4-4 (EFT) Level 3, EN 61000-4-5 (Surge) Level 3, EN 61000-4-6 (CS) Level 3, EN 61000-4-8			
	Traffic Control: NEMATS-2			
	Rail Traffic: EN50155,EN50121-4			
	Mechanical Project: IEC60068-2-6, IEC60068-2-27, IEC60068-2-32 Industrial: IEC 61000-6-2			
Safety	CE Mark ,commercial CE/LVD EN60950, RoHS, UL60591-1			
Warranty	3 years warranty			

ELECTRICAL PIN OUT DIAGRAM

8 7 6 5 4 3 2 1

PD and PSE Eight-Pin RJ45 Modular Jack

PSE Pinout		
RJ45 Conductor Pin#	802.3af & at Mode A	802.3at Mode B
1	TxRx A+ DC+	TxRx A+
2	TxRx A- DC+	TxRx A-
3	TxRx B+ DC-	TxRx B+
4	TxRx C+	TxRx C+ DC+
5	TxRx C-	TxRx C- DC+
6	TxRx B- DC-	TxRx B-
7	TxRx D+	TxRx D+ DC-
8	TxRx D-	TxRx D- DC-

PD Pinout		
RJ45 Conductor Pin#	802.3af & at Mode A	802.3at Mode B
1	TxRx A+ DC+	TxRx A+
2	TxRx A- DC+	TxRx A-
3	TxRx B+ DC-	TxRx B+
4	TxRx C+	TxRx C+ DC+
5	TxRx C-	TxRx C- DC+
6	TxRx B- DC-	TxRx B-
7	TxRx D+	TxRx D+ DC-
8	TxRx D-	TxRx D- DC-

SYSTEM CONFIGURATION

LinkPower™ LPS2000-T1
Gigabit PoE Switch

Connect Up to 4 PoE Devices

POE FIXED CAMERA

POE ACCESS POINT

POE WIRELESS BRIDGE

POE PTZ CAMERA

Internet

SFP

NVR600 Series

100 ~ 240V AC INPUT

SFP/RJ45 Combo

STANDARD ACCESSORIES

ECK0001
Ethernet Connector Kit

WMK0001
Wall Mounting Kit

APCK0001
AC Power Cord Kit
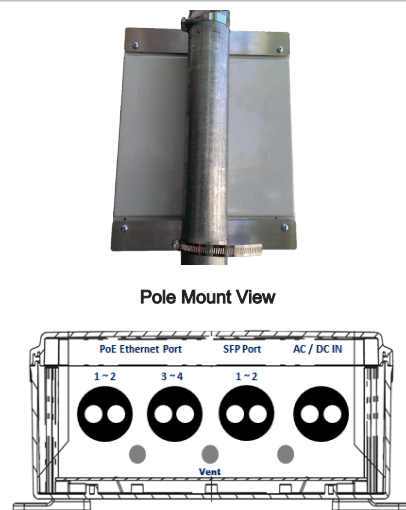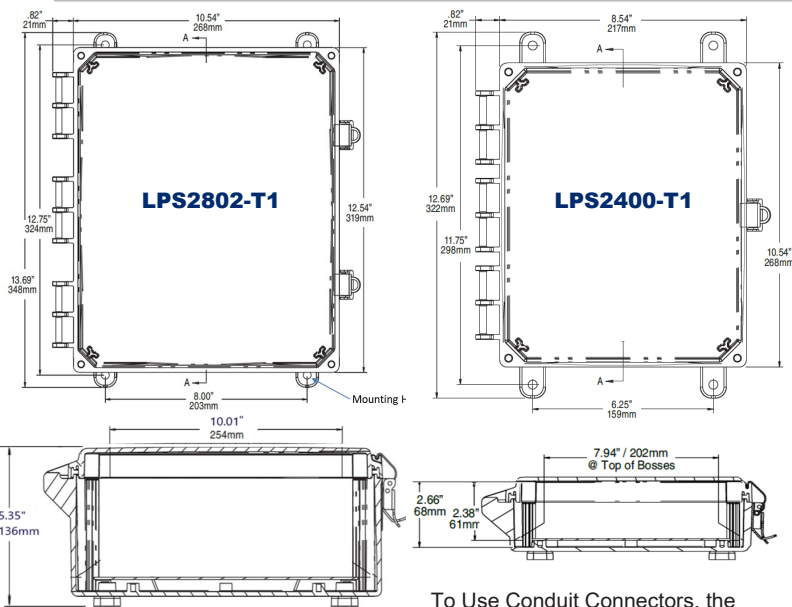
OPTIONAL ACCESSORIES

Mast Mounting Kit:
MMK0001-S: LPS2400
MMK0001-L: LPS2802
(For Pole Diameter from 2" to 4.5")
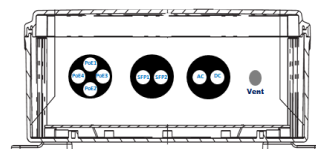
WPCK0001-3-4
DC Power Cord Kit

ENCLOSURE DRAWINGS & INTERFACES

.82"
21mm
A

10.54"
268mm

12.75"
324mm

12.54"
319mm

LPS2802-T1

13.89"
348mm

A

8.00"
203mm

Mounting H

10.01"
254mm

5.35"
136mm

.82"
21mm
A

8.54"
217mm

12.69"
322mm

11.75"
298mm

LPS2400-T1

10.54"
268mm

A
6.25"
159mm

7.94" / 202mm
@ Top of Bosses

2.66"
68mm 2.38"
61mm

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

Pole Mount View

PoE Ethernet Port   SFP Port   AC / DC IN
1 ~ 2   3 ~ 4   1 ~ 2

Vent

LPS2802-T1 Series Interfaces
1. Weatherproof AC/DC & SFP Connector
2. Weatherproof PoE & SFP Connector
3. Vent Plug

Vent

LPS2400-T1 Series Interfaces
1. Weatherproof AC Power Cable Connector
2. Weatherproof PoE & SFP Cable Connector
3. Vent Plug

LPS2802-T1

10"x5"l (˜`fK l @ <Ł
Internal Space for
Wiring Storage

LPS2400-T1

Internal (Hotel) Space:
8"x3.125"x2" (WxLxH)

PACKAGE CONTENTS

1. LinkPower LPS2400-T1 or LPS2802-T1 Gigabit PoE Switch
2. User's Manual
3. Quick Install Guide
4. Warranty Information
5. ECK0001 Ethernet Connector Kit
6. PCC0001 Power Cable Connector Kit
7. Top Cover Screws & Screw Hole Fillers (4)
8. WMK0001 Wall Mount Kit with 4 Flanges

InscapeData

THE LEADING OUTDOOR NETWORK APPLIANCE COMPANY

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

Product Information Online: http://www.inscapedata.com/lps2000-t1.htm

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