

Inscape Data offers the **Best-in-Class All-in-One-Box LinkPower™ Outdoor PoE (Power over Ethernet) switch systems** based on the IEEE802.3af/at and IP66/67/68 standards, enabling IP Video Surveillance, Wireless Mesh network, Smart City, Campus Network, and Municipal Network applications to operate under extreme weather conditions.



- Supply PoE Power to All 5 Classes of IP Network
 Video Cameras
- Built-In Power Supply Protected by Overload, Over Voltage, & Over Temperature Features
- Maximum Security Protection by a Rich Set of Security Features, i.e. Password, SSH, 802.1x, & AAA, etc.
- Remote Network Management Through a Broad Set of Management Functions, i.e., PoE/Port/QoS Configuration, Remote Diagnostics, & VLAN, etc.
- No Fans, Natural Cooling, and No Noise Design for Enduring Outdoor Installation
- Investment Protection by IP67/68 Compliant Outdoor Enclosures
- 3-Year Limited Factory Warranty

FEATURE SUMMARY

HARDWARE

- All Ports Support Auto-Flip, i.e., Auto MDI/MDIX
- All PoE Ports Support IEEE802.3af/at PoE power up to 30W, PoE++ Model up to 60W
- Dual Power Input Reduntancy, i.e., 120V ~ 240V AC & 48V DC on all LPS1800/2000/3000
- 8K MAC Address Table, 9.6K Jumbo Frame, Packet Forwarding Rate 20.83 for 8 xRJ45 & 8.93Mbps@64bytes for 4 4x Gb RJ45
- 256Gbps Non-blocking Switching Capacity for 8 PoE ports & 128Gbps Bandwidth for 4 PoE Ports
- MBTF: 539608 Hours

EMC / SAFETY

- CE Mark, Commercial CE/LVD, FCC, RoHS
- FCC Part 15 Class B
- UL60591-1, TUV EN60950-1

MANAGEMENT

- Supports Enhanced Management Through Web, CLI, TELNET, SSH, & SNMP
- Supports STP (802.1D) & RTSP (802.1W)
- Supports Layer 2+ Switching Features Including 802.1Q VLAN, 4K VLAN Entries, Mirroring, Port Isolation, IGMP Snooping, DHCP Snooping, LLDP, PoE+ Management, IP Source Guard, ARP Inspection, CLs, etc.
- Support Remote Cable Diagnostics
- Support Ethernet Protection Ring G.8032 <50ms Industrial Quick Ring Protection

OPERATING CONDITIONS

- Operating -30°C to 70°C, Non-Operating -45°C to 85°C
- Humidity: Operating 5% to 95%
- Altitude: Operating 3000m



LinkPower[™] Outdoor PoE Switch Solutions for Smart City

General Spec							
Model Name	LPS840AT-T1	LPS840AT-T2	LPS2400AT-T1	LPS3400ATM-T1			
No. of Switch Ports	6	6	6	6			
Manageability	Unmanaged	Unmanaged	Unmanaged	Layer 2+Managed			
Uplink Ports	2 Gigabit RJ45	2 Gigabit RJ45	2 Gigabit SFP	2 Gigabit SFP			
PoE Ports	4 10/100/1000Mbps	4 10/100/1000Mbps	4 10/100/1000Mbps	4 10/100/1000Mbps			
Type of Weatherproof Connectors	Cable Gland	Plug n Play	Cable Gland	Cable Gland			
PoE Standards	IEEE 802.3af/at	IEEE 802.3af/at	IEEE 802.3af/at	IEEE 802.3af/at			
Max. PoE Power	30Wper Port/120W Total	30Wper Port/120W Total	30Wper Port/120W Total	30Wper Port/120W Total			
Input Voltage	120~240AC	120~240AC	120~240AC / 48V DC	120~240AC / 48V DC			
Network Protocol Standards	IEEE 802.3 CSMA/CD, 8	ntrol, 802.1af DTE Power via MDI					
Management Functions	N/A	N/A	N/A	SNMP v1/v2c, RMON, HTTP/SSH, TACACS +, IEEE802.1x, IEEE802.1q VLAN, MAC			
Auto MDI / MDIX			YES	Address Port Locking			
Ethernet Surge Protection			4KV				
Over Temperature Protect	Over Temperature Protection Protection type : Shut down o/p voltage, re-power on to recover						
Working Temperature	$-30^{\circ}\text{C} \sim +70^{\circ}\text{C}$						
Installation		Wall Mount Kit Included / Pole Mount Kit Optional					
Regulartory / Safety	CE, FCC, RoHS / UL60950-1, TUV EN60950-1, IEC60950-1 approved						
Warranty	3 Years						



LinkPower[™] Outdoor PoE Switch Solutions for Smart City

General Spec Model Name No. of Switch Ports	LPS1800AT-T1 12	LPS2802AT-T1	LPS3400ATMP-T1	LPS3802ATM-T1	LPS3800ATM-T1			
Manageability	Unmanaged	Unmanaged	Layer 2+ Managed	Layer 2+ Managed	Layer 2+ Managed			
Uplink Ports	2 Gigabit RJ45/SFP Combo	2 Gigabit SFP	2 Gigabit SFP	2 Gigabit SFP	2 Gigabit RJ45 & SFP & 2 2.5 Gigabit SFP			
PoE Ports	8 10/100Mbps	8 10/100/1000Mbps	&10/100!#"""Mbps	8 10/100/1000Mbps	8 10/100/1000Mbps			
Type of Weatherproof Connectors	Cable Gland	Cable Gland	Cable Gland	Cable Gland	Cable Gland			
PoE Standards	IEEE 802.3af/at	IEEE 802.3af/at	IEEE 802.3af/at	IEEE 802.3af/at	IEEE 802.3af/at			
Max. PoE Power	30Wper Port/240W Total	30Wper Port/240W Total	60Wper Port/240W Total	30Wper Port/240W Total	30Wper Port/240W Total			
Input Voltage Network Protocol Standards	IEEE 802.3 CSMA/CD, 8	120~240AC / 48V DC IEEE 802.3 CSMA/CD, 802.3i 10Base-T, 802.3u 100Base-T, 802.3ab 1000Base-T, 802.3x Flow Control, 802.1af DTE Power via MDI						
Management Functions	S	SNMP v1/v2c, RMON, HTTP/SSH, TACACS+, IEEE802.1x, IEEE802.1q VLAN, MAC Address Port Locking						
Auto MDI / MDIX		YES						
Ethernet Surge Protection	ι –	4KV						
Over Temperature Protec	tion	n Protection type : Shut down o/p voltage, re-power on to recover						
Working Temperature		$-30^{\circ}\text{C} \sim +70^{\circ}\text{C}$						
Installation		Wall Mount Kit Included / Pole Mount Kit Optional						
Regulartory / Safety		CE, FCC, RoHS / UL60950-1, TUV EN60950-1, IEC60950-1 approved						
Warranty		3 Years						



LinkPower[™] Outdoor PoE Switch Solutions for Smart City

8-Port Series					
General Specs	LPS6844ATM-T1	LPS7844ATM-T1			
Manageability	Managed	Managed			
Uplink Ports	4 Gigabit RJ45 & 4 10 Gigabit SFP Fiber	4 Gigabit RJ45 & 4 10 Gigabit SFP Fiber			
PoE Ports	8 10/100/1000Mbps	8 10/100/1000Mbps			
Type of Weatherproof Connectors	Cable Gland	Cable Gland			
PoE Standards	IEEE 802.3af/at	IEEE 802.3af/at			
Max. PoE Power	30Wper Port/240W Total	30Wper Port/240W Total			
Input Voltage	120~240AC	120~240AC			
Network Protocol Standards Management Functions	Layer 2 Switch IEEE 802.3 CSMA/CD, 802.3i 10Base-T, 802.3u 100Base-T, 802.3ab 1000Base-T, 802.3x Flow Control, 802.1af DTE Power via MDI SNMP v1/v2c, RMON, HTTP/SSH, TACACS+, IEEE802.1x, IEEE802.1q VLAN, MAC Address Port Locking				
Auto MDI / MDIX	YES				
Ethernet Surge Protection	8KV				
Over Temperature Protection	Protection type : Shut down o/p voltage, re-power on to recover				
Working Temperature	-30°C ~ +70°C				
Installation	Wall Mount Kit Included / Pole Mount Kit Optional				
Regulartory / Safety	CE, FCC, RoHS / UL60950-1, TUV EN60950-1, IEC60950-1 approved				
Warranty	3 Years				



Inscape Data has been serving the video security, WIFI WISP, and Smart City markets worldwide since February 2004. Inscape Data Corporation is a U.S. based manufacturer of total PoE and fiber optic solutions. Inscape Data offers a unique combination of flexible installation and Layer 2+ and Layer 3 management features of commercial and outdoor PoE switches, which simplify wiring, integration, and network management for small size and large scale network deployment projects. Featuring remote reboot, power management, i.e., PoE monitoring, and other VLAN network management functions, Inscape Data's patented 2, 6, 10, and 14 port Outdoor and commercial 52 port Gigabit PoE switch systems with 10Gb Fiber Optic SFP+ transmission greatly reduce the challenges and installation overhead involved in the network design and deployment of wired/wireless, IP video, smart city networks.

LinkPower[™] Commercial PoE Switch Series



LinkPower[™] Commercial PoE Switch Solutions are Lay 2+ and Layer 3 Managed PoE switches designed and manufactured by Inscape Data Corporation. LinkPower[™] Commercial PoE Switch Solutions offer 24 to 48 Gigabit PoE Ports and 4*1/10G SFP+ fiber slot ports, and the switch hardware is designed with Microsemi VITESSE chipsets featuring with large cache, low latency, and powerful network management functions. Each PoE power delivers 30W, and the maximum PoE output power is from 400W to 600W based on a specific model. The LinkPower Commercial PoE switches automatically detect and recognize the power receiving equipment, which meets the PoE standards and supply power through the network cable. The LinkPower Commercial PoE switches are ideal for hotels, college campuses and medium to large enterprises.

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Model Name	PL2-22220	PL2-24004	PL2-48040	PL2-48004	PL3-240084	PL3-480004		
Management	Layer 2+	Layer 2+	Layer 2+	Layer 2+	Layer 3	Layer 3		
Port Interface (Network Protocol, Footnote 1)	Total 26 Ports 22 10/100/1000M PoE RJ45 Ports, 2 Gb Combo RJ45/SFP, 2 Gb SFP Ports, 1 Console Port	Total 28 Ports 24 10/100/1000M PoE RJ45 Ports, 4 10Gb SFP+ Ports, 1 Console Port	Total 52 Ports 48 10/100/1000M PoE RJ45 Ports, 4 Gb SFP Ports, 1 Console Port	Total 52 Ports 48 10/100/1000M PoE RJ45 Ports, 4 10Gb SFP+ Ports, 1 Console Port	Total 28 Ports 24 10/100/1000M PoE RJ45 Ports, 8Gb SFP Ports, 4 10Gb SFP+ Ports, 1 Console Port	Total 52 Ports 48 10/100/1000M PoE RJ45 Ports, 4 10Gb SFP+ Ports, 1 Console Port		
POE Standard, Twisted Pair Transmission - Footnote 2			IEEE802.3af/at, Aver	age Power 15.4 ~ 30W Max per Port				
Switching Capacity, MAC Address Table Size	256Gbps Non-blocking, 32K	256Gbps Non-blocking, 32K	598Gbps Non-blocking, 32K	598Gbps Non-blocking, 32K	598Gbps Non-blocking, 32K	598Gbps Non-blocking, 32K		
Fiber Ports	1Gb SFP, Mode options: Single/ Multimode, Single/Dual Fiber LC	10Gb SFP+, Mode options: Single/ Multimode, Single/Dual Fiber LC	1Gb SFP, Mode options: Single/ Multimode, Single/Dual Fiber LC	10Gb SFP+, Mode options: Single/ Multimode, Single/Dual Fiber LC	1GB SFP, 10Gb SFP+, Mode options: Single/Multimode, Single/Dual Fiber LC			
Optical Fiber Cable			Multimode:850nm 0~550M ,Singl	emode:1310nm 0~40KM,1550nm 0~120KM.				
System Power, Input Volt.	650W, AC100-240	400W, AC100-240	600W, AC100-240	600W, AC100-240	400W, AC100-240	600W, AC100-240		
Packet Forwarding Rate, Memory Buffer	38.69Mpps @ 64byts, 32MB	95 M pps @ 64byts, 32MB	131Mpps @ 64byts, 32MB	131Mpps @ 64byts, 32MB	107Mpps @ 64byts, 32MB			
System LED Indicator		Power indicator: PWR(yello	w); System indicator:SYS(yellow); Netwo	ork indicator; Link/Act (yellow); PoE indicator: F	PoE (green); SFP fiber port :L/A (green)			
PoE Management		Total power limit of PoE power supply, PoE output power allocation per port, PoE output priority configuration for each port, PoE working state display per port, Power delay start, PoE work and time scheduling						
VLAN		Support port based VLAN (4K), IEEE802.1q, protocol based VLAN, Access, Trunk, Hybrid three types of port configuration, QinQ configuration						
Spanning Tree			STP (IEEE802.1d),	RSTP (IEEE802.1w), MSTP (IEEE802.1s)				
QoS	1. SP (Strict F	1. SP (Strict Priority): 2. WFQ (Weighted Fair Queuing); 3. WRR (Weighted Round Robin); 4. Head Of Line; 5. Best-Effort Service; 6. First come first served; 7. 802.1p; 8. Cos/Tos, QOS; 9. Differentiated Service;						
Industrial Ring Network Proto	x	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		orts 1024 devices per ring, the self healing time		,		
Management Features		DHCP Client, DHCP Snooping Port Aggregation, Multicast, Storm Control, QoS, Hardware Priority Queue, Port Security, IGMP v1/v2						
Lighting Protection			1 0,	 Porotocol, Web GUI management, CLI Mana ction :6KV 8/20us; Protection Level:IP30 	agement			
POwer Supply			0 01	ower supply, AC 100~240V 50-60Hz 6.6A				
Installation Method			Desktop t	type, 19 inch 1U cabinet installation				
Power Pin, RJ45		Desktop type, to men to easine instantion Default: 1/2(+),3/6(-)						
Operating/Storage Temp.			-20~+55°C:Humidity 5%~90% RH	Non condensing, -40~+80°C; Humidity 5%~95	% RH Non condensing			
Dimensions (LxWxH)	17.30x11.38x1.73 Inch							
Certification	CCC; CE mark, Commercial; CE/LVD EN60950; FCC Part 15 Class B;RoHS;							
Warranty	3 Years							

Footnote 1 - Network Protocols: IEEE802.3 10BASE-T; IEEE802.3 10Base-T; IEEE802.3 100Base-TX; IEEE802.3 ab 1000Base-TX; IEEE802.3 1000Base-TX; IEEE802.3 ab 1000Base-TX; IEEE802.3 1000Base-TX; IEEE802.3 ab 1000Base-TX; IEE802.3 ab 1

LinkPower[™] Commercial SFP L2+/L3 Managed Switch Series

The OFS Series solutions, the OFS2444 series, offer managed SFP managed L2+/L3 switches with 10G uplinks, with 24*100/1000M SFP ports +4*10/100/M RJ45 ports+4*1/10G(SFP+)Ports. The OFS2444 series offers Layer 2+ and Layer 3 full network management functions, which include support IPV4/IPV6 management, support static routing full line speed forwarding, support complete security protection mechanism, perfect ACL/QoS strategy and powerful VLAN function, and easy to manage and maintain. These functions support multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and (ITU-T G.8032) ERPS to improve link backup and network reliability. In a situation where a one way network fails, communication can be recovered quickly to ensure uninterrupted communication of important applications. Through web network management mode, port traffic control, VLAN partition, SNMP, the OFS2444 series meets and exceeds the needs of any business configuration.



Model Name Management	OFS2444L2 OFS2444L2-10 OFS2444L3-10 Layer 2+ Layer 2+ Layer 3				LinkPower™ Optical Transceivers		
Port Interface	Total 32 Ports 24 Gb SFP Ports, 4 Gb RJ45,		Total 32 Ports 24 Gb SFP Ports, 4 Gb RJ45.	-			
(Network Protocol, Footnote 1)	and 4 Gb SFP Uplink Ports	and 4 10Gb SFP Uplink Ports	and 4 10Gb SFP Uplink Ports	Model Name	Description	SFP Module	
FP Port Characteristics	Gigabit /10 Gigabit SFP optical fiber interface,	default matching optical modules, need to buy separately, (optional	MM 2630C LC	RoHS Compliant Multimode			
ptical Fiber Cable	Multimode:850nm 0~550M ,Single mode:1310nm 0~40KM,1550nm 0~120KM.				LC 1.25Gbps 850nm 550M Optical Transceiver	and the second sec	
stem LED Indicators	Power indicator: PWR (yellow),System indicator: SYS(yellow),Network indicator: Link/	/Act (yellow), Fiber port :L/A(green)				
witching Capacity, MAC ddress Table Size	368Gbps Non-blocking, 32K	598Gbps Non-blocking, 32K	598Gbps Non-blocking, 32K		Del IC Compliant Single Mede		
otal Power, Input Volt.	55W, AC100-240	60W, AC100-240	60W, AC100-240	SM 2632C LC	RoHS Compliant Single Mode LC 1.25Gbps 1310nm Optical	ALC: NO	
acket Forwarding Rate		131Mpps @ 64byts, Full Speed Filtration			20km Transceiver		
AC Address Table Buffer Memory		32K & 32Mb, Support automatic updates, two-way learning	g				
oS		ghted Round Robin); Head Of Line; Best-Effort Service; First e support port-based IP+MAC Binding; Hardware support port-		MM 6630C-SFP+ LC	ME -		
LAN	Support port based VLAN (4K), IEEE	802.1q, protocol based VLAN, Access, Trunk, Hybrid three typ	pes of port configuration, QinQ configuration		300m Optical Transceiver		
anning Tree		STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802	2.1s)				
dustrial Ring Network	Support G.8032 (ERPS), support 255 loops at most, and supports 1024 devices per ring, the self healing time of the ring network is less than 20ms				RoHS Compliant Single Mode LC 10Gb/s SFP+		
anagement Features		Port Aggregation, Multicast, Storm Control, QoS, Hardware Pr ing, Secure Sheel (SSH) Porotocol, Web GUI management, Cl		SM 7832C-SFP+ LC	1310nm 20km Optical Transmitter		
ecurity Features	1.User grading management and password protection, 2. IEEE802.1X authentication / centralized MAC address authentication, 3. AAA & RADIUS authentication, 4. the number of MAC address learning restrictions, 5. MAC address black hole, 6. SSH 2 to provide secure passwords for user login, 7. SSL to ensure data transmission security, 8. Port isolation, 9. the speed limit function of ARP message, 10. IP source address protection, 11. ARP intrusion detection function, 12. Against DoS attacks, 13. Port broadcast message suppression, 14. Host data backup mechanism, 15. Binding capabilities of IP+MAC+VLAN+ ports			NOTE: For more LinkPower™ optical transceiver product information, please visist http://www.inscapedata.com			
ghting Protection		Lightning protection :4KV 8/20us; Protection Level:IP3	30				
vitch Reset		Support one key to restore factory settings					
stallation Method		Desktop type, 19 inch 1U cabinet installation					
perating/Storage Temp	-20~+55°C;	;Humidity 5%~90% RH Non condensing, -40~+80°C; Humidity	y 5%~95% RH Non condensing				
mensions (LxWxH)		17.30x8.86x1.73 Inch					
ertification	C	CC; CE mark, Commercial; CE/LVD EN60950; FCC Part 15 C	Class B;RoHS;				
ystem Requirements		r, Google browser chrome V42 or higher, Microsoft Internet Ex rk operating system (such as Microsoft Windows, Linux or Mac					
lamant :		2 Veere					

3 Years

Footnote 1 - Network Protocols: IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u 100Base-TX; IEEE802.3ab 1000Base-TX; IEEE802.3z 1000Base-LX/SX/CX; IEEE802.3ae, 0GBase-SR/LR; Footnote 2 - EEE802.3x Footnote 2 - Twisted Pair Transmission: 10BASE-T:Cat3.4.5 UTP (<100 meter); 100BASE-TX: Cat5 or later UTP (<100 meter); 1000BASE-T:Cat6 or later UTP (<100 meter); 1000BASE-TX: Cat5 or later UTP (<100 meter); 1000BASE-TX: Ca

LinkPower[™] PoE & Fiber Optic Switches come with a three-year limited warranty, For more information, please visit Inscape Data's website.

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Warranty

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LinkPower[™] Network Switch Solutions for Smart City



For detailed information on features, compliance, and compatibility, please see each product's specific product brief.

WARRANTY INFORMATION

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*This brochure describes hardware features and capabilities. Please refer to the driver release notes on inscapedaat.com for feature availability. *Actual product may differ from the images.

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