InscapeData

THE LEADING OUTDOOR NETWORK APPLIANCE COMPANY
Total Turnkey Solutions for Outdoor PoE, Wired/Wireless, and IP Video Applications

LinkPower™ LPS1000
All Weather Adjustable Voltage PoE Switch

Inscape Data's LinkPower™ LPS1000 All Weather Adjustable Voltage PoE Switch is the industry's first outdoor five-port Ethernet Switch with an adjustable voltage feature. Based on Inscape Data's patent-pending technology, the LPS1000 Adjustable Voltage PoE Switch offers four voltage levels, which enables a wide range of outdoor network and security applications and significantly reduces the complexity of outdoor network installation, integration and ongoing network maintenance.

The LPS1000 PoE Switch offers local power level configurations. Locally, each LPS1000 port is designed with a simple, easy-to-use push button for power level configuration. Remote monitoring over the internet can be achieved using a common internet web browser. The adjustable voltage and other dynamic features, including remote web browser PoE, remote device power cycle, heartbeat monitor and individual port troubleshooting capabilities, make the LinkPower LPS1000 the industry's most effective and robust outdoor PoE Switch.

The LPS1000 All Weather Adjustable Voltage PoE Switch is based on Inscape Data's patent-pending proprietary technologies. Inscape Data solely reserves its intellectual property rights to enforce protection of its intellectual property worldwide.

Key Features & Benefits

Remote PD Power Cycle
Remotely Turn Power On and Off PoE Device Connected to the LPS1000

All Weather Enclosure**
IP67 Compliant Rating And Water Tight Connectors Based On Patent Pending Technology

Independent Port Voltage Adjustment
Adjustable DC Voltage With Poe Voltage Of 12VDC, 24VDC, 48VDC, And IEEE 802.3af Compatible

Heartbeat Monitor
Monitor the System at a Regular Interval, Reboot Automatically When the System Fails

Remote System Reset
Remote Reset the LPS1000 System From Across the Network

High Power PoE
The LPS1000 Delivers Up to 150 Watts of Total Power for the Most Demanding Applications

Power Device Protection
Port Voltage Change Allowed Only When No Ethernet Device Connected to Port

Integrated Industrial Ethernet Surge Protection
132A Peak Pulse Current Protection On Every Ethernet Port

5-Port PoE Switch
Connect Up To 5 PoE Devices Or Uplink Switch At 10/100 Mbps Speeds With Auto-MDX Cross Over Feature

** When used with the included watertight connector kit

Applications

- *Parking Lot Surveillances*
- *Campus Networks*
- *Fixed Wireless Networks*
- *Border Security Surveillance*
- *Municipal Networks*
- *Hospitality Networks*
- *Hotel Resort Networks*
- *Hotspot Integrations*
- *VOIP Services*
- *Traffic Monitoring*

System Configurations

Connect Up to 5 PoE Devices

POE FIXED CAMERA
POE ACCESS POINT
POE WIRELESS BRIDGE
POE PTZ CAMERA
POE RFID READER

Solar System Compatible
48VDC and 120VAC INPUT

Internet

Monitoring PC
Remote PoE Device Restart

Voltage Status
Port 1	0V
Port 2	12VDC
Port 3	24VDC
Port 4	48VDC
Port 5	802.3af

RESTART

LinkPower™ LPS1000
Adjustable Voltage PoE Switch

LPS1000 All Weather Adjustable Voltage PoE Switch

Technology

Standard	IEEE 802.3, IEEE802.3u, IEEE 802.3af, IEEE 802.1Q, IEEE 802.1p, 802.3x, IGMP v1,v2,v3
Switch Technology	Store and Forward Technology with 1.2Gbps Internal Switch Fabric
Aggregate Sys. Throughput	500 mbps
MAC Address	2K MAC Address Table
Packet Buffer	384 kbits

Power Over Ethernet

IEEE 802.3af	Endspan Wiring Architecture Provides PD Classification Detection
Passive PoE Voltage*	0 V DC, 12 V DC, 24 V DC, 48 V DC Delivered on V+(Pin 4,5) and V-(Pin 7,8)
Voltage Configuration	Port Independent
Pin Assignment	V + (Pin 4,5), V - (Pin 7,8), TX (RJ-45 Pin 1,2), RX (RJ-45 Pin 3,6)

Network

Data Rate	Ethernet: 10/20Mbps (half/full duplex). Fast Ethernet: 100/200Mbps (half/full duplex)
Security	Software User Authentication

Interface

Number of Ports	Five 10/100Mbps Auto-MDIX PoE Ports, One USB Console Port
Connectors	DC Power: 2-pin Terminal Block. AC Power: 3-pin Terminal Block
Cable	10Base-TX: 4-Pair UTP/STP Category 3,4,5 Cable, EIA/TIA-568 100-Ohm (100m)
	100Base-TX: 4-Pair UTP/STP Category 5 Cable, EIA/TIA-568 100-Ohm (100m)
On/Off Switch	One System Power Switch
Push Button Switch	Five Individual PoE Voltage Control Switch. One Voltage Reset All Switch. One System Reset and Factory Default Switch
Upper Case Cover LED	Five Green LAN Link LED, One Green System Power LED
Control Panel LED	LAN Activity and Speed Green LED
	802.3af / 48VDC / 24VDC / 12VDC Voltage Level Green LED
Earth Ground	Ground Lug

Management

Control Panel	Port Voltage Configuration, System Reboot
Console (USB)	System Wide Configuration
Remote (Web/HTTP)	Port Voltage and Link Monitor, Independent Port Restart / Power Cycle, System Reboot
System Reboot	Web/HTTP, Control Panel, Console

Power Requirement

AC Input Voltage	100 ~ 250 VAC, 4A, 50/60Hz, Internal Universal Switching Power Supply
AC Input Voltage Protection	Over Load and Short Circuit Auto Recovery
DC Input Voltage	48VDC, 5.2A
Consumption*	With No PD Load: 10W. With Full PDF Load: 100W
PoE Power Limit*	The Maximum DC Power Delivery on Each PoE Port is 30W

Ethernet Surge Protection

Protected Ports	All Five 10/100Mbps Auto-MDIX PoE Ports
Data Clamp Voltage	7.5 V DC
Power Clamp Voltage	60 V DC
Protection Mode	Line-Line and LIne-GND
Response Time	< 5ns
Max Shunt Capacitance	< 25pF
Peak Pulse Current	132A

Environmental

Construction	Bottom Case: Die cast Aluminum. Upper Case: Poly Carbonate
Dimension (WxHxD)	271mm x 315mm x 82mm
Weight	2kg
Storage Temperature	-20ºC ~ +85ºC (-4ºF ~ 185ºF)
Storage Humidity	10% ~ 90% (non-condensing)
Operating Temperature	-40ºC ~ +70ºC (-40ºF ~ 158ºF)
Operating Humidity	10% ~ 90% (non-condensing)
Outdoor Usage	Weatherproof to IP67 Compliance

MTBF

	150,000 Hours, MIL-HDBK-217F GB Standard

Warranty

	1 Year

Compliance

FC CE **RoHS** (UL) 60950, 60601-1

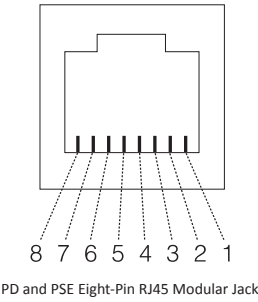*Applicable to ±5% Tolerance

System Dimensions & Interfaces

Dimensions
a. 315.17mm
b. 271.76mm
c. 82.07mm

Interfaces
1. Weatherproof Power Connector
2. Weatherproof PoE Connector
3. Power LED
4. Network Link and Activity LED

8 7 6 5 4 3 2 1

PD and PSE Eight-Pin RJ45 Modular Jack

PSE Pinout		
RJ45 Conductor Pin#	802.3af Mode A	802.3af Mode B/ Passive PoE*
1	Rx, V+	Rx
2	Rx, V+	Rx
3	Tx, V-	Tx
4	Spare	V+
5	Spare	V+
6	Tx, V-	Tx
7	Spare	V-
8	Spare	V-

PD Pinout		
RJ45 Conductor Pin#	802.3af Mode A	802.3af Mode B/ Passive PoE*
1	TX+, V+	TX+
2	TX-, V+	TX-
3	RX+, V-	RX+
4		V+
5		V+
6	RX-, V-	RX-
7		V-
8		V-

*Passive PoE Voltage Supported by LPS1000: 0VDC, 12VDC, 24VDC, 48VDC

Package Contents

1. LinkPower LPS1000 Adjustable Voltage PoE Switch
2. Read Me First
3. Important Note for Reverse Polarity PoE Pinout
4. Quick Install Guide
5. Resource CD with Console Port Driver, QIG, User's Manual, etc.
6. Warranty Information
7. ECK0001 Ethernet Connector Kit
8. PCC0001 Power Cable Connector Kit
9. PCK0001 Power Cable Kit
10. CK0001 Plastic Conduit Kit
11. MWMK0001 Mast & Wall Mounting Kit

Optional Accessories

1. **ZMEC0001**
Zinc Metal Ethernet Connector Kit

2. **ZMPC0001**
Zinc Metal Power Connector Kit

3. **MCEC0001**
Steel Flexible Metal Conduit for Ethernet Connector Kit

4. **MCPC0001**
Steel Flexible Metal Conduit for Power Connector Kit

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