LPES-3424DSFP

24 10/100TX PoE at/af + 4 DualSpeed SFP L2⁺ Switch

- *24x10/100TX PoE at/af Hipower w/ built in 360W power supply*
- *Supports PoE management, ACL, IGMPv3, QinQ, SSH/SSL,IPv6*
- *User friendly UI, including auto topology drawing and DDM threshold monitoring with dB values****

FCC CE RoHS IPv6

OVERVIEW

Lantech LPES-3424DSFP is a high performance L2 + managed PoE at/af switch which provides L2 wire speed and advanced security function for network aggregation and backbone deployment. It delivers 24 PoE at/af power injectors up to 30W per port, comprehensive QoS, advanced security, LLDP/Cisco Discovery Protocol for the scalability and resiliency. LPES-3424DSFP can recognize the diagnostic SFP and display SFP parameters on WebUI.

Compliant with IEEE802.3at/af standard, the Lantech LPES-3424DSFP is able to feed each PoE port up to 30W for the connected PD devices. It also supports advanced PoE management including PoE detection and scheduling. PoE detection can detect if the connected PD is still alive then sending power; PoE scheduling is to allow pre-set power feeding schedule upon routine time table. PoE port status is to display PoE current, voltage, watt and temperature information.

It supports MSTP that allows RSTP over Vlan for redundant VLAN links. The LPES-3424DSFP also embedded several features for stronger and reliable network protection in an easy and intuitive way. The LPES-3424DSFP supports DMI interface that can correspond with DDM SFPs (Digital diagnostic monitor) to display the five parameters in Lantech's UI, including optical

output power, input power, temperature, laser bias current and transceiver supply voltage***. The TX power/RX power raw data is automatically converted to dB values for installer, making it easier to calculate the fiber distance. The built-in RTC (realtime clock) can keep track of time.

Lantech LPES-3424DSFP builds all the important management features required in large surveillance network such as DHCP server, ACL for security, SSH/SSL, IGMP Router port , Query / Snooping, advanced QoS with 8 queues. It also can export the configuration in editable configuration file making the mass deployment easier.

Lantech LPES-3424DSFP designs with a factory reset button where user can reset all settings to factory default. The built-in watch dog design can reboot switch automatically when CPU is found dead.

Lantech LPES-3424DSFP has a built in power for 360W that can feed PoE power up to 250W. It is the best PoE switch to connect with IP Camera, Setup box, VoIP phone / router, Wireless Equipments for MTU, Transportation or Surveillance applications.

FEATURES & BENEFITS

- **System Interface/Performance**
  - *24x10/100 TX PoE at/af+ 4 100M/1000M SFP L2+*
  - *16K MAC Address Table*
  - *Total 360W (250W for PoE budget)*
  - *One FAN for ventilation*
  - *0 to 45C* (32°F ~113°F)*operation temperature*
- **PoE management including PoE detection and scheduling for PD (power devices) plus per port PoE status (current / voltage/ watt / temperature)**
- **DDM to support SFP diagnostic function*****
  - *Automatically convert the raw data into dB values for TX power/RX power, making it easier to measure the fiber distance*
- **4K 802.1Q VLAN, Port based VLAN**
- **Supports IEEE 802.1p Class of Service, per port provides**

8 priority queues Port base, Tag Base and Type of Service Priority
- **IEEE 802.1d STP, IEEE 802.1w RSTP,802.1s MSTP**
- **Port Trunk with LACP 127 trunks with automatic link failover**
- **Security**
  - *Port Security: MAC address entries/filter; port lock*
  - *IP address security for management interface (SNMP, Telnet, Web)*
  - *SSH/SSL*
  - *256 policy base ACL*
  - *Login Security: IEEE 802.1X/RADIUS*
- **IGMP v1,v2,v3 and Proxy** for Multi Media Application**
- **IGMP Query mode and support dynamic IGMP router port**

for reversed multicast video flow
- Built-in RTC to keep track of time
- Supports IEEE802.1ab LLDP, Cisco CDP
- DHCP server / client supported
- Bandwidth Control
  - Ingress Packet Filter and Egress Rate Limit
  - Broadcast/Multicast Packet Filter Control

- System Event Log, Email alert, SMS(mobile text) and SNMP Trap for alarm support; 32 RMON
- TFTP/HTTP Firmware upgrade; InstaConfig** for mass updgrade
- Reset / Factory default button to restore factory setting
- Watch dog design to reboot switch when CPU is found dead

DIMENSIONS (unit=mm)
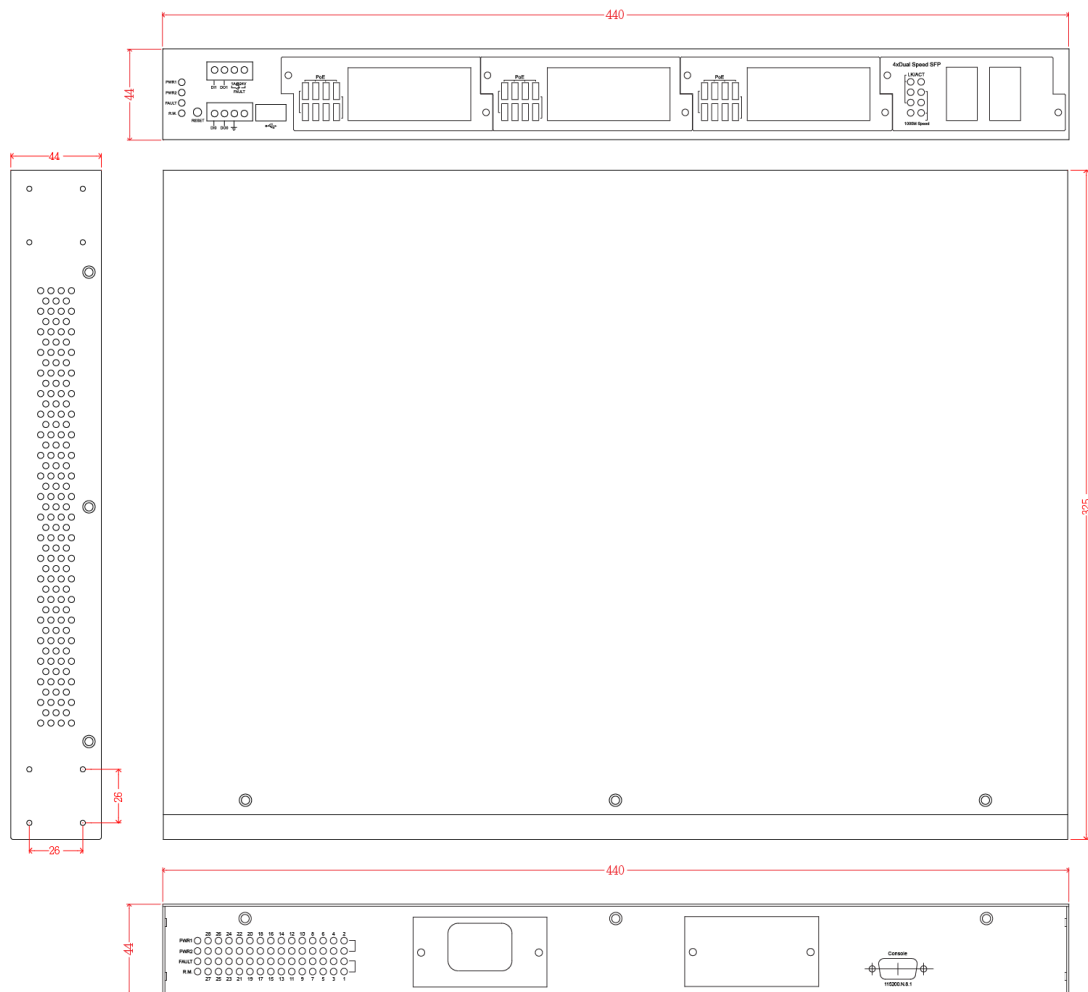
SPECIFICATION

Hardware Specification

IEEE Standards		
	IEEE 802.3 10Base-T Ethernet	IEEE 802.3ad Link Aggregation Control Protocol (LACP)
	IEEE 802.3u 100Base-TX Ethernet	IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
	IEEE 802.3ab 1000Base-T Ethernet	IEEE 802.3at / af PoE
	IEEE 802.3z Gigabit Fiber	IEEE 802.1x User Authentication (Radius)
	IEEE 802.3x Flow Control Capability	Switch Architecture: Back-plane (Switching Fabric): 12.8Gbps
	ANSI/IEEE 802.3 Auto-negotiation	Transfer Rate: 14,880pps for Ethernet port
	IEEE 802.1Q VLAN	148,800pps for Fast Ethernet port
	IEEE 802.1p Class of Service	1,488,000pps for Gigabit Ethernet / Gigabit Fiber port
	IEEE 802.1X Access Control	MAC Address: 16K MAC address table
	IEEE 802.1D Spanning Tree	PoE pin assignment: RJ-45 port # 1~# 24 support PoE at/af End-point, Alternative A mode. Per port provides up to 30W@port capability.
	IEEE 802.1w Rapid Spanning Tree	Positive (VCC+): RJ-45 pin 1,2.
	IEEE 802.1s Multiple Spanning Tree	

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	Negative (VCC-): RJ-45 pin 3,6.
Connectors	24 10/100TX RJ-45 with auto MDI/MDI-X function
	4 100M / 1000M Mini-GBIC : SFP sockets
	RS-232 console: RJ-45
DDM	Conform to SFF-8472 to show diagnostic SFP with temperature, current, voltage, input and output power
Protocol	CSMA/CD
LED	Per unit: Power 1 (Green) Link/Activity (Green), Full duplex/collision(Yellow)), MINI GBIC (Link/Activity)(Green)
Power Supply	360W w/fan
Power Consumption	Full load: 30W
PoE Power Budget	Efficient PoE consumption 250W
Case Dimension	19" Metal case; 440mm(W)x325mm(D)x44mm(H)
Operating Humidity	5%~95% (Non-condensing)
Operating Temperature	Standard: 0°C ~45°C(32°F ~113°F)
Storage Temperature	-40°C to 70°C (-40°F ~158°F)
FAN	One
Factory reset button & watch dog design	Factory reset button to restore back to factory default settings. Watch dog design can reboot switch automatically when CPU is found dead
RTC	RTC(Real Time Clock) to keep track of time always
EMI	FCC Class A, CE
Warranty	2 years
Software Specification	
Management	SNMP v1 v2c, v3/ Web/Telnet/CLI Management
SNMP MIB	RFC 1215 Traps MIB, RFC 1213 MIBII RFC 1158 MIBII RFC 1157 SNMP MIB, RFC 1493 Bridge MIB, RFC 1573 IF MIB RFC 2674 VLAN MIB, Partial RFC 1643 EtherLike, RFC 1757 RMON, RFC 2674 Q-Bridge MIB RFC 2790 Host Resource MIB RSTP MIB* LLDP MIB* Private MIB
VLAN	Port based VLAN, up to 28 groups IEEE802.1Q Tag VLAN Static VLAN groups up to 256, Dynamic VLAN group up to 2048, VLAN ID from 1 to 4096.
Port Trunk with LACP	LACP Port Trunk: 127 Trunk groups/Maximum 4 trunk members
LLDP	Support LLDP to allow switch to advise its identification and capability on the LAN
CDP	Cisco Discovery protocol for topology mapping
Spanning Tree	Support IEEE802.1d Spanning Tree,IEEE802.1w Rapid Spanning Tree, IEEE 802.1s MSTP
Quality of Service	The quality of service determined by port, Tag and IPv4 Type of service, IPv4 Differentiated Services Code Points - DSCP

Class of Service	Support IEEE802.1p class of service, per port provides 8 priority queues
Port Mirror	Support 3 mirroring types: "RX, TX and Both packet"
Multicast Filtering & IGMP	*Dynamic:* *Support IGMP snooping v1, v2,v3* *Support 256 multicast groups* *Support IGMP query* *Support Dynamic IGMP router port for reversed multicast video floow*
Bandwidth Control	Support ingress packet filter and egress packet limit. The egress rate control supports all of packet type, the limit rates are 0~100Mbps. Ingress filter packet type combination rules are Broadcast/Multicast/Flooded Unicast packet, Broadcast/Multicast packet, Broadcast packet only and all types of packet. The packet filter rate can be set from 0 to 100Mbps The packet filter rate can be set an accurate value through the pull-down menu for the ingress packet filter and the egress packet limit.
Network Security	Support 10 IP addresses that have permission to access the switch management and to prevent unauthorized intruder. 802.1X access control for port based and MAC based authentication Account access control management 256 Policy based Access Control List SSL/ SSH for Management
PoE Management	■ PoE Detection to check if PD is hang up then restart the PD ■ PoE Scheduling to On/OFF PD upon routine time table ■ Per port PoE status : voltage, current, watt and temperature
Flow Control	Support Flow Control for Full-duplex and Back Pressure for Half-duplex
System Log	Support System log record and remote system log server
SMTP, SMS	Support SMTP Server and 6 e-mail accounts for receiving event alert; Can send alert via mobile SMS text
SNMP Trap	Up to 3 Trap stations Cold start, Port link up, Port link down, Authentication Failure, Private Trap for power status, PoE port event
DHCP	Provide DHCP Client/ DHCP Server
DNS	Provide DNS client feature and support Primary and Secondary DNS server.
SNTP	Support SNTP to synchronize system clock in Internet
Firmware Update	Support TFTP /HTTPS firmware update with auto provision
Configuration backup and restore	Support TFTP/FTP backup and restore; InstaConfig** mass configuration

*Future Release
**Optional
***Optional DDM SFP required

ORDERING INFOMATION

■ **LPES-3424DSFP…………………………….......P/N: 8450-180**
24 10/100TX POE at/af + 4 Dual SFP L2 plus PoE Switch w/360W power; 0°C to 45°C

OPTIONAL ACCESSORIES

Mini GBIC (SFP)

■ **8330-162X** MINI GBIC 1000SX (LC/0.5km) Transceiver   ■ **8330-163X** MINI GBIC 1000SX2 (LC/2km) Transceiver

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8330-165X	MINI GBIC 1000LX (LC/10km) Transceiver
8340-0591	MINI GBIC 1000LHX (LC/40km) Transceiver
8330-166	MINI GBIC 1000XD (LC/50km) Transceiver
8330-169	MINI GBIC 1000XD (LC/60km) Transceiver
8330-167	MINI GBIC 1000ZX (LC/80km) Transceiver
8330-170	MINI GBIC 1000EZX (120km) Transceiver
8330-168	MINI GBIC 10/100/1000T (100m) Transceiver
8330-060	100Base FX 2KM, Multi-mode, LC Transceiver
8330-065	100Base FX 5KM, Multi-mode, LC Transceiver
8330-061	100Base LX 30KM, Single-mode, LC Transceiver

8330-188	LTSFP-1000BX-10KM Transceiver (WDM 1310)
8330-189	LTSFP-1000BX-10KM Transceiver (WDM 1550)
8330-186	LTSFP-1000BX-20KM Transceiver (WDM 1310)
8330-187	LTSFP-1000BX-20KM Transceiver (WDM 1550)
8330-180	LTSFP-1000BX-40KM Transceiver (WDM 1310)
8330-182	LTSFP-1000BX-40KM Transceiver (WDM 1550)
8330-181	LTSFP-1000BX-60KM Transceiver (WDM 1310)
8330-183	LTSFP-1000BX-60KM Transceiver (WDM 1550)
8330-184	LTSFP-1000BX-80KM Transceiver (WDM 1490)
8330-185	LTSFP-1000BX-80KM Transceiver (WDM 1550)

All SFP with –D are with DDM function

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