Product Data Sheet

LPB5000 Series Gigabit PoE+ Ethernet Managed Switch Eco

LPB5052A

Overview

The Gigabit PoE+ Ethernet Managed Switch Eco provides a reliable infrastructure for your business network. The switch improves the availability of your critical business applications, protects your sensitive information, and optimizes your network bandwidth. Easy to set up and use, it provides the ideal combination of affordability and capabilities for entry-level networking. Use the switch in a small business or enterprise application.

Two models are available:

• Gigabit PoE+ Ethernet Managed Switch Eco – 24-Port (product code LPB5028A). This model has (20) 10/100/1000BASE-T access ports, (4) copper/fiber combo ports with dual-speed SFP slots, and (4) 10 Gigabit SFP+ uplink ports with dual speed (1G/10G).

• Gigabit PoE+ Ethernet Managed Switch Eco – 52-Port (product code LPB5052A). This model has (48) 10/100/1000BASE-T access ports and (4) 10 Gigabit SFP+ uplink slots with dual speed (1G/10G).

Unlike other entry-level network switching solutions that provide advanced managed network capabilities only in the costliest models, the Gigabit PoE+ Ethernet Managed Switch Eco supports data, voice, security, and wireless technologies. The switch is easy to deploy and configure.

Features

• Powers 802.3af PoE or 802.3at PoE+ wireless access points, security cameras, VoIP phones, remote sensors, and other devices.

• Scalable—add 10-GbE SFP+ modules when you need more capacity while maintaining 100-/1000-Mbps fiber/copper links.

• Provides full SNMP management plus Web-based management.

• L2+ features provide better manageability, security, QoS, and performance.

• High port count design includes all Gigabit Ethernet ports.

• Supports the following:

- Guest VLAN, voice VLAN, Port based, tag-based, and Protocol based VLANs.

- 802.3az Energy Efficient Ethernet standard.

- 8K MAC table.

- IPv6/ IPv4 Dual stack.

- s-Flow.

- 802.3at and complies with 802.3af standard.

- Easy-Configuration-Port for IP Phone, IP camera, or wireless environment.

Specifications

Physical Characteristics	
Aggregate Bandwidth	28 Gbps
Buffer Architecture	4096 bytes on-chip frame buffer
Network Interface	Ports 1–24 (LPB5028A) or Ports 1–48 (LPB5052A): RJ-45 connector, auto MDI/X 10BASE-T: RJ-45 (100-ohm, UTP cable; Category 3 or better); 100BASE-TX: RJ-45 (100-ohm, UTP cable; Category 5 or better); 1000BASE-T: RJ-45 (100-ohm, UTP or STP cable; Category 5, 5e, or 6) *Maximum Cable Length = 328 ft (100 m) Ports 24–28 (LPB5028A) or 48–52 (LPB5052A): 1G/10G SFP ports

Ports	LPB5028A:
	  (20) 10/100/1000BASE-T access ports,
	  (4) copper/fiber combo ports with dual-speed SFP slots,
	  (4) 10-Gigabit SFP+ uplink ports with dual speed (1G/10G),
	  (1) DB9 console port;
	LPB5052A:
	  (48) 10/100/1000BASE-T access ports,
	  (4) 10 Gigabit SFP+ uplink slots with dual speed (1G/10G),
	  (1) DB9 console port

Switching Database	32K MAC address entries
Connectors	LPB5028A: (24) RJ-45, (4) SFP slots, (4) SFP+ slots, (1) DB9; LPB5052A: (48) RJ-45, (4) SFP+ slots, (1) DB9

Indictators	LEDs:
	  System: Power;
	  TP Port: Status (LINK/ACT/SPD), 10/100/1000M;
	  SFP Port: Status (LINK/ACT/SPD), 1G/10G

Temperature	Operating: 32°F to 104°F (0°C to 40°C)
Humidity	Operating: 5% to 90% (non-condensing)
Power	Input: 100–240 VAC, 50–60 Hz; Power Supply: Internal: 100 to 240 VAC, 50 to 60 Hz; Consumption: 60 Watts maximum
Dimensions	1.7"H x 17.4"W x 11.8"D (4.4 x 44.2 x 30 cm)
Weight	LPB5028A: 8.6 lb. (3.9 kg); LPB5052A: 9.0 lb. (4.1 kg)
Switch Features	
Flow Control	Full-duplex: IEEE 802.3x; Half-duplex: Backpressure
Forwarding Mode	Store-and-forward
Throughput	95.23 Mbps
Management Features	
In-Band Management	SSH/SSL, Telnet, SNMP, or HTTP
Out-of-Band Management	RS-232 (DB9) console port
Software Loading	HTTP, TFTP in-band, Console out-of-band

Switch Features (continued)	

Approvals	Emissions:
	    EN55022 (CISPR 22) Class A EN 61000-3;
	    FCC Class A;
	    CE Mark;
	Immunity:
	    EN 61000-4-2/3/4/5/6/8/11;
	    EN 55024

Standards	IEEE 802.3 => 10Base-T Ethernet (Twisted-pair Copper); IEEE 802.3u => 100Base-TX Ethernet (Twisted-pair Copper); IEEE 802.3ab => 1000Base-TX Ethernet (Twisted-pair Copper); IEEE 802.3z => 1000Base-X Ethernet; IEEE 802.3x => Flow Control Capability; ANSI/IEEE 802.3 => Auto-negotiation; IEEE 802.1Q => VLAN; IEEE 802.1p => Class of Service; IEEE 802.1X => Access Control; IEEE 802.1D => Spanning Tree; IEEE 802.1w => Rapid Spanning Tree; IEEE 802.1s => Multiple Spanning Tree; IEEE 802.3ad => ink Aggregation Control Protocol (LACP); IEEE 802.1AB => Link Layer Discovery Protocol (LLDP)

The LPB5028A and LPB5052A support the following modules in their SFP or SFP+ slots.

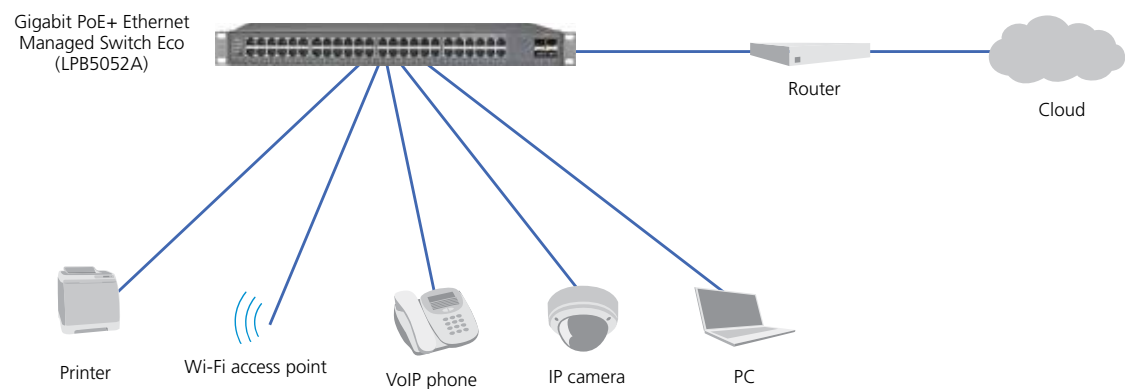| Table 2-1. Supported SFP Transceivers.	
Product Code	Description
LFP401	SFP, 155-Mbps Fiber with Extended Diagnostics, 850-nm Multimode, LC, 2 km
LFP402	SFP, 155-Mbps Fiber with Extended Diagnostics, 1310-nm Multimode, 2 km, LC
LFP403	SFP, 155-Mbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, Plus, 30 km, LC
LFP411	SFP, 1.25-Gbps Fiber with Extended Diagnostics, 850-nm Multimode, LC, 300 m
LFP412	SFP, 1.25-Gbps Fiber with Extended Diagnostics, 1310-nm Multimode, LC, 2 km
LFP413	SFP, 1.25-Gbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, LC, 10 km
LFP414	SFP, 1.25-Gbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, LC, 30 km
LSP421	10GBASE-SR SFP+, 850-nm Multimode, 300 m, LC
LSP422	10GBASE-SR SFP+, 1310-nm Single-Mode, 10 km, LC

Refer to the chart below when choosing the best switch for your application.

Comparison Chart: LPB5028A vs. LPB5052A

Product Code	10/100/1000BASE-T access ports	Copper/fiber combo ports with dual-speed SFP slots	10-Gigabit SFP+ uplink ports with dual speed (1G/10G)	DB9 console port
LPB5028A	20	4	4	1
LPB5052A	48	None	4	1

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A typical application of the LPB5052A is shown below.

Gigabit PoE+ Ethernet
Managed Switch Eco
(LPB5052A)

Router

Cloud

Printer

Wi-Fi access point

VoIP phone

IP camera

PC

Ordering Information

Item	Code
LPB5000 Series Switches	
Gigabit PoE+ Ethernet Managed Switch Eco	
(20) 10/100/1000BASE-T access ports,	
(4) 100/1G copper/fiber combo ports with dual-speed SFP slots,	
(4) 10 Gigabit SFP+ uplink ports with dual-speed (1G/10G)	
	LPB5028A
Gigabit PoE+ Ethernet Managed Switch Eco	
(48) 10/100/1000BASE-T access ports,	
(4) 10 Gigabit SFP+ uplink ports with dual-speed (1G/10G)	
	LPB5052A
Compatible SFP transceivers (work with LPB5028A)	
SFP	
155-Mbps Fiber with Extended Diagnostics,	
850-nm Multimode, LC, 2 km	**LFP401**
1310-nm Multimode, 2 km, LC	**LFP402**
1310-nm Single-Mode, Plus, 30 km, LC	**LFP403**
SFP	
1.25-Gbps Fiber with Extended Diagnostics	
850-nm Multimode, LC, 300 m	**LFP411**
1310-nm Multimode, LC, 2 km	**LFP412**
1310-nm Single-Mode, LC, 10 km	**LFP413**
1310-nm Single-Mode, LC, 30 km	**LFP414**
Compatible SFP+ transceivers (work with LPB5028A and LPB5052A)	
SFP+	
10GBASE-SR SFP+,	
850-nm Multimode, LC, 300 m	**LSP421**
1310-nm Single-Mode, 10 km, LC	**LSP422**

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