Ethernet switch with 24-port 10/100, 4 10/100/1000 ports, and PoE and stacking

SFE2000P

SFE2000P is optimized for maximizing the system availability with fully redundant Stacking, Redundant Power options, and Dual Images for resilient firmware upgrades. The SFE2000P is able to secure the network through IEEE 802.1Q VLANs, IEEE 802.1X port authentication, Access Control Lists (ACL), DOS Prevention, and MAC-based filtering. The enhanced QoS and traffic management features ensure clear and reliable voice and video communications

For Wireless or VoIP deployments, the SFE2000P supports the IEEE802.3af standard for Power over Ethernet (PoE). With automatic load sensing, the power control circuitry automatically detects PoE on the end-device before providing power. For safety, each port has independent overload and short-circuit protection, along with LED indicators for power status. A maximum of 15.4W is available on the FE ports for powering PoE enabled wireless AP or VoIP handsets, with a maximum per device PoE delivery of 185 Watts available for all ports.

SFE2000P switches provide an intuitive, secure management interface enabling you to better utilize the comprehensive feature-set of the SFE2000P, resulting in a better optimized, more secure network.

Linksys Business Series SFE and SGE Stackable switch products are Linksys One Ready. That means they include the necessary firmware to be seamlessly integrated into a Linksys One data or data/voice network. Once connected, a Linksys One Service Router will discover the SFE/SGE device, automatically configure it and make it available to other users on the network. Linksys One technology is automatic and self-configuring. When Linksys One Voice Gateways, IP Phones and other Linksys One peripherals are connected to a Linksys One Ready Ethernet switch's ports, small businesses are ready to communicate in a matter of minutes.

| Fully resilient stacking provides optimized growth with simplified management | Provides IEEE 802.3af PoE power to IP phones, cameras, or APs | Maximum security and control of traffic with policing, shaping, ACLs, and QoS | Linksys One Ready - simple, automated installation with Linksys One Services Routers present |

PRODUCT DATA

24-Port 10/100 Ethernet Switch with PoE

BUSINESS SERIES

LINKSYS One™ Ready

Model: SFE2000P

CISCO™

Features

- 24 10/100 Ethernet ports + 4 10/100/100 Copper ports

- 2 miniGBIC slots (shared with 2 copper ports) for Fiber Gigabit Ethernet expansion

- IEEE 802.3af PoE on delivered over any of the 24 10/100 ports

- A maximum of 15.4W is available on the FE ports for powering PoE enabled wireless AP or VoIP handsets, with a maximum per device PoE delivery of 185 Watt available for all ports

- Dual images for resilient firmware upgrades

- 12.8 Gbps, Non-blocking, Store-and-Forward switching capacity

- Simplified QoS management using 802.1p, Diffserv or ToS traffic prioritization specifications

- Power redundancy when used with Linksys Business Series Redundant Power Supply unit

- Fully resilient stacking provides optimized growth with simplified management

- Access Control Lists (ACL) for granular security and QoS implementation

- Management enables configuration and monitoring from a standard web browser

- Secure remote management of the switch via SSH and SSL encryption

PRODUCT DATA

BUSINESS SERIES

LINKSYS®
A Division of Cisco Systems, Inc.

24-Port 10/100 Ethernet Switch with PoE

Specifications

Model	SFE2000P 24-port 10/ 100 Ethernet Switch with PoE
Ports	24 RJ-45 connectors for 10BASE-T/100BASE-TX + 4 10BASE-T/100BASE-TX/1000Base-T with 2 Gigabit combo ports shared between miniGBIC ports Console port Auto MDI/MDI-X Autonegotiate/Manual setting RPS port for connecting to Redundant Power Supply unit
Buttons	Reset Button
Cabling Type	UTP CAT 5 or better for 10BASE-T/100BASE-TX, UTP CAT 5e or better for 1000BASE-T
LEDs	PWR, Fan, Link/Act, PoE, Speed, RPS, Master, Stack ID 1 - 8

POE

	IEEE 802.3af PoE on delivered over any of the 24 10/100 ports Power budget allows for max power of 15.4W on up to 12 ports simultaneously

Performance

Switching Capacity	Up to 12.8 Gbps, non-blocking

Stacking

Stack Operation	Up to 8 units in a stack (192 ports) Hot Insertion and removal Ring and Chain stacking options Master and Backup master for resilient stack control Auto-numbering or manual configuration of units in stack

Layer 2

MAC table size	8K
Number of VLANs	256 active VLANs (4096 range)
VLAN	Port-based and 802.1Q Tag-based VLANs Protocol-based VLAN Management VLAN Private VLAN Edge (PVE) GVRP
HOL Blocking	Head of line blocking prevention

Layer 3

Layer 3 options	Static Routing CIDR (Classless Interdomain Routing) 128 Static Routes IPv4 Forwarding in silicon - Wirespeed forwarding of layer 3 traffic

Management

Web User Interface	Built-in Web UI for easy browser-based configuration (HTTP/HTTPS)
SNMP	SNMP version 1, 2c, 3 with support for traps
SNMP MIBs	RFC1213 MIB-2, RFC2863 Interface MIB, RFC2665 Ether-like MIB, RFC1493 Bridge MIB, RFC2674 Extended Bridge MIB (P-bridge, Q-bridge), RFC2819 RMON MIB (groups 1,2,3,9 only), RFC2737 Entity MIB, RFC 2618 RADIUS Client MIB RFC 1215 Traps
RMON	Embedded Remote Monitoring (RMON) software agent supports four RMON groups (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis
Firmware Upgrade	Web Browser upgrade (HTTP) and TFTP
	Dual images for resilient firmware upgrades
Port Mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe

- 802.1Q based VLANs enable segmentation of networks for improved performance and security

- Private VLAN Edge for simplified network isolation for guests connections or autonomous networks

- Automatic configuration of VLANs across multiple switches through GVRP/GARP

- User/Network port level security via 802.1x authentication and MAC-based filtering

- Increased the bandwidth and added link redundancy with Link Aggregation Control Protocol (LACP)

- Enhanced rate limiting capabilities, including back pressure, multicast, and broadcast flood control

- Port Mirroring for non-invasive monitoring of switch traffic

- Mini Jumbo frame support (1600 bytes)

- SNMP v1, v2c, v3 and RMON support

- Fully rack-mountable using the included rack-mounting hardware

- Linksys One Ready - Simple, one-step automated installation and initial configuration

Other Management	Traceroute
	Single IP Management
	Secure Socket Layer (SSL) security for Web UI
	Secure Shell (SSH)
	RADIUS
	Port mirroring
	TFTP upgrade
	DHCP client
	BootP
	SNTP
	Xmodem upgrade
	Cable diagnostics
	PING
	Syslog
	Telnet client (SSH secure support)

Security

IEEE 802.1x	802.1x - RADIUS Authentication. MD5 Hash
	Guest VLAN
	Single/Multiple Host mode
Access Control	ACLs - Drop or Rate Limit based on:
	Source and Destination MAC-based
	Source and Destination IP address
	Protocol
	Port
	VLAN
	DSCP/IP Precedence
	TCP/UDP Source and Destination ports
	802.1p priority
	Ethernet Type
	ICMP packets
	IGMP packets
	Up to 1018 rules

Availability

Link Aggregation	Link Aggregation using IEEE 802.3ad LACP
	Up to 8 ports in up to 8 groups
Storm Control	Broadcast and Multicast Storm protection
DOS prevention	DOS Attack prevention
Spanning Tree	IEEE 802.1D Spanning Tree, IEEE 802.1w Rapid Spanning Tree, IEEE 802.1s Multiple Spanning Tree, Fast Linkover
IGMP Snooping	IGMP (v1/v2) snooping limits bandwidth-intensive video traffic to only the requestors. Support 256 multicast groups
Power Redundancy	Connection to RPSU for power redundancy

QoS

Priority levels	4 Hardware queues
Scheduling	Priority Queuing and Weighted Round Robin (WRR)
Class of Service	Port-based
	802.1p VLAN priority based
	IPv4/v6 IP Precedence/TOS/DSCP based
	Diffserv
	Classification and Remarking ACLs
Rate Limiting	Ingress policer
	Egress rate control

Standards

802.3 10BASE-T Ethernet, 802.3u 100BASE-TX Fast Ethernet, 802.3ab 1000BASE-T Gigabit Ethernet, 802.3z Gigabit Ethernet, 802.3x Flow Control, 802.3 ad LACP,802.3af POE, 802.1d STP, 802.1Q/p VLAN, 802.1w Rapid STP, 802.1s Multiple STP, 802.1x Port Access Authentication

PRODUCT DATA

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Environmental

Dimensions	17.32" x 14.70" x 1.73"
W x H x D	(440 x 375 x 44 mm)
Unit Weight	10.89 lb (4.94 kg)
Power	48VDC
Certification	UL (UL 60950), CSA (CSA 22.2), CE mark, FCC Part 15 (CFR 47) Class A
Operating Temp.	32 to 104ºF (0 to 40ºC)
Storage Temp.	-4 to 158ºF (-20 to 70ºC)
Operating Humidity	10 to 90% relative humidity, noncondensing
Storage Humidity	10 to 95% relative humidity, noncondensing

Package Contents

- SFE2000P Ethernet Switch
- Console Cable
- AC Power Cord
- Rackmount Kit
- Quick-Start Installation Guide

Minimum Requirements

- Web-Based Utility: Web Browser (Mozilla Firefox 1.5 or later, IE 5.5 or later, Netscape 7.01 or later)
- Cat5 Ethernet Network Cables
- Operating System: Windows 2000, XP or Above
- Provider support for CPE (Software Version 1.2 or Above)

PRODUCT DATA

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7010910NC-RR

Model: SFE2000P