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Gigabit Ethernet Switch with 24-port 10/100/1000 with 4 shared SFP slots, PoE and stacking

SGE2000P is optimized for maximizing system availability with fully redundant stacking, redundant power options, and dual images for resilient firmware upgrades. The SGE2000P 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 IP voice and video communications.

For Wireless or VoIP deployments, the SGE2000P 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 APs or VoIP handsets, with a maximum per device PoE delivery of 185W available for all ports.

The SGE2000P provides an intuitive, secure management interface enabling network administrators to better utilize its comprehensive management feature-set, resulting in a better optimized and 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, surveillance 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



SGE2000P

PRODUCT DATA

24-Port 10/100/1000 Gigabit Ethernet Switch with PoE

BUSINESS SERIES



Model: SGE2000P



Features

- 24 10/100/1000 Ethernet ports
- 4 SFP slots (shared with 4 copper ports) for Fiber Gigabit Ethernet expansion
- IEEE 802.3af PoE on delivered over any of the 24 10/100/1000 copper ports
- A maximum of 15.4W is available on the copper ports for powering PoE enabled wireless AP or VoIP handsets, with a maximum per device PoE delivery of 185W available for all ports
- Dual images for resilient firmware upgrades
- 48 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

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24-Port 10/ 100/100 Gigabit Ethernet Switch with PoE

Specifications

Model	SGE2000P 24-Port 10/ 100/1000 Gigabit Ethernet Switch with PoE
Ports	24 RJ-45 Connectors for 10BASE-T/100BASE-TX/1000Base-T with 4 Shared Gigabit SFP Slots Console Port Auto MDI/MDI-X Autonegotiate/Manual Setting RPS Port for Connecting to Redundant Power Supply Unit Reset Button
Buttons	
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 Delivered Over Any of the 24 10/100/1000 Ports
Power Budget Allows for Max Power of 15.4W on Up to 12 Ports Simultaneously

Performance

Switching Capacity Up to 48 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, RFC3621 Power Ethernet 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 and 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

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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
DOS prevention
Spanning Tree

Broadcast and Multicast Storm Protection
DOS Attack Prevention

IGMP Snooping

IEEE 802.1D Spanning Tree, IEEE 802.1w Rapid Spanning Tree, IEEE 802.1s Multiple Spanning Tree, Fast Linkover
IGMP (v1/v2) Snooping Limits Bandwidth-Intensive Video Traffic to Only the Requestors. Supports 256 Multicast Groups
Connection to RPSU for Power Redundancy

Power Redundancy

QoS

Priority levels
Scheduling
Class of Service

4 Hardware Queues
Priority Queuing and Weighted Round Robin (WRR)
Port-Based
802.1p VLAN Priority Based
IPv4 IP Precedence/TOS/DSCP Based
Diffserv
Classification and Remarking ACLs
Ingress Policer
Egress Rate Control

Rate Limiting

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, 802.3ad LACP, 802.3af POE, 802.1d STP, 802.1Q/p VLAN, 802.1w Rapid STP, 802.1s Multiple STP, 802.1x Port Access Authentication

Environmental

Dimensions	17.32" x 14.70" x 1.73"
W x H x D	440 x 375 x 44 mm
Unit Weight	15.85 lb (7.19 kg)
Power	48VDC
Certification	UL (UL 60950), CSA (CSA 22.2), CE Mark, FCC Part 15 (CFR 47) Class A
Operating Temperature	32 to 104°F (0 to 40°C)
Storage Temperature	-4 to 158°F (-20 to 70°C)
Operating Humidity	10 to 90% Relative Humidity, Noncondensing
Storage Humidity	10 to 95% Relative Humidity, Noncondensing

Package Contents

- SGE2000P Ethernet Switch
- Console Cable
- AC Power Cord
- Rack-Mount Kit
- Quick Installation Guide

Minimum Requirements

- Web Browser - Mozilla Firefox 1.5 or Later, IE 5.5 or Later, Netscape 7.01 or Later
- Cat5 Ethernet Network Cable
- TCP/IP Protocol Installed on Each Computer Within the Network
- Network Adapter Installed in Each Computer
- Network Operating System
- Provider Support for CPE Software Version 1.2 or Higher

Linksys
A Division of Cisco Systems, Inc.
121 Theory
Irvine, CA 92617 USA

E-mail: sales@linksys.com
support@linksys.com
Web: <http://www.linksys.com>

Linksys products are available in more than 50 countries, supported by 12 Linksys Regional Offices throughout the world. For a complete list of local Linksys Sales and Technical Support contacts, visit our Worldwide Web Site at www.linksys.com.

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