



SGE2010P

Ethernet Switch with 48-Port 10/100/1000, 4 Shared SFP Slots, and PoE

The Linksys SGE2010P Managed switch with WebView allows you to expand your network securely. Configuration of the switch is secured using SSL for Web access. The SGE2010P is optimized for maximum system availability with fully-redundant stacking, redundant power options, and dual images for resilient firmware upgrades. The switch secures 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 SGE2010P 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 to show power status. It provides 15W of available PoE power on up to 24 of the GE ports for powering PoE-enabled wireless AP or VoIP handsets. The maximum PoE available per device for all ports is 360W.

The SGE2010P provides resilient stacking for up to 4 units, or 192 ports. A stack of units is managed as a single switch with one web management interface. The SGE2010P can coexist in a stack with Linksys SGE2xxx/P 24-port and 48-port switches such as the Linksys SGE2000, SGE2000P, and the SGE2010, for a maximum of 192 ports in a stack. The stacking functionality includes master/backup unit behavior, ring and chain architecture, and hot insertion and removal of units.

Software running on the SGE2010P Ethernet Switch interacts with provisioning, management, and security software on both the site's services router and the service provider's equipment. This interaction provides a simple, one-step installation and access to web-administered features for the administrator and users. Simple, affordable network operations throughout the network's lifetime are the result.

Optimized for the network core with 48 Gigabyte ports and redundant power

Fully-resilient stacking provides optimized growth with simplified management

Provides IEEE 802.3af PoE to a phone, camera, or access point

Maximum security and control of traffic with policing, shaping, ACLs, and QoS

PRODUCT DATA

48-Port Gigabit Ethernet Switch with PoE

Model: **SGE2010P**

BUSINESS SERIES

Features

- 48 - 10/100/1000 Ethernet ports
- 4 mini-GBIC slots (shared with 4 Ethernet ports) for fiber Gigabit Ethernet expansion
- IEEE 802.3af PoE delivered over any of the 48 10/100/1000 ports
- 15.4W available power to a GE port for PoE-enabled wireless AP or VoIP handsets (maximum per-device PoE delivery of 360W available for all ports)
- Dual images for resilient firmware upgrades
- 96 Gbps, non-blocking, store-and-forward switching capacity
- Simplified QoS management using 802.1p, Diffserv or ToS traffic prioritization
- Power redundancy when used with the RPS1000 Redundant Power Supply unit
- Fully-resilient stacking provides optimized growth with simplified management
- Access Control Lists (ACLs) for granular security and QoS implementation
- Configuration and monitoring from a standard web browser
- Secure remote management of the switch via SSH and SSL encryption
- 802.1q-based VLANs enable segmentation of networks for improved performance

PRODUCT DATA

BUSINESS SERIES

48-Port Gigabit Ethernet Switch with PoE

Specifications

Model	SGE2010P 48-Port 10/100/1000 Ethernet Switch with PoE
Ports	48 RJ-45 connectors for 10BASE-T/100BASE-TX/1000BASE-T with 4 Gigabit combo ports shared between mini-GBIC 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

Power over Ethernet

IEEE 802.3af PoE on delivered over any of the 48 10/100/1000 ports
Maximum power of 15.4W to an Ethernet port—360W total available to all ports with regular AC power, 280W total available with RPS

Performance

Switching Capacity	96 Gbps non-blocking
Forwarding Capacity	71.4M packets per second (64-byte packets)

Stacking

Stack Operation	Up to 192 ports in a stack 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
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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; multicast TV VLAN; private VLAN Edge (PVE); GVRP
HOL Blocking	Head-of-line blocking prevention

Layer 3

Layer 3 Options	Static routing; Classless Interdomain Routing (CIDR); 60 static routes; IPv4 and IPv6; Forwarding in silicon - wirespeed forwarding of Layer 3 traffic
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Management

Web User Interface	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)
SNMP	SNMP version 1, 2c, and 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, and 9 only), RFC2737 Entity MIB, RFC 2618 RADIUS Client MIB, RFC 1215 Traps
Remote Monitoring (RMON)	Embedded RMON software agent supports 4 RMON groups (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis)
Firmware Upgrade	Web browser upgrade (HTTP/HTTPS) 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.
Other Management	Traceroute; single IP management; SSL security for web user interface; 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 Lists (ACLs)	Drop or rate limit based on source and destination MAC or IP address, protocol, port, VLAN, DSCP/IP precedence, TCP/UDP source and destination ports, 802.1p priority, Ethernet type, ICMP packets, IGMP packets, DHCP snooping, ARP inspection, and IP source address guard Up to 1018 rules

and security

- Private VLAN edge simplifies network isolation for guest 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 bandwidth and added link redundancy with Link Aggregation Control Protocol (LACP)
- Enhanced rate-limiting capabilities, including back pressure and multicast, broadcast, and flood control
- Port mirroring for noninvasive monitoring of switch traffic
- Jumbo Frame support up to 10KB
- SNMP v1, v2c, v3 and RMON support
- Fully rack-mountable using included rack-mounting hardware

Availability

Link Aggregation	Using IEEE 802.3ad LACP, up to 8 ports in up to 8 groups
Storm Control	Broadcast, multicast and unknown unicast
Spanning Tree	IEEE 802.1D Spanning Tree, IEEE 802.1w Rapid Spanning Tree, IEEE 802.1s Multiple Spanning Tree, and fast linkover
DOS prevention	DOS attack prevention
IGMP (version 1 and 2)	Limits bandwidth-intensive multicast traffic to only the requestors and supports 256 multicast groups
Snooping	Connection to RPS unit for power redundancy
Power Redundancy	

Quality of Service

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 Re-marking ACLs
Rate Limiting	Ingress policer; egress rate control; per VLAN
Statistics	16 meters

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" (440 x 375 x 44 mm)
Weight	10.89 lb (4.94 kg)
Power	100-240V 47-63Hz, Internal, Universal; also equipped with external redundant power supply connector for external power supply, -48VDC
Certification	UL (UL 60950), CSA (CSA 22.2), CE mark, FCC Part 15 (CFR 47) Class A
Operating Temp.	32 to 104°F (0 to 40°C)
Storage Temp.	-4 to 158°F (-20 to 70°C)
Operating Humidity	10 to 90%, relative, non-condensing
Storage Humidity	10 to 95%, relative, non-condensing

Package Contents

- One SGE2010P Ethernet Switch
- One AC power adapter with power cord
- Two rack-mounting kits with 8 screws
- One CD-ROM with user documentation (PDF) included
- One registration card
- Console cable

Minimum Requirements

- Web browser—Mozilla Firefox version 1.5 or later; Microsoft Internet Explorer version 5.5 or later
- Cat5 Ethernet Network Cable
- TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in the network
- Provider support for CPE software version 1.2 or higher

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Model: **SGE2010P**

Check the product package and contents for specific features supported. Specifications are subject to change without notice.