Mojo S-2000 Series Managed PoE Switches

Highlighted Features

- Mojo cloud-managed switch
- 8-port, 24-port, and 48-port models
- 130 / 370 / 740 Watt power budget
- PoE & PoE+ Support (802.3af/at)
- IPv4/IPv6
- L3 static routing
- Console port

S-2008P

S-2024P

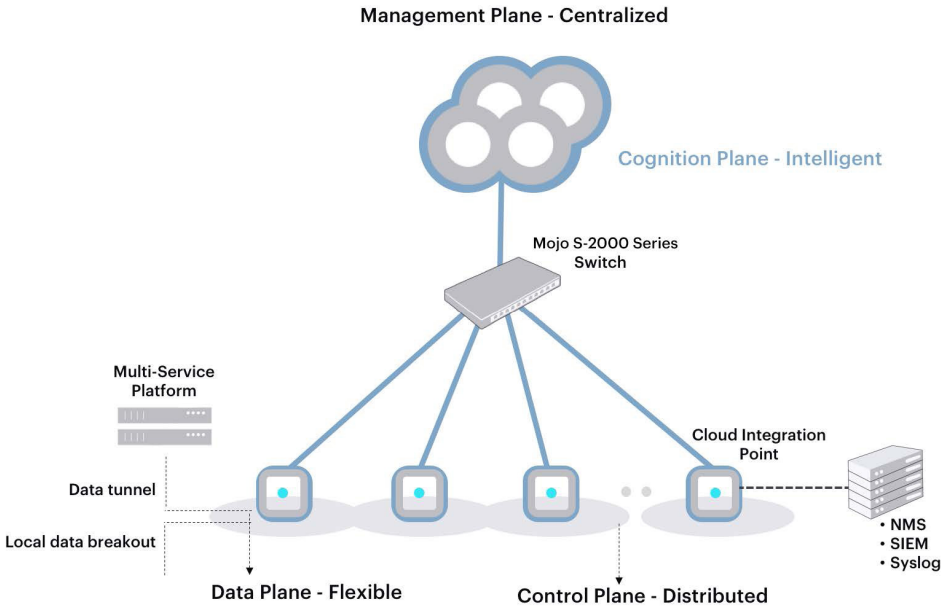
S-2048P

The Mojo S-2000 series of managed switches offers the power of a feature-rich, web-intelligent layer 2 switch solution that can be managed with Mojo's award-winning cloud management platform. Now Mojo customers can extend the exceptional network visibility and troubleshooting capabilities of the Mojo cloud management platform, while providing Power over Ethernet (PoE) to their Mojo access points and other PoE capable devices.

These cost-effective, energy-efficient switches are offered in 8-port, 24-port, and 48-port models, and offer a power budget of 130 W, 370 W, 740 W (respectively).

The S-2000 series is loaded with advanced features intended to maximize network performance and security. From enhanced QoS features that deliver optimal performance to real-time applications such as video and VoIP, to VLAN-segmented broadcast domains that reduce broadcast traffic and increase LAN security and performance, to multi-faceted security features that restrict access to sensitive resources, the S-2000 series is designed for enterprise customers that want a full-featured enterprise-class solution that will easily fit into any network budget.

The Mojo Cloud Architecture



Mojo Networks

Hardware Features	Benefits
IEEE 802.3af/802.3at Standard PoE	The S-2000 series supplies the IEEE 802.3af and 802.3at power needed to support any access point in the Mojo product line.
Integrated Gigabit SFP Uplink ports	The S-2008P switch provides two integrated Gigabit SFP ports, and the S-2024P and the S-2048P each include four integrated Gigabit SFP uplink ports. These SFP ports can be used for additional uplink bandwidth or link redundancy.
Console Port - RJ45	The S-2000 series includes a console port, and supports multiple management access through the Mojo Cloud, CLI, SNMP, Web, and Telnet.
Diagnostic LED	The S-2000 series includes LED indicators to indicate switch status. Device: Power, Fault, PoE Max, LAN Mode, PoE Mode. Copper ports: LAN/PoE Mode, Link/Act. SFP Ports: Speed, Link/Act.
Software Features	**Benefits**
Dual Firmware/Configuration	The S-2000 series can save dual firmware/configuration files to provide redundancy and more security for users.
Static Routing	The S-2000 series supports L3 static routing to group different network segments and increase user flexibility.
Dynamic VLAN Assignment	Dynamic VLAN Assignment automatically assigns the same port to different VLANs to increase user convenience.
Cloud-Based Management	Management of the S-2000 series is supported through the Mojo cloud management interface to enable the same visibility and troubleshooting capabilities applied to WLAN network and client devices. Alternate management methods also supported. See detailed feature set on page 5 for list of alternative methods.
Enhanced Security	The S-2000 series supports 8 hardware queues, port-based QoS (IPv4/IPv6 DSCP), and DiffServ features to provide optimal real-time services.
DOS Protection	The S-2000 series provides DDOS protection to avoid hacker attacks on your network.
Cable Diagnostics	Cable diagnostics check real-time cable status to find network problems immediately.

Key Features

Performance And Scalability
The S-2000 series is a family of smart switches designed to complement your Mojo cloud-based WLAN deployment. The switches can be deployed in any network topology, from small to large. Besides powerful software features, the switches provide a complete solution for supporting high availability and PoE support for optimal WLAN network connectivity and performance.

PoE Support
The S-2000 series provides up to 30 Watts of power to attached Mojo access points and other devices, such as VoIP phones and surveillance cameras, all over existing Ethernet cables. The switch can deliver up to 30 Watts per port for each switch model.

Continuous Availability
IEEE 802.1w Rapid Spanning Tree Protocol provides a loop-free network and redundant links to the core network with rapid convergence, which ensures a faster recovery from failed links, enhancing overall network stability and reliability.

IEEE 802.1Q VLAN-segmented broadcast domains reduce broadcast traffic and increase LAN security and performance.

IEEE 802.3ad Link Aggregation Control Protocol (LACP) increases bandwidth by automatically aggregating several physical links together as a logical trunk and provides load balancing and tolerance for uplink connections.

Cloud-Based Management
Management of the S-2000 series is provided through the Mojo cloud management interface to enable the same visibility and troubleshooting capabilities applied to WLAN network and client devices.

Comprehensive QoS
Eight egress queues per port enables differentiated management of up to eight different traffic types. Traffic is prioritized according to 802.1p or DSCP, giving optimal performance to real-time applications such as voice and video.

Asymmetric Bi-Directional Rate-Limiting (BDRL), per-port or per-traffic class, preserves network bandwidth and allows maximum control of network resources.

Enhanced Security
Port security allows access to a switch port based on MAC address. This limits the total number of devices from using a switch port and protects from MAC flooding attacks. IEEE 802.1x port-based access control ensures all users are authorized before being granted access to the network. User authentication is carried out using a standards-based RADIUS server.

Access Control Lists (ACLs) restrict access to sensitive resources by denying packets based on source and destination MAC addresses, IP addresses, and TCP/UDP ports. ACLs are hardware supported, so switching performance is not compromised.

Secure Shell (SSH) and Secure Sockets Layer (SSL/HTTPS) encrypts Telnet and web access to the switch, providing secure network management.

IP Source Guard can be enabled with DHCP snooping on Trunk ports with a large number of VLANs to filter and control IP traffic access to the network.

DHCP snooping provides security by filtering un-trusted DHCP messages and by building and maintaining a DHCP snooping binding table.

Dynamic VLAN assignment for user authentication and location-independent access to the network.

Product Model		S-2008P	S-2024P	S-2048P
Port	RJ-45 10/100/1000 Ports	8	24	48
	SFP Uplink Ports with LACP support	2 (1G)	4 (1G)	4 (1G)
	PoE Ports	8	24	48
	Console Port - RJ45	1	1	1
Performance	Switching Capacity	20 Gbps	56 Gbps	104 Gbps
	Flash Memory	32 MB	32 MB	32 MB
	DRAM	256 MB	256 MB	256 MB
	Jumbo Frames	√	√	√
PoE	IEEE 802.3af/802.3at	√	√	√
	PoE Power Budget (Watts)	130 W	370 W	740 W
Mechanical	Rack Space	9 inches	12 inches	16 inches
	Form Factor	Rack mount	Rack mount	Rack mount
	Dimensions (W x D x H)	3 x 9 x 1.7 inches	17.3 x 12.2 x 1.7 inches	17.3 x 16.1 x 1.7 inches
Environmental	Operating Temperature	0 ~ 50˚C	0 ~ 50˚C	0 ~ 50˚C
	Storage Temperatures	-40 ~ 70˚C	-40 ~ 70˚C	-40 ~ 70˚C
	Operating Humidity (non-condensing)	5% to 95%	5% to 95%	5% to 95%

S-2000 Series Feature Set

L2 Features

- Flow Control
- Spanning Tree Protocol:
  - IEEE 802.1D Spanning Tree Protocol (STP)
  - IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
  - IEEE 802.1s Multiple Rapid Spanning Tree Protocol (MSTP, 64 instances
- VLAN Group:
- Link Aggregation:
  - Static Trunk
  - IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IGMP Snooping:
  - IGMP v1/v2/v3 snooping
  - IGMP Fast Lane
  - MLD Snooping
- Jumbo Frame
- Cable Diagnostic

L3 Features

- Static Routing

PoE

- Support IEEE 802.3af (15.4 W)/ IEEE802.3at (30W) on each port (Total PoE Power Budget as follows):
  - S-2008P (130 W)
  - S-2024P (370 W)
  - S-2048 (340 W)

Security

- DDOS Protection
- Port Isolation
- Port Mirror
- Storm Control
- Port Security

Management

- CLI
- RMON (groups 1,2,3 and 9)
- SNMP
- Management Access (Mojo Cloud/ Console/SNMP/Web /Telnet)
- Event/Error Log/Syslog

About Mojo Networks, Inc.
At Mojo, we're shaking up the Enterprise WiFi industry. We know that customers are ready for a modern WiFi network that doesn't rely on outdated controllers and proprietary hardware. Our cloud-managed WiFi solution is based on a radical vision for creating networks that reach new heights in performance, security, scalability, and ease-of-use. Founded in 2003 and headquartered in Mountain View, CA, Mojo Networks delivers brilliant WiFi to many of the world's top brands and highest levels of government. Learn more about our vision and products at www.mojonetworks.com.

Ordering Information

S-2000 Series

Part Number	Description
S-2008P-CLD-XYR	8 port PoE+ switch and "X" Year enterprise cloud subscription and support
S-2024P-CLD-XYR	24 port PoE+ switch and "X" Year enterprise cloud subscription and support
S-2048P-CLD-XYR	48 port PoE+ switch and "X" Year enterprise cloud subscription and support

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