SR2200 and SR2300 Switch Families

Aerohive Enterprise Cloud-Managed Switches

The Aerohive SR series switches utilize the power of the enterprise cloud to provide unified wired and wireless access with centralized management and visibility across the entire network. The SR switches provide energy-efficient gigabit Layer 3-Lite capabilities with flexible Power over Ethernet (PoE) options, as well as a wealth of port-density options. Critical capabilities, such as zero-touch provisioning, and powerful QoS make these switches a complement to any enterprise network.

Cloud Managed

The SR2200 and SR2300 families are managed from the same enterprise public or private cloud HiveManager NG that is used to manage Aerohive access points and switches. This simplifies management of the wired and wireless network, allows across-the-network visibility, and reduces the time and complexity of initial switch deployments, expansions, upgrades and network refreshes. The need for trained installers or technicians is minimized and time-to-operation and expenses associated with managing large scale deployments is drastically reduced.

On Demand Scalability

The SR2208P fanless desktop switch offers quick and easy wiring closet extensions, while the SR2224P, an entry level access switch, offers simple wiring closet expansion. The SR2324P and SR2348P provide premium bandwidth and port density access on the edge of the network.

SR families of switches can be brought online by simply shipping the equipment to the install site and plugging it in. Switches will automatically find the HiveManager, either in Aerohive's public cloud or on a customer premises, download complete configuration, security, and corporate policies, and instantly provide service for connected devices.
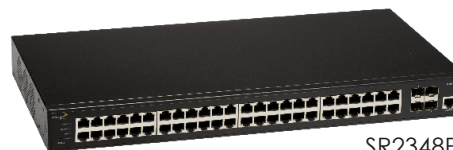

SR2208P

SR2224P

SR2324P

SR2348P

Dimensions, Interfaces and POE budget

Model	Dimensions WxDxH (mm)	Downlink ports	Uplink ports	POE budget	Switching Capacity	MTBF
SR2208P	279 x 170 x 44	8 x 1 GE ports	2 x 1GE dual media (SFP and copper)	124W	20 Gbps	1,209,148 hours
SR2224P	440 x 240 x 44	24 x 1 GE ports	4 x 1 GE SFP	180W	56 Gbps	2,490,009 hours
SR2324P	440 x 240 x 44	24 x 1 GE ports	4 x 10GE SFP+	370W	128 Gbps	1,489,636 hours
SR2348P	440 x 350 x 44	48 x 1 GE ports	4 x 10 GE SFP+	740W	176 Gbps	1,489,636 hours

Common to all models:

• Reset button to reset (on press) and load factory default settings

• 1 RJ45 serial console port

• Downlink ports with 802.3af/802.3at PoE/PoE+ with legacy support

• 30 Watts max per port

• 16,000 MAC addresses

• Jumbo Frames (9216 bytes)

• 4095 VLANs

Environmental:

• Operating temperature: 0 to +40 degrees C

• Storage temperature: -25 to +70 degrees C

• Humidity: 5% to 95% RH (non-condensing)

• Acoustics: (for all 24 and 48 port models)
 48 dB max (<25 degree C)
 53 dBA max (>25 degree C at max fan speed)
 8 port model is a quiet model, since its fanless.

• Input voltage 100-240 Volts

Software Features:

Note: While all of the features below are supported in the OS, not all of them may be supported in HiveManager NG.

Switching

Core Switching Features
- IEEE 802.1AB—Link Layer Discovery Protocol (LLDP)
- IEEE 802.1D—Spanning tree compatibility
- IEEE 802.1p—Ethernet priority with user provisioning and mapping
- IEEE 802.1s—Multiple spanning tree compatibility
- IEEE 802.1Q—Virtual LANs with port-based VLANs
- IEEE 802.1X—Port-based authentication with Guest VLAN support
- IEEE 802.1W—Rapid spanning tree compatibility
- IEEE 802.3—10BASE-T
- IEEE 802.3u—100BASE-T
- IEEE 802.3ab—1000BASE-T
- IEEE 802.1ak—Virtual Bridged Local Area Networks - Amendment 07: Multiple Registration Protocol
- IEEE 802.3ac—VLAN tagging
- IEEE 802.3ad—Link aggregation
- IEEE 802.3x —Flow control
- Static Routing
- GARP—Generic Attribute Registration Protocol: clause 12, IEEE 802.1D-2004
- GMRP—Dynamic L2 multicast registration: clause 10, IEEE 802.1D-2004
- GVRP—Dynamic VLAN registration: clause 11.2, IEEE 802.1Q-2003
- RFC 4541—Considerations for Internet Group Management Protocol (IGMP) Snooping Switches
- ANSI/TIA-1057—LLDP-Media Endpoint Discovery (MED)
- RFC 5171—Unidirectional Link Detection (UDLD) Protocol

Advanced Layer-2 Features
- Authentication, Authorization, and Accounting (AAA)
- Broadcast Storm Recovery
- Broadcast/Multicast/Unknown unicast storm recovery
- DHCP Snooping
- IGMP Snooping Querier
- Multicast VLAN Registration (MVR)
- Independent VLAN Learning (IVL) support
- IPv6 Classification APIs
- Jumbo Ethernet frame support
- Port MAC locking
- Port mirroring
- Protected ports
- Static MAC filtering
- TACACS+
- Voice VLANs
- Unauthenticated VLAN
- Internal 802.1X Authentication Server
- CLI Filtering
- Switchport mode configuration
- Link Dependency
- IPv6 RA Guard (Stateless)

System Facilities
- Event and error logging facility
- Run-time and configuration download capability
- PING utility
- Xmodem
- FTP Transfers via IPv4/IPv6
- Malicious Code Detection
- RFC 768—UDP
- RFC 783—TFTP
- RFC 791—IP
- RFC 792—ICMP
- RFC 793—TCP
- RFC 826—ARP
- RFC 894—Transmission of IP datagrams over Ethernet networks
- RFC 896—Congestion control in IP/TCP networks
- RFC 951—BOOTP
- RFC 1034—Domain names - concepts and facilities
- RFC 1035—Domain names - implementation and specification
- RFC 1321—Message digest algorithm
- RFC 1534—Interoperability between BOOTP and DHCP
- RFC 2021—Remote network monitoring management information base version 2
- RFC 2030—Simple Network Time Protocol (SNTP)
- RFC 2131—DHCP relay
- RFC 2132—DHCP options and BOOTP vendor extensions
- RFC 2819—Remote Network Monitoring Management Information Base
- RFC 2865—RADIUS client
- RFC 2866—RADIUS accounting
- RFC 2868—RADIUS attributes for tunnel protocol support
- RFC 2869—RADIUS Extensions
- RFC 3579—RADIUS support for EAP
- RFC 3580—IEEE 802.1X RADIUS usage guidelines
- RFC 3164—The BSD syslog protocol
- RFC 3580—802.1X RADIUS Usage Guidelines
- RFC 5176—Dynamic Authorization Server (Disconnect-Request processing only)

Management
- HiveManager NG
- Industry-standard CLI
- IPv6 management
- Password management
- Autoinstall support for firmware images and configuration files
- SNMP v1, v2, and v3
- SSH 1.5 and 2.0
- RFC 4252: SSH authentication protocol
- RFC 4253: SSH transport layer protocol
- RFC 4254: SSH connection protocol
- RFC 4251: SSH protocol architecture
- RFC 4716: SECSH public key file format
- RFC 4419: Diffie-Hellman group exchange for the SSH transport layer protocol
- SSL 3.0 and TLS 1.0
- RFC 2246: The TLS protocol, version 1.0
- RFC 2818: HTTP over TLS
- RFC 3268: AES cipher suites for transport layer security
- Secure Copy (SCP)
- Telnet
- Web

Advanced Management Features
- Industry Standard CLI with the following features:
- Scripting capability
- Command completion
- Context sensitive help
- Optional user password encryption
- Multi-session Telnet server

SNMP MIBs

Switching MIBs
- IEEE 802.1X MIB (IEEE 802.1-PAE-MIB 2004 Revision)
- IEEE 802.3AD MIB (IEEE 802.3-AD-MIB)
- IANAifType-MIB
- FASTPATH Enterprise MIBs for full configuration support of switching features
- RFC 1213—MIB II
- RFC 1493—Bridge MIB
- RFC 1612—DNS resolver MIB extensions
- RFC 1643—Definitions of managed objects for the Ethernet-like interface types
- RFC 2233—Interfaces group MIB using SMI v2
- RFC 2613—SMON MIB
- RFC 2618—RADIUS authentication client MIB
- RFC 2620—RADIUS accounting MIB
- RFC 2674—VLAN MIB
- RFC 2737—Entity MIB version 2
- RFC 2819—RMON groups 1, 2, 3, and 9
- RFC 2863—IF-MIB
- RFC 2925—Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations
- RFC 3273—RMON Groups 1, 2, and 3
- RFC 3291—Textual conventions for Internet network addresses
- RFC 3434—RMON Groups 1, 2, and 3
- RFC 4022—TCP-MIB
- RFC 4113—UDP-MIB

Quality of Service MIBs
- MIBs for full configuration support of DiffServ, ACL, and CoS functionality
- RFC 3289—Management information base for the DiffServ architecture (read-only)

Security
- Permit/deny actions for inbound IP and Layer-2 traffic classification based on:
- Time-Based ACL
- Source/Destination IP address
- TCP/UDP Source/Destination port
- IP Protocol Type
- Type of Service (ToS) or differentiated services (DSCP) field
- Source/Destination MAC address
- EtherType
- IEEE 802.1p user priority (outer and/or inner VLAN tag)
- VLAN ID (outer and/or inner VLAN tag)
- RFC 1858—Security Considerations for IP Fragment Filtering

Optional ACL Rule Attributes
- Assign flow to a specific Class of Service (CoS) queue
- Redirect matching traffic flows

Quality of Service
- Classify traffic based on same criteria as ACLs and optionally:
- Mark the IP DSCP or Precedence header fields
- Police the flow to a specific rate with two-color aware support
- RFC 2474—Definition of the differentiated services field (DS field) in the IPv4 and IPv6 headers
- RFC 2475—An architecture for differentiated services
- RFC 2597—Assured forwarding Per-Hop Behavior (PHB) group
- RFC 2697—Single-rate policing
- RFC 3246—An expedited forwarding PHB
- RFC 3260—New terminology and clarifications for DiffServ

Class of Service (CoS) Queue Mapping Configuration
- AutoVoIP – Automatic CoS settings for VoIP
- IP DSCP-to-queue mapping
- Configurable interface trust mode (IEEE 802.1p, DSCP, or u ntrusted)
- Interface egress shaping rate
- Strict priority versus weighted scheduling per queue

Aerohive Switches

Part Number	Description
AH-SR-2208P	SR2208P, 8 x GE RJ45 copper ports, 2 x dual media (fiber/copper) GE ports, 124W POE budget, L3 Lite Static Routing
AH-SR-2224P	SR2224P, 24 x GE RJ45 copper ports, 4 x GE SFP ports, 180W POE budget, L3 Lite Static Routing
AH-SR-2324P	SR2324P, 24 x GE RJ45 copper ports, 4 x 10GE SFP+ ports, 370W POE budget, L3 Lite Static Routing
AH-SR-2348P	SR2348P, 48 x GE RJ45 copper ports, 4 x 10GE SFP+ ports, 740W POE budget, L3 Lite Static Routing

Warranty and Support

Every Aerohive Networks device is backed by a limited lifetime hardware warranty. Extended product and technical support may be purchased separately and can include next day advanced replacement, 24x7 or 8x5 technical support, web and email support access, and software updates. For complete support terms go to www.aerohive.com/support.

Contact us today to learn how your organization can benefit from an Aerohive wireless LAN architecture.