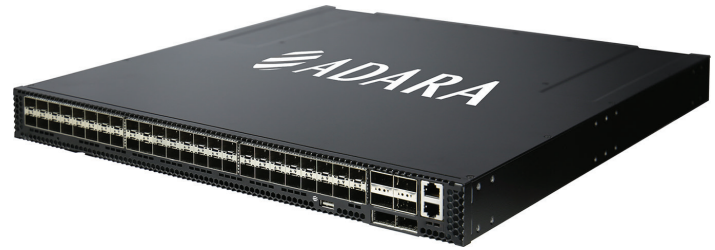


ADARA Axis 5800 Series



Product Highlights

Performance

- 48 x RJ-45 Copper, supporting 10GBASE-T, 1000BASE-T and 100BASE-TX Ethernet on Cat 6, Cat 6 A and Cat 7 twisted-pair cable
- 48 x RJ-45 Copper, supporting 1000BASE-T and 100BASE-TX on Cat 5e UTP, Cat 6, Cat 6A and Cat 7 twisted-pair cable
- 6 x 40 QSFP switch ports, each supporting 40GbE (DAC, 40GBASE-SR4/LR4) or 4 x 10GbE (DAC or fiber breakout cable)
- Full line-rate Layer 2 or Layer 3 forwarding of 720 Gbps

Robust Hardware

- Hot-swappable, redundant PSUs
- Hot-swappable, redundant fans
- Hot/Cold Aisle with port-to-power and port-to-port airflow SKUs
- Management: Ethernet and console RJ-45 ports

Flexible high-performance switch for SDN applications.

The ADARA Axis 5800 Switch meets the high-performance, availability, and network-scaling requirements of enterprise and cloud data centers. The AS5812-54T provides full line-rate switching at Layer 2 or Layer 3 across 48 x 10GbE ports and 6 x 40GbE uplinks. The switch can be deployed either as a Top-of-Rack switch, or as part of a 10GbE or 40GbE distributed spine, forming a non-blocking folded-CLOS data center fabric. The switch is rack mountable in either a standard 19 inch rack, or with the Open Rack Switch Adapter in the 21 inch Open Rack.

The hardware provides the high-availability features required for data center operation, including; redundant, hot-swappable AC power input, 4+1 redundant fan modules, and port-to-power or power-to-port airflow options. The AXIS 5800 is an ideal Top-of-Rack switch for virtualized data centers, with its support of VXLAN and NVGRE tunneling functions in hardware, leveraging existing Cat 5e/Cat 6/Cat 6A/Cat 7 cabling infrastructure that saves further investment.

ADARA software running on this switch provides software solutions including OpenFlow Controller, L2-L3 switching, and other SDN applications.

Software Features

L2 Features

- Auto-negotiation for port speed and duplex
- Flow control: IEEE 802.3x & back-pressure
- Switching mode: store-and-forward
- Spanning Tree Protocol:
 - 802.1D, 802.1w, & 802.1s
 - Spanning Tree Fast Forwarding
 - Edge port
 - Loop guard
 - BPDU filter/guard
 - Auto Edge
 - TCN guard
 - Root guard
- VLANs
 - IEEE 802.1Q tagged based
 - Port-based (up to 4094 VLANs)
 - Private VLAN
 - GARP/GVRP/GMRP
 - 802.1v protocol VLAN
 - Voice VLAN
 - MAC-based VLAN
 - IP-subnet VLAN
 - QinQ
- VTP v1/v2
- Storm control
 - Broadcast
 - Unknown multicast
 - Unknown unicast
- IGMP snooping
 - IGMP snooping v1/v2/v3
 - IGMP v1/v2 querier
 - IGMP immediate leave
- Link Aggregation
 - 802.3ad with LACP
 - Cisco EtherChannel Like
 - Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac)
- Multi-chassis LAG (MLAG)
- Link state
- Port backup

QoS

- Priority queues: 8 queues
- Scheduling for priority queue: WRR, Strict and hybrid (WRR+Strict)
- COS: 802.1p, IP Precedence, & DSCP
- DiffServ
- Port rate limit
- Auto VoIP
- iSCSI optimization

Security

- Static and dynamic port security (MAC-based)
- 802.1x: port-based, MAC-based, auto VLAN assignment, QoS assignment, guest VLAN, unauthenticated VLAN
- ACL: L2/L3/L4
- IPv6 ACL: L3/L4
- RADIUS: authentication and accounting (up to 32 servers)
- TACACS+: authentication (up to 5 servers)

- HTTPS and SSL (AES 128-cbc, 3ES-cbc, Blowfish-cbc)
- SSH 1.5/v2.0 (AES 128-cbc, 3ES-cbc, Blowfish-cbc)
- User name and password: local authentication and remote authentication via RADIUS/TACACS+
- Denial of Service control
- Management IP filtering (SNMP/Web/Telnet/SSH)
- MAC filtering
- IP Source Guard
- Dynamic ARP inspection (DAI)
- DHCP snooping

Management

- Industrial command-line interface
- CLI filtering
- Telnet/SSH
- Software download/upload: TFTP/Xmodem/FTP
- Configuration download/upload: TFTP/Xmodem/FTP
- Dual image supported
- SNMP v1/v2c/v3
- RMON 1, 2, 3 & 9
- BOOTP: client/relay
- DHCP: client/relay/option 82
- Auto-Installation
- Event/error log: local flash and remote server via system log (RFC3164)
- DNS: client/relay
- NTP/SNTP
- LLDP (802.1ab, Link Layer Discovery Protocol)
- CDP (Cisco Discovery Protocol) version 2
- Port mirroring: one to one & many to one
- sFlow (RFC 3176)
- IPv6 management:
 - IPv4/IPv6 Dual Stack
 - ICMPv6
 - ICMPv6 redirect
 - IPv6 Path MTU Discovery
 - IPv6 Neighbor Discovery
 - stateless auto-configuration
 - manual configuration
 - DHCPv6 (client)
 - SNMP/HTTP/SSH/Telnet over IPv6
 - IPv6 DNS resolver
 - IPv6 RADIUS/TACACS+ support
 - IPv6 Syslog support
 - IPv6 SNTP & NTP
 - IPv6 TFTP
 - IPv6 Ping

Layer 3 Features

- IP Multinetting/CIDR
- /31 subnets
- ARP (static: 128, dynamic: 3968)
- Proxy ARP
- Local proxy ARP
- IRDP
- Static route
- Unicast Routing: RIP v1/v2, OSPF
- ECMP
- Multicast Routing: IGMP v1/v2/v3, DVMRP, PIM-DM/-SM
- VRRP
- Source IP Configuration
- Policy-based routing

IPv6 Layer 3 Features

- IPv6 Layer 3 features
- Static route
- Unicast Routing: RIPng & OSPFv3
- Multicast Routing: MLD v1/v2, PIM-DM6-SM6
- DHCPv6: relay

Datacenter Features

- Congestion Notification
- Enhanced Transmission Selection
- Priority-based Flow Control
- Datacenter Bridging Extension
- FIP snooping

VM Tracer Features

- VMware vSphere support
- VM Auto Discovery
- VM Adaptive Segmentation
- VM host view

Ethernet Virtual Bridge

- Ethernet Virtual Bridging (EVB, IEEE 802.1Qbg)

Hardware Specifications

Switch Silicon: Broadcom BCM56864 Trident2+ 720 Gbps

Physical Ports

- 48 x RJ-45 Copper each supporting 10GbE, 1GbE or 100 Mbps
- 6 x QSFP each supporting 40GbE or 4 x 10GbE

Management Ports on front panel:

- 1 x RJ-45 serial console
- 1 x RJ-45 100/1000BASE-T management

Performance

- Wire Speed Forwarding: L2 and L3
- Switching Capacity: 720 Gbps
- Forwarding Rate: 1 Bpps
- MAC Addresses: up to 288K
- VLAN IDs: 4K
- Jumbo Frames (9216 Bytes)

Physical and Environmental

- Dimensions (WxDxH): 47.3 x 44.25 x 4.39 cm (18.6 x 17.4 x 1.71 in)
- Weight: 9.5 kg (20.94 lb), with two installed PSU modules
- Fans: hot-swappable 4+1 redundant fans
- Operating Temperature: 0°C to 40°C
- Storage Temperature: -40°C to 70°C
- Operating Humidity: 5% to 95% non-condensing
- PSUs: 2 redundant, load-sharing, hot-swappable AC or -48VDC. Input Voltage: 90 to 264 VAC at 50-60 Hz. -48 to -72 VDC.

EMI

- CE Mark (EN55022 Class A), FCC Part 15 Class A, VCCI Class A

Environmental

- Temperature: IEC 68-2-14
- Shock: IEC 68-2-29
- Vibration: IEC 68-2-36, IEC 68-2-6
- Drop: ISTA 2A
- RoHS-6 Compliant

Safety

- CB, EN60950, UL/CUL

ADARA Management / Configuration Capabilities

ADARA Network Functions Virtualization Software	ADARA Software Defined Networking Software	ADARA Axis Switch
<p>Auto Configuration</p> <ul style="list-style-type: none"> • Cloud Based • Local • Double Touch ICON <ul style="list-style-type: none"> - (Full Keyboard/Mouse not required) <p>Automated Management</p> <ul style="list-style-type: none"> • Policy Engine Automated CLI Management <p>Manual</p> <ul style="list-style-type: none"> • CLI Management • GUI (drop down) 	<p>Auto Configuration</p> <ul style="list-style-type: none"> • Cloud Based • Local • Double Touch ICON <ul style="list-style-type: none"> - (Full Keyboard/Mouse not required) <p>Automated Management</p> <ul style="list-style-type: none"> • Policy Engine Automated CLI Management <p>Manual</p> <ul style="list-style-type: none"> • CLI Management • GUI (drop down) 	<p>Auto Configuration</p> <ul style="list-style-type: none"> • From Bootup <p>Automated Management</p> <ul style="list-style-type: none"> • Software Defined Networking • Policy Engine Automated CLI Management <p>Manual</p> <ul style="list-style-type: none"> • CLI Management <p>Auto Topology Discovery</p> <ul style="list-style-type: none"> • Link Layer Discovery Protocol • Cisco Discovery Protocol <p>Virtual Machine Auto Discovery</p>

Your next step

ADARA solutions help businesses accelerate growth at a lower total cost of ownership. For more information about ADARA Networks solutions visit www.adaranetworks.com

Corporate Headquarters

ADARA Networks
 2150 N. First Street
 San Jose, CA 95131, USA
 Phone: 408/433-4900
www.adaranetworks.com

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