

Overview

Arista 7280R Data Center Switch Router Series

HPE and Arista share a common vision around the need to deliver secure hybrid IT solutions and experiences built on industry-leading software-defined infrastructure—helping customers to operate their workloads with speed and agility to grow their business. This partnership will provide our customers with proven networking solutions that are superior to legacy alternatives and that complement HPE compute, storage, virtualization, and cloud offerings.

The Arista 7280R Series of fixed systems, including the 7280R, 7280RA, 7280R2 and 7280R2A, are key components of the Arista 7000 Series portfolio of data center switches. The Arista 7280R Series are purpose built 10/25/40/100GbE systems built for the highest performance environments, and to meet the needs of the largest scale data centers and service providers. They deliver scalable L2 and L3 resources and high density with advanced features for network monitoring, precision timing and network virtualization to deliver scalable and deterministic network performance while simplifying designs and reducing Opex. The 7280R capabilities address the requirements for modern networking and rich multi-media content delivery requiring a lossless forwarding solution in a compact and energy efficient form factor.

The 7280R can be deployed in a wide range of open networking solutions including large scale layer 2 and layer 3 cloud designs, overlay networks, virtualized or traditional enterprise data center networks. Deep packet buffers and large routing tables allow for internet peering, interconnect and Inter-DC networking. The broad range of interfaces and density choice provides deployment flexibility.

The 7280R Series are available in a range of models with a choice of 10GBASE-T, 10GbE and 25GbE SFP with 40GbE and 100GbE QSFP uplinks and systems that offer up to 60 ports of wire speed 100GbE in a 2RU system.

7280R support for 100GbE QSFP incorporates a flexible choice of interface speed including 25GbE and 50GbE providing unparalleled flexibility and the ability to seamlessly transition data centers to the next generation of Ethernet performance. The 7280R Series provide industry leading power efficiency with airflow choices for back to front, or front to back. An optional built-in SSD supports advanced logging, data captures and other services directly on the switch. Combined with Arista EOS the 7280R Series delivers advanced features for big data, cloud, virtualized and traditional designs.



Arista 7280R Series

Product Highlights

Performance

- 7280CR Series: 60 x 100GbE
- 7280QR Series: 72 x 40GbE
- 7280SR Series: 48 x 25GbE and 6 x 100GbE
- 7280TR: 48 x 1/10GbE and 6x 100GbE
- 7280SR: 48 x 1/10GbE and 6x 100GbE
- Up to 60 wire-speed 100GbE ports

Cloud Networking Ready

- 768K MAC Addresses
- 768K IPv4 and IPv6 Host Routes
- Over 2M IPv4 Routes
- Arista AlgoMatch™

Resilient Control Plane

Overview

- Up to 12 terabits per second
- Up to 5.76 billion packets per second
- Wire speed L2 and L3 forwarding
- QSFP100: Quad 10GbE or 25GbE mode
- High Performance x86 CPU
- Up to 16GB DRAM
- 4GB Flash
- User applications can run in a VM

Data Center Optimized Design

- Ultra-deep packet buffer up to 32GB
- Virtual Output Queues per port to eliminate head of line blocking
- Over 94% efficient power supplies
- Redundant & hot-swap power and fans
- Front-to-rear or rear-to-front cooling
- Designed for NEBS
- Tool less rails for simple installation

Arista Extensible Operating System

- Single binary image
- Fine-grained truly modular network OS
- Stateful Fault Containment (SFC)
- Stateful Fault Repair (SFR)
- Full access to Linux shell and tools
- Extensible platform - bash, python, C++ , GO, OpenConfig

Virtualization and Provisioning

- CloudVision
- VXLAN for next generation DC
- LANZ for microburst detection
- DANZ Advanced Mirroring & TAP Aggregation for improved visibility
- VM Tracer
- Zero Touch Provisioning (ZTP)
- Advanced Event Monitoring
- sFlow (RFC3176)

Arista Extensible Operating System (EOS)

All Arista products including the 7280R Series runs the same Arista EOS software, binary image simplifying network administration with a single standard across all switches. Arista EOS is a modular switch operating system with a unique state sharing architecture that cleanly separates switch state from protocol processing and application logic. Built on top of a standard Linux kernel, all EOS processes run in their own protected memory space and exchange state through an in-memory database. This multi-process state sharing architecture provides the foundation for in-service-software updates and self-healing resiliency together with stateful switchover without the loss of data plane forwarding.

Arista EOS enables advanced monitoring and automation capabilities such as Zero Touch Provisioning, LANZ, VM Tracer and Linux based tools to be run natively on the switch.

Software Defined Cloud Networks

Arista Software Defined Cloud Networking (SDCN), combines the principles that have made cloud computing the unstoppable force that it is: automation, self service provisioning, and linear scaling of both performance and economics coupled with the trend in Software Defined Networking that delivers: network virtualization, custom programmability, simplified architectures, and lower capital expenditure. This combination creates a best-in-class software foundation for maximizing the value of the network to both the enterprise and service provider data center. A new architecture for the most mission-critical location within the IT infrastructure that simplifies management and provisioning, speeds up service delivery, lowers costs and creates opportunities for competitive differentiation, while putting control and visibility back in the hands of the network and systems administrators.

The Four Pillars of Arista's Software Defined Cloud Networking:

- Universal Cloud Network
 - Scalable standards-based MLAG at Layer 2, ECMP for Layer 3 and VXLAN for network virtualization flexibility
 - Non blocking leaf-spine for 1K-100K hosts
- Cloud Control
 - Standards based EOS with AEM, ZTP/ZTR, LANZ and DANZ
 - Automated Monitoring for visibility and telemetry
- Network Wide Virtualization

Overview

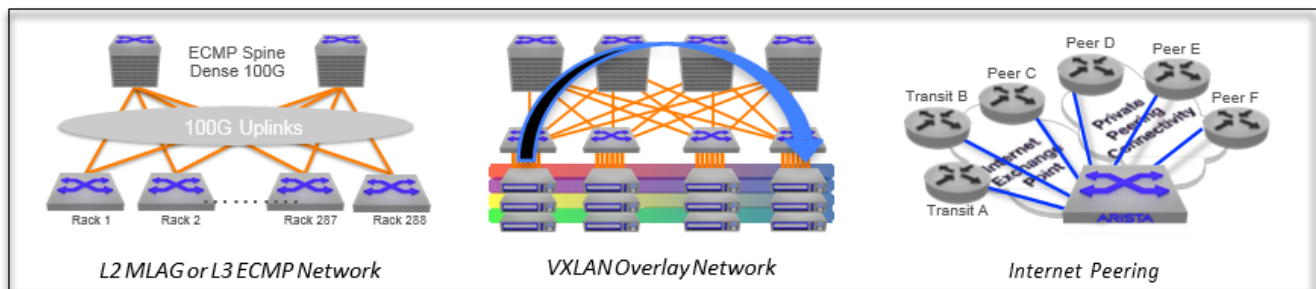
- Multi-vendor API Support with eAPI
- Support for VMWare and NSX with VXLAN and VMTracer
- Support for Microsoft OMI and Openstack OVSDB
- Network Applications and Automated Management
 - Single point of network-wide state with Arista CloudVision
 - Networked applications for workload mobility, smart systems rollback and upgrades and workflow telemetry
 - Open Partner integration

Scaling Data Center Performance

The Arista 7280R Series deliver non-blocking switching capacity that enables dramatically faster and simpler network designs for data centers and lowers both capital and operational expenses. The Arista 7000 Series of fixed and modular systems with a single consistent EOS allows for flexible selections at all tiers of the network and deployment scenarios including layer 2 MLAG, layer 3 ECMP, VXLAN Overlay, and Internet Peering.

Arista's Multi-Chassis Link Aggregation (MLAG) technology supports a leaf and spine active/active L2 network topology. An Equal Cost Multi-Path (ECMP) design at Layer 3 scales the network in a fully non-blocking, low-latency, two-stage network that provides predictable and consistent application performance. The flexibility of the L2 and L3 multi-path design options combined with support for open standards provides maximum flexibility, scalability and network wide virtualization that scales to hundreds of thousands of hosts in a single two-tier design. Both designs support overlay networks via VXLAN and can integrate with standards-based overlay controller solutions.

The Arista 7280R Series FlexRoute™ engine provides the flexible scalability to support deployment as a routing platform with Internet scale routing. Arista FlexRoute along with EOS NetDB enables innovation not natively available in merchant chipsets. Arista EOS provides operational savings through visibility, automation and improved network operations.



Arista Flexible Network Architectures

Enhanced Features for High Performance Cloud Networks

The Arista 7280R delivers a suite of advanced traffic control and monitoring features to improve the agility of modern high performance environments, with solutions for automation, data monitoring, precise timing and next-generation virtualization.

Automating the data center enables customers to dynamically provision computing resources in the most efficient manner while also meeting business needs by maintaining service level agreements (SLAs). Arista EOS automates complex IT workflows and simplifies network operations while reducing or even eliminating downtime. Arista EOS rich automation capabilities not only reduce the human error element in network operations but also enable IT operators to make the network work the way they want.

Arista offers solutions for a variety of approaches to cloud-like network automation. Addressing the needs of the largest public cloud environments as well as applying those lessons learned in the turnkey CloudVision automation offering.

CloudVision

CloudVision is a network-wide approach for workload orchestration and workflow automation as a turnkey solution for Cloud Networking. CloudVision extends the EOS publish subscribe architectural approach across the network for state, topology, monitoring and visibility. This enables enterprises to move to cloud-class automation without needing any significant internal development.

Advanced Event Management (AEM)

Overview

Advanced Event Management (AEM), a sub-system of Arista EOS, is a powerful and flexible tool to automate tasks and customize the behavior of EOS and the operation of the overall data center switching infrastructure. Simplifying the overall operations, AEM provides the tools to customize alerts and actions. AEM allows operators to fully utilize the intelligence within EOS to respond to real-time events, automate routine tasks, and automate actions based on changing network conditions.

Precise Data Analysis

Arista Latency Analyzer (LANZ) and Precision Data Analyzer (DANZ) are integrated features of EOS. DANZ provides a solution to monitoring and visibility challenges at 10/40/100Gbps giving IT operations the ability to proactively deliver feedback on congestion events, filter, replicate, aggregate and capture traffic without affecting production performance. LANZ provides precise real-time monitoring of micro-burst and congestion events before they impact applications, with the ability to identify the sources and capture affected traffic for analysis.

Precision Timing (IEEE 1588)

Arista's hardware derived Precision Time Protocol solution provides a robust mechanism for accurate in-band time distribution in high performance environments. The system clock can be synchronized using IEEE 1588 PTP.

Virtualization

Supporting next-generation virtualized data centers requires tight integration with orchestration tools and emerging encapsulation technologies such as VXLAN. The 7280R builds on the valuable tools already provided by the Arista VM Tracer suite to integrate directly into encapsulated environments. Offering a wire-speed gateway between VXLAN and traditional L2/3 environments, the 7280R makes integration of non-VXLAN aware devices including servers, firewalls and load-balancers seamless and provides the ability to leverage VXLAN as a standards based L2 extension technology for non-MPLS environments.

AlgoMatch™

AlgoMatch is a unique Arista innovation for modern cloud networks, combining both software and hardware to enable more flexible and scalable solutions for access control, policy based forwarding and network telemetry. By combining general purpose memory with advanced software algorithms AlgoMatch delivers higher scale, performance and efficiency with lower power and is more cost effective than traditional solutions. AlgoMatch provides a more efficient packet matching algorithm that in turn enables flow matching for access control, policy and visibility. The net benefits are a high performance policy engine with both increased functionality and scale in a cost and power efficient solution. AlgoMatch is available on the 7280RA, 7280R2A and 7280R2K Series of products.

- AlgoMatch enables IPv4 and IPv6 access control at the same scale
- L4 rule ranges are programmed efficiently without expansion or reduced capacity
- Multiple actions can be performed on a single packet or flow
- User defined filters allow flexible packet classification based on offsets for custom actions
- Supports rich policy with consistent semantics that would exhaust classical resources

Maximum Network Design Flexibility

- Scalable designs with up to a 128-way ECMP provides flexibility and balances traffic evenly across the largest leaf-spine designs
- MLAG designs are effective at almost any layer of the network and maximize cross-sectional bandwidth with fast failover times measured in 100's of milliseconds for link failures.
- VXLAN gateway, bridging and routing with VMTracer features to enable next generation data center designs
- Scaleable routing tables to support internet route peering
- Wide choice of dense 10G/40G/100G interfaces with broad support for flexible 10GbE, 25GbE or 50GbE modes.
- Support for standards based IEEE 25GbE with mix and match support for both 10G and 25G for simple and cost effective migration
- Virtual output queue (VoQ) architecture and deep packet buffering to eliminate head of line blocking with low latency
- ACL scalability with up to 24K entries per forwarding engine allows for rich policy control

Overview

- Flexible allocation of L2 and L3 forwarding table resources for more design choice
- PTP, sFlow, DANZ and multi-port mirroring tools provide network wide visibility and monitoring to detect traffic bursts, monitor latency and congestion and allow capacity planning to improve application performance and availability

System overview

The 7280R and 7280R2 Series deliver unprecedented levels of buffering, scale and availability with a wide choice of high density 10/25/40/100GbE interfaces as shown below, with support for AlgoMatch on the 7280RA and 7280R2A models.



Arista 7280TRA-48C6 and Arista 7280TR-48C6

7280TRA-48C6 and 7280TR-48C6: 48 port 10GbE BASE-T and 6 ports 100GbE

- Offers 48 wire speed 100M/1G/10G RJ45 ports
- Six 100G QSFP ports allow choice of 6 x 100GbE, 24x 25GbE, 6x 40GbE, or 24x 10GbE
- Flexible support for 10GbE, 25GbE, 40GbE, 50GbE and 100GbE with optics or cables
- 2.16Tbps of wire speed performance with 4GB of buffer



Arista 7280SRA-48C6 and Arista 7280SR-48C6

7280SRA-48C6 and 7280SR-48C6: 48 port SFP+ and 6 ports 100GbE

- Offers 48 wire speed 1/10G SFP+ ports
- Six 100G QSFP ports allow choice of 6 x 100GbE, 24x 25GbE, 6x 40GbE, or 24x 10GbE
- Flexible support for 10GbE, 25GbE, 40GbE, 50GbE and 100GbE with optics or cables
- 2.16Tbps of wire speed performance with 4GB of buffer



Arista 7280SR2A-48YC6 and Arista 7280SR2-48YC6

7280SR2A-48YC6 and 7280SR2-48YC6: 48 port 25GbE SFP and 6 ports 100GbE

- Offers 48 wire speed 1/10/25G SFP ports with FC and RS FEC
- Six 100G QSFP ports allow choice of 6 x 100GbE, 24x 25GbE, 6x 40GbE, or 24x 10GbE
- Flexible support for 10GbE, 25GbE, 40GbE, 50GbE and 100GbE with optics or cables
- 3.6Tbps of wire speed performance with 8GB of buffer



Arista 7280QR-C36 and Arista 7280QRA-C36S

7280QR-C36: 24 port QSFP+ and 12 ports QSFP100

- Offer a choice of ports combinations with QSFP+ and QSFP100 optics and cables
- Flexible interface combinations - 36x 40G, 144x 10G, 12x 100G, 48 x 25G, 24x 50G
- 4.32Tbps of wire speed performance with 8GB of buffer



Arista 7280QR-C72

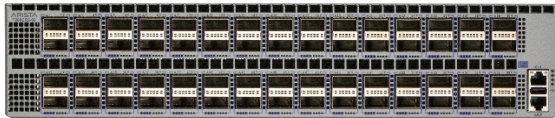
7280QR-C72: 56 port QSFP+ and up to 16 ports QSFP100

- Full 72 ports of 40G with flexible combinations of up to 16 ports of 100GbE
- Maximum of 96 ports of 10G with 48 of 40G, or 56 of 40G and 8 ports of 100GbE

Overview



Arista 7280CR-48



Arista 7280CR2-60 and 7280CR2K-60

- QSFP100 ports with 5 speeds including 10GbE, 25GbE, 40GbE, 50GbE and 100GbE
- 6.4Tbps of wire speed performance with 16GB of buffer

7280CR-48: 48 port QSFP100 and 8 ports of QSFP+

- Up to 48 100G ports with QSFP100 and 8 ports of 40G with QSFP+
- Maximum of 224 ports of 10GbE or 192 ports of 25GbE
- 5 speeds for flexible 10GbE, 25GbE, 40GbE, 50GbE and 100GbE with optics or cables
- 10.24Tbps of wire speed performance with 32GB of buffer

7280CR2-60, 7280CR2A and 7280CR2K-60: 60 port QSFP100

- Up to 60 100G ports with QSFP100
- Maximum of 240 ports of 10GbE or 25GbE with FC and RS FEC
- 12Tbps of wire speed performance with 24GB of buffer

Arista 7280R Flexible Combinations

7280R Accelerated sFlow

sFlow is a powerful tool used commonly by network operators for advanced network telemetry, capacity planning, security analysis and quality of experience monitoring. All models of the 7280R Series enable sFlow utilizing the high performance CPU. Within modern high performance systems traffic sampling requires the capability to both sample and process packet rates of hundreds of millions of packets per second. With the 7280R Series Accelerated sFlow feature the sampling and processing of flow samples into sFlow datagrams is handled via a dedicated sFlow engine capable of generating up to 1.6Mpps of sFlow data, and of supporting 1:1000 sampling rates of full wire speed systems or higher rates with selective sampling based on triggers and filters. All sFlow v5 information is included in the sFlow records ensuring consistent integration with existing standard sFlow collection and analysis tools and no loss of information.

7280R Deterministic Network Performance

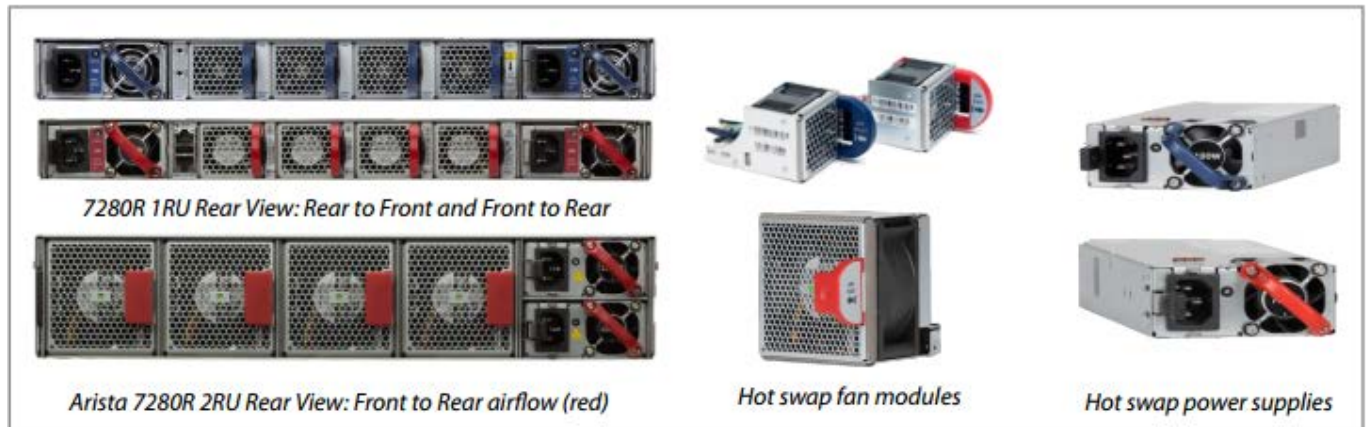
The Arista 7280R Series uses a deep buffer virtual output queue (VOQ) architecture that eliminates head-of-line (HOL) blocking and virtually eliminates packet drops even in the most congested network scenarios. An advanced traffic scheduler fairly allocates bandwidth between all virtual output queues while accurately following queue disciplines including weighted fair queueing, fixed priority, or hybrid schemes. As a result, the Arista 7280 can handle the most demanding data center requirements with ease, including mixed traffic loads of real-time, multicast, and storage traffic while still delivering low latency.

7280R High Availability

The Arista 7280R switches were designed for continuous operations with system wide monitoring of both hardware and software components, simple serviceability and provisioning to prevent single points of failure. Key high availability features include:

- 1+1 hot-swappable power supplies and four hot-swap fans provide dynamic temperature control combined with N+1 redundancy
- Color coded PSU's and fans that deliver platinum level power efficiency
- Live software patching
- Self healing software with Stateful Fault Repair (SFR)
- Smart System Upgrade (SSU) and Accelerated Software Update (ASU)

Overview



Features and Benefits

Layer 2 Features

- 802.1w Rapid Spanning Tree
- 802.1s Multiple Spanning Tree Protocol
- Rapid Per Vlan Spanning Tree (RPVST+)
- 4096 VLANs
- Q-in-Q
- 802.3ad Link Aggregation/LACP
 - 64 Ports / Channel
 - 224 groups per system
- MLAG (Multi-Chassis Link Aggregation)
 - Uses IEEE 802.3ad LACP
 - 128 ports per MLAG
- 802.1Q VLANs/Trunking
- 802.1AB Link Layer Discovery Protocol
- 802.3x Flow Control
- Jumbo Frames (9216 Bytes)
- IGMP v1/v2/v3 snooping
- Storm Control *
- 802.1 AVB *
- SMPTE-2059-2

Layer 3 Features

- Static Routes
- Routing Protocols: OSPF, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2
- 128-way Equal Cost Multipath Routing (ECMP)
- VRF
- Bi-Directional Forwarding Detection (BFD)
- Unicast Reverse Path Forwarding (uRPF)
- VRRP
- Virtual ARP (VARP)
- Policy Based Routing (PBR)
- Route Maps

Multicast

- IGMP v2/v3
- Protocol Independent Multicast (PIM-SM / PIM-SSM)
- PIM-Bidir *
- Anycast RP (RFC 4610)

Extensibility

- Linux Tools
 - Bash shell access and scripting
 - RPM support
 - Custom kernel modules
- Software Defined Networking (SDN)
 - eAPI
 - OpenStack Neutron Support
- Programmatic access to system state
 - Python
 - Chef
 - Puppet
 - C++
 - eAPI
 - GO
 - OpenConfig
 - OpenStack Neutron Plug-in support
- Native KVM/QEMU support

System Scalability

- 9216 Byte Jumbo Frame Support
- 8 Priority Queues per Port
- 1152 Link Aggregation Groups (LAG)
- 32 Ports per LAG
- Virtual Output Queueing
- Distributed Scheduler
- WFQ, CIR*, ETS*, Fixed Priority

Standards Compliance

- 802.1D Bridging and Spanning Tree
- 802.1p QOS/COS
- 802.1Q VLAN Tagging
- 802.1w Rapid Spanning Tree
- 802.1s Multiple Spanning Tree Protocol
- 802.1AB Link Layer Discovery Protocol
- 802.3ad Link Aggregation with LACP
- 802.3x Flow Control
- 802.3ab 1000BASE-T
- 802.3z Gigabit Ethernet

Overview

- Multicast Source Discovery Protocol (MSDP)

Advanced Monitoring and Provisioning

- Latency Analyzer and Microburst Detection (LANZ)
 - Configurable Congestion Notification (CLI, Syslog) *
 - Streaming Events (GPB Encoded) *
 - Capture/Mirror of congested traffic *
- Zero Touch Provisioning (ZTP)
- Advanced Mirroring
 - Port Mirroring (16 sessions)
 - Enhanced Remote Port Mirroring
 - SPAN/TAP M:N Aggregation
 - L2/3/4 Filtering
- Advanced Event Management suite (AEM)
 - CLI Scheduler
 - Event Manager
 - Event Monitor
 - Linux tools
- Integrated packet capture/analysis with TCPDump
- Restore and Configure from USB
- RFC 3176 sFlow
- Optional SSD for logging and data capture
- IEEE 1588 PTP

Virtualization Support

- VXLAN Gateway (draft-mahlingam-dutt-dcops-vxlan-01)
- VXLAN Tunnel Endpoint
- VXLAN Bridging
- VXLAN Routing (VRF, MLAG)
- VM Tracer VMware Integration

Security Features

- PDP
- Service ACLs
- Ingress / Egress ACLs using L2, L3, L4 fields ¹
- Ingress / Egress ACL Logging and Counters ¹
- MAC ACLs * ¹
- ACL Deny Logging 1
- ACL Counters ¹
- DHCP Relay / Snooping
- MAC Security ¹
- TACACS+
- RADIUS
- ARP trapping and rate limiting

Quality of Service (QoS) Features

- Up to 8 queues per port
- Strict priority queueing
- 802.1p based classification
- DSCP based classification and remarking
- Egress shaping / Weighted round robin (WRR)
- Policing / Shaping
- Rate limiting *
- Explicit Congestion Notification (ECN) marking
- 802.1Qbb Per-Priority Flow Control (PFC)

- 802.3ae 10 Gigabit Ethernet
- 802.3by 25 Gigabit Ethernet
- 802.3ba 40 Gigabit Ethernet
- 802.3ba 100 Gigabit Ethernet
- RFC 2460 Internet Protocol, Version 6 (IPv6) Specification
- RFC 2461 Neighbor Discovery for IP Version 6 (IPv6)
- RFC 2462 IPv6 Stateless Address Autoconfiguration
- RFC 2463 Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification
- IEEE 1588-2008 Precision Time Protocol

SNMP MIBs

- RFC 3635 EtherLike-MIB
- RFC 3418 SNMPv2-MIB
- RFC 2863 IF-MIB
- RFC 2864 IF-INVERTED-STACK-MIB
- RFC 2096 IP-FORWARD-MIB
- RFC 4363 Q-BRIDGE-MIB
- RFC 4188 BRIDGE-MIB
- RFC 2013 UDP-MIB
- RFC 2012 TCP-MIB
- RFC 2011 IP-MIB
- RFC 2790 HOST-RESOURCES-MIB
- RFC 3636 MAU-MIB
- RMON-MIB
- RMON2-MIB
- HC-RMON-MIB
- LLDP-MIB
- LLDP-EXT-DOT1-MIB
- LLDP-EXT-DOT3-MIB
- ENTITY-MIB
- ENTITY-SENSOR-MIB
- ENTITY-STATE-MIB
- ARISTA-ACL-MIB
- ARISTA-QUEUE-MIB
- RFC 4273 BGP4-MIB
- RFC 4750 OSPF-MIB
- ARISTA-CONFIG-MAN-MIB
- ARISTA-REDUNDANCY-MIB
- RFC 2787 VRRPv2MIB
- MSDP-MIB
- PIM-MIB
- IGMP-MIB
- IPMROUTE-STD-MIB
- SNMP Authentication Failure trap
- ENTITY-SENSOR-MIB support for DOM (Digital Optical Monitoring)
- User configurable custom OIDs

See EOS release notes for latest supported MIBs

Overview

- 802.1Qaz Enhanced Transmission Selection (ETS)*
- Data Center Bridging Extensions (DCBX)*

Network Management

- CloudVision
- Configuration rollback and commit
- 100/1000 Management Port
- RS-232 Serial Console Port
- USB Port
- SNMP v1, v2, v3
- Management over IPv6
- Telnet and SSHv2
- Syslog
- AAA
- Industry Standard CLI
- Beacon LED for system identification
- System Logging
- Environment monitoring

* Not currently supported in EOS

NOTE 1: Supported only on 7280RA, 7280R2A and 7280R2K

Scale Comparison ¹	7280R	7280RA	7280R2	7280R2A	7280R2K
MAC Addresses	768K	768K	768K	768K	768K
IPv4 Host Routes	768K	768K	768K	768K	768K
IPv6 Unicast Host Routes	768K	768K	768K	768K	768K
IPv4 Unicast LPM Routes	Over 1M	Over 1M	1.3M	1.3M	2M
IPv6 Unicast LPM Routes	1M	1M	1.3M	1.3M	2M
Multicast Routes	Up to 768K	Up to 768K	Up to 768K	Up to 768K	Up to 768K
ACL Entries per Forwarding Engine ²	NA	24K	NA	24K	24K

NOTE 1: Maximum values dependent on shared resources in some cases

NOTE 2: International customers contact sales for more information

Configuration

Ordering Information

Description	Arista SKU	HPE SKU
Switch		
Arista 7280R2 60QSFP28 Algomatch-2 Front-to-Back AC Switch	DCS-7280CR2K-60-F	JQ195A
Arista 7280R2 60QSFP28 Algomatch-2 Front-to-Back DC Switch	DCS-7280CR2K-60-DC-F	JQ196A
Arista 7280R2 60QSFP28 Algomatch-2 L3 Front-to-Back AC Switch	DCS-7280CR2K-60-F LX-F	JQ197A
Arista 7280R2 30QSFP28 Algomatch-2 Expanded Front-to-Back AC Switch	DCS-7280CR2K-30-F	JQ206A
Arista 7280R2 30QSFP28 Algomatch-2 Expanded L3 Front-to-Back AC Switch	DCS-7280CR2K-30-F LX-F	JQ208A
Arista 7280R 48QSFP28 8QSFP+ Front-to-Back DC Switch	DCS-7280CR-48-DC-F	JH803A
Arista 7280R 48QSFP28 8QSFP+ Back-to-Front AC Switch	DCS-7280CR-48-F	JH804A
Arista 7280R 24QSFP+ 12QSFP28 Front-to-Back AC Switch	DCS-7280QR-C36-F	JH558A
Arista 7280R 24QSFP+ 12QSFP28 Back-to-Front AC Switch	DCS-7280QR-C36-R	JH559A
Arista 7280R 24QSFP+ 12QSFP28 SSD Front-to-Back AC Switch	DCS-7280QR-C36-M-F	JH560A
Arista 7280R 24QSFP+ 12QSFP28 SSD Back-to-Front AC Switch	DCS-7280QR-C36-M-R	JH561A
Arista 7280R 24QSFP+ 12QSFP28 SSD Expanded L3 Front-to-Back AC Switch	DCS-7280QR-C36-FLX-F	JH805A
Arista 7280R 24QSFP+ 12QSFP28 SSD Expanded L3 Back-to-Front AC Switch	DCS-7280QR-C36-FLX-R	JH806A
Arista 7280SR 48SFP+ 6QSFP28 SSD Expanded L3 Front-to-Back AC Switch	DCS-7280SR-48C6-FLX-F	JH832A
Arista 7280SR 48SFP+ 6QSFP28 SSD Expanded L3 Back-to-Front AC Switch	DCS-7280SR-48C6-FLX-R	JH833A
Arista 7280R 48SFP+ 6QSFP28 Front-to-Back AC Switch	DCS-7280SR-48C6-F	JH562A
Arista 7280R 48SFP+ 6QSFP28 Back-to-Front AC Switch	DCS-7280SR-48C6-R	JH563A
Arista 7280R 48SFP+ 6QSFP28 SSD Front-to-Back AC Switch	DCS-7280SR-48C6-M-F	JH564A
Arista 7280R 48SFP+ 6QSFP28 SSD Back-to-Front AC Switch	DCS-7280SR-48C6-M-R	JH565A
Arista 7280R 48XGT 6QSFP28 SSD Expanded L3 Front-to-Back AC Switch	DCS-7280TR-48C6-FLX-F	JQ072A
Arista 7280R 48XGT 6QSFP28 SSD Expanded L3 Back-to-Front AC Switch	DCS-7280TR-48C6-FLX-R	JQ073A
Arista 7280R 48XGT 6QSFP28 Front-to-Back AC Switch	DCS-7280TR-48C6-F	JH566A
Arista 7280R 48XGT 6QSFP28 Back-to-Front AC Switch	DCS-7280TR-48C6-R	JH567A
Arista 7280R 56QSFP+ 16QSFP28 Front-to-Back Switch AC Switch	DCS-7280QR-C72-F	JQ004A
Arista 7280R 56QSFP+ 16QSFP28 Back-to-Front AC Switch	DCS-7280QR-C72-R	JQ005A
Arista 7280R 56QSFP+ 16QSFP28 SSD Expanded Front-to-Back AC Switch	DCS-7280QR-C72M-F	JQ006A
Arista 7280R 56QSFP+ 16QSFP28 SSD Expanded Back-to-Front AC Switch	DCS-7280QR-C72M-R	JQ007A
Arista 7280R 56QSFP+ 16QSFP28 SSD Expanded L3 Front-to-Back AC Switch	DCS-7280QR-C72M-FLX-F	JQ008A
Arista 7280R 56QSFP+ 16QSFP28 SSD Expanded L3 Back-to-Front AC Switch	DCS-7280QR-C72M-FLX-R	JQ009A
Arista 7280R2 60QSFP28 Front-to-Back AC Switch	DCS-7280CR2-60-F	JQ078A
Arista 7280R2 60QSFP28 Front-to-Back DC Switch	DCS-7280CR2-60-DC-F	JQ079A
Arista 7280R2 60QSFP28 L3 Front-to-Back AC Switch	DCS-7280CR2-60-FLX-F	JQ081A
Arista 7280R2 48SFP28 6QSFP28 Front-to-Back AC Switch	DCS-7280SR2-48YC6-F	JQ173A
Arista 7280R2 48SFP28 6QSFP28 Back-to-Front AC Switch	DCS-7280SR2-48YC6-R	JQ174A
Arista 7280R2 48SFP28 6QSFP28 SSD Expanded Front-to-Back AC Switch	DCS-7280SR2-48YC6-M-F	JQ175A
Arista 7280R2 48SFP28 6QSFP28 SSD Expanded Back-to-Front AC Switch	DCS-7280SR2-48YC6-M-R	JQ176A
Arista 7280R2 48SFP28 6QSFP28 SSD Expanded L3 Front-to-Back AC Switch	DCS-7280SR2-48YC6M-FLX-F	JQ177A
Arista 7280R2 48SFP28 6QSFP28 SSD Expanded L3 Back-to-Front AC Switch	DCS-7280SR2-48YC6M-FLX-R	JQ178A

Configuration

Arista 7280RA 48SFP+ 6QSFP28 Algomatch Front-to-Back AC Switch	DCS-7280SRA-48C6-F	JQ092A
Arista 7280RA 48SFP+ 6QSFP28 Algomatch Back-to-Front AC Switch	DCS-7280SRA-48C6-R	JQ093A
Arista 7280RA 48SFP+ 6QSFP28 Algomatch SSD Expanded Front-to-Back AC Switch	DCS-7280SRA-48C6M-F	JQ094A
Arista 7280RA 48SFP+ 6QSFP28 Algomatch SSD Expanded Back-to-Front AC Switch	DCS-7280SRA-48C6M-R	JQ095A
Arista 7280RA 48SFP+ 6QSFP28 Algomatch SSD Expanded L3 Front-to-Back Switch	DCS-7280SRA-48C6M-FLX-F	JQ096A
Arista 7280RA 48SFP+ 6QSFP28 Algomatch SSD Expanded L3 Back-to-Front Switch	DCS-7280SRA-48C6M-FLX-R	JQ097A
Arista 7280RA 36QSFP+ 12QSFP28 Algomatch Front-to-Back AC Switch	DCS-7280QRA-C36S-F	JQ086A
Arista 7280RA 36QSFP+ 12QSFP28 Algomatch Back-to-Front AC Switch	DCS-7280QRA-C36S-R	JQ087A
Arista 7280RA 36QSFP+ 12QSFP28 Algomatch SSD Expanded Front-to-Back AC Switch	DCS-7280QRA-C36SM-F	JQ088A
Arista 7280RA 36QSFP+ 12QSFP28 Algomatch SSD Expanded Back-to-Front AC Switch	DCS-7280QRA-C36SM-R	JQ089A
Arista 7280RA 36QSFP+ 12QSFP28 Algomatch SSD Expanded L3 Front-to-Back Switch	DCS-7280QRA-C36SM-FLX-F	JQ090A
Arista 7280RA 36QSFP+ 12QSFP28 Algomatch SSD Expanded L3 Back-to-Front Switch	DCS-7280QRA-C36SM-FLX-R	JQ091A
Arista 7280RA 48XGT 6QSFP28 Algomatch Front-to-Back AC Switch	DCS-7280TRA-48C6-F	JQ098A
Arista 7280RA 48XGT 6QSFP28 Algomatch Back-to-Front AC Switch	DCS-7280TRA-48C6-R	JQ099A
Arista 7280RA 48XGT 6QSFP28 Algomatch SSD Expanded Front-to-Back AC Switch	DCS-7280TRA-48C6M-F	JQ100A
Arista 7280RA 48XGT 6QSFP28 Algomatch SSD Expanded Back-to-Front AC Switch	DCS-7280TRA-48C6M-R	JQ101A
Arista 7280RA 48XGT 6QSFP28 Algomatch SSD Expanded L3 Front-to-Back Switch	DCS-7280TRA-48C6M-FLX-F	JQ102A
Arista 7280RA 48XGT 6QSFP28 Algomatch SSD Expanded Back-to-Front L3 Switch	DCS-7280TRA-48C6M-FLX-R	JQ103A
Arista 7280R2 60QSFP28 Algomatch Front-to-Back AC Switch	DCS-7280CR2A-60-F	JQ110A
Arista 7280R2 60QSFP28 Algomatch Front-to-Back DC Switch	DCS-7280CR2A-60-DC-F	JQ111A
Arista 7280R2 60QSFP28 Algomatch L3 Front-to-Back AC Switch	DCS-7280CR2A-60-FLX-F	JQ113A

NOTE: Switches sold in the US are manufactured at a US facility and comply with TAA requirements.

Optional components

Arista 500W Front-to-Back AC Power Supply	PWR-500AC-F	JH882A
Arista 500W Back-to-Front AC Power Supply	PWR-500AC-R	JH883A
Arista 500W Front-to-Back DC Power Supply	PWR-500-DC-F	JH597A
Arista 500W Back-to-Front DC Power Supply	PWR-500-DC-R	JH599A
Arista 750W TX Front-to-Back AC Power Supply	PWR-745AC-F	JH884A
Arista 750W TX Back-to-Front AC Power Supply	PWR-745AC-R	JH885A
Arista 750W 7280R Front-to-Back AC Power Supply	PWR-747AC-RED	JQ082A
Arista 750W 7280R Back-to-Front AC Power Supply	PWR-747AC-BLUE	JQ083A
Arista 7000 1900W Front-to-Back AC Power Supply	PWR-1900AC-F	JH876A
Arista 7000 1900W Back-to-Front AC Power Supply	PWR-1900AC-R	JH877A
Arista 7000 1900W Front-to-Back DC Power Supply	PWR-1900-DC-F	JH878A
Arista 7000 1900W Back-to-Front DC Power Supply	PWR-1900-DC-R	JQ014A
Arista 7280R 1RU High Speed Front-to-Back Fan Module	FAN-7000H-F	JQ116A
Arista 7280R 1RU High Speed Back-to-Front Fan Module	FAN-7000H-R	JQ117A

Configuration

Arista Expanded L3 Software Fix-2 E-LTU	LIC-FIX-2-FLX	JH601AAE
Arista Expanded L3 Software Fix-4 E-LTU	LIC-FIX-4-FLX	JH602AAE
Arista Enhanced L3 Software 10G Fix-2 E-LTU	LIC-FIX-2-E	JH606AAE
Arista Provisioning Software 10G Fix-2 E-LTU	LIC-FIX-2-Z	JH608AAE
Arista Virtualization Software 10G Fix-2 E-LTU	LIC-FIX-2-V	JH609AAE
Arista Enhanced L3 Software 10G Fix-3 E-LTU	LIC-FIX-3-E	JL409AAE
Arista Enhanced L3 Software 10G Fix-4 E-LTU	LIC-FIX-4-E	JL410AAE
Arista Provisioning Software 10G Fix-3 E-LTU	LIC-FIX-3-Z	JL411AAE
Arista Provisioning Software 10G Fix-4 E-LTU	LIC-FIX-4-Z	JL412AAE
Arista Virtualization Software 10G Fix-3 E-LTU	LIC-FIX-3-V	JL414AAE
Arista Virtualization Software 10G Fix-4 E-LTU	LIC-FIX-4-V	JL415AAE
Arista FlexRoute L3 Lite Software Fix-2 E-LTU	LIC-FIX-2-FLX-L	JQ049AAE
Arista FlexRoute L3 Lite Software Fix-3 E-LTU	LIC-FIX-3-FLX-L	JQ050AAE
Arista FlexRoute L3 Software Fix-3 E-LTU	LIC-FIX-3-FLX	JQ051AAE
Arista FlexRoute L3 Lite Software Fix-4 E-LTU	LIC-FIX-4-FLX-L	JQ052AAE
Arista FlexRoute L3 Lite Software Fix-2 E-LTU	LIC-FIX-2-FLX-L	JQ049AAE
Arista 7000 Front-to-Back Fan Module	FAN-7000-F	JH856A
Arista 7000 Back-to-Front Fan Module	FAN-7000-R	JH857A
Arista 7002 High Speed Front-to-Back Fan Module	FAN-7002H-F	JH859A
Arista 7001 1RU Accessory Kit	KIT-7001	JH866A
Arista 2 Post 2RU Rack Mount Kit	KIT-2POST	JH862A
Arista 2 Post 1RU Rack Mount Kit	KIT-2POST-1U-NT	JH863A
Arista 4 Post Rack Mount Kit	KIT-4POST-NT	JH864A

Service

Arista A-Care 7280QR-36 NBD Software 1 Month Support E-LTU	SVC-7280QR-36-1M-NB	JH472AAE
Arista A-Care 7280QR-36 4H Software 1 Month Support E-LTU	SVC-7280QR-36-1M-4H	JH473AAE
Arista A-Care 7280QR-36 2H Software 1 Month Support E-LTU	SVC-7280QR-36-1M-2H	JH474AAE
Arista A-Care 7280QR-36 SSD NBD Software 1 Month Support E-LTU	SVC-7280QR-36M-1M-NB	JH475AAE
Arista A-Care 7280QR-36 SSD 4H Software 1 Month Support E-LTU	SVC-7280QR-36M-1M-4H	JH476AAE
Arista A-Care 7280QR-36 SSD 2H Software 1 Month Support E-LTU	SVC-7280QR-36M-1M-2H	JH477AAE
Arista A-Care 7280SR-48 NBD Software 1 Month Support E-LTU	SVC-7280SR-48C6-1M-NB	JH478AAE
Arista A-Care 7280SR-48 4H Software 1 Month Support E-LTU	SVC-7280SR-48C6-1M-4H	JH479AAE
Arista A-Care 7280SR-48 2H Software 1 Month Support E-LTU	SVC-7280SR-48C6-1M-2H	JH480AAE
Arista A-Care 7280SR-48 SSD NBD Software 1 Month Support E-LTU	SVC-7280SR-48C6M-1M-NB	JH481AAE
Arista A-Care 7280SR-48 SSD 4H Software 1 Month Support E-LTU	SVC-7280SR-48C6M-1M-4H	JH482AAE
Arista A-Care 7280SR-48 SSD 2H Software 1 Month Support E-LTU	SVC-7280SR-48C6M-1M-2H	JH483AAE
Arista A-Care 7280TR-48 NBD Software 1 Month Support E-LTU	SVC-7280TR-48C6-1M-NB	JH484AAE
Arista A-Care 7280TR-48 4H Software 1 Month Support E-LTU	SVC-7280TR-48C6-1M-4H	JH485AAE
Arista A-Care 7280TR-48 2H Software 1 Month Support E-LTU	SVC-7280TR-48C6-1M-2H	JH486AAE
Arista A-Care 7280CR-48 2H Software 1 Month Support E-LTU	SVC-7280CR-48-1M-2H	JH736AAE
Arista A-Care 7280CR-48 4H Software 1 Month Support E-LTU	SVC-7280CR-48-1M-4H	JH737AAE
Arista A-Care 7280CR-48 NBD Software 1 Month Support E-LTU	SVC-7280CR-48-1M-NB	JH738AAE
Arista A-Care 7280SR2A-48YC6 NBD Software 1 Month Support E-LTU	SVC-7280SR2A-48YC6-1M-NB	JH964AAE
Arista A-Care 7280SR2A-48YC6 4H Software 1 Month Support E-LTU	SVC-7280SR2A-48YC6-1M-2H	JH965AAE
Arista A-Care 7280SR2A-48YC6 2H Software 1 Month Support E-LTU	SVC-7280SR2A-48YC6-1M-4H	JH966AAE
Arista A-Care 7280SR2A-48YC6M NBD Software 1 Month Support E-LTU	SVC-7280SR2A-48YC6M-1M-NB	JH967AAE
Arista A-Care 7280SR2A-48YC6M 4H Software 1 Month Support E-LTU	SVC-7280SR2A-48YC6M-1M-4H	JH968AAE
Arista A-Care 7280SR2A-48YC6M 2H Software 1 Month Support E-LTU	SVC-7280SR2A-48YC6M-1M-2H	JH969AAE
Arista A-Care 7280QR-C72 NBD Software 1 Month Support E-LTU	SVC-7280QR-C72-1M-NB	JH970AAE

Configuration

Arista A-Care 7280QR-C72 4H Software 1 Month Support E-LTU	SVC-7280QR-C72-1M-4H	JH971AAE
Arista A-Care 7280QR-C72 2H Software 1 Month Support E-LTU	SVC-7280QR-C72-1M-2H	JH972AAE
Arista A-Care 7280QR-C72M NBD Software 1 Month Support E-LTU	SVC-7280QR-C72M-1M-NB	JH973AAE
Arista A-Care 7280QR-C72M 4H Software 1 Month Support E-LTU	SVC-7280QR-C72M-1M-4H	JH974AAE
Arista A-Care 7280QR-C72M 2H Software 1 Month Support E-LTU	SVC-7280QR-C72M-1M-2H	JH975AAE
Arista A-Care 7280TR-48 SSD NBD Software 1 Month Support E-LTU	SVC-7280TR-48C6M-1M-NB	JL416AAE
Arista A-Care 7280TR-48 SSD 4H Software 1 Month Support E-LTU	SVC-7280TR-48C6M-1M-4H	JL417AAE
Arista A-Care 7280TR-48 SSD 2H Software 1 Month Support E-LTU	SVC-7280TR-48C6M-1M-2H	JL418AAE
Arista A-Care 7280CR2-60 NBD Software 1 Month Support E-LTU	SVC-7280CR2-60-1M-NB	JQ135AAE
Arista A-Care 7280CR2-60 4H Software 1 Month Support E-LTU	SVC-7280CR2-60-1M-4H	JQ136AAE
Arista A-Care 7280CR2-60 2H Software 1 Month Support E-LTU	SVC-7280CR2-60-1M-2H	JQ137AAE
Arista A-Care 7280QRA-C36S NBD Software 1 Month Support E-LTU	SVC-7280QRA-36S-1M-NB	JQ141AAE
Arista A-Care 7280QRA-C36S 4H Software 1 Month Support E-LTU	SVC-7280QRA-36S-1M-4H	JQ142AAE
Arista A-Care 7280QRA-C36S 2H Software 1 Month Support E-LTU	SVC-7280QRA-36S-1M-2H	JQ143AAE
Arista A-Care 7280QRA-C36SM NBD Software 1 Month Support E-LTU	SVC-7280QRA-36SM-1M-NB	JQ144AAE
Arista A-Care 7280QRA-C36SM 4H Software 1 Month Support E-LTU	SVC-7280QRA-36SM-1M-4H	JQ145AAE
Arista A-Care 7280QRA-C36SM 2H Software 1 Month Support E-LTU	SVC-7280QRA-36SM-1M-2H	JQ146AAE
Arista A-Care 7280SRA-48C6 NBD Software 1 Month Support E-LTU	SVC-7280SRA-48C6-1M-NB	JQ147AAE
Arista A-Care 7280SRA-48C6 4H 1 Month Support E-LTU	SVC-7280SRA-48C6-1M-4H	JQ148AAE
Arista A-Care 7280SRA-48C6 2H Software 1 Month Support E-LTU	SVC-7280SRA-48C6-1M-2H	JQ149AAE
Arista A-Care 7280SRA-48C6M NBD Software 1 Month Support E-LTU	SVC-7280SRA-48C6M-1M-NB	JQ150AAE
Arista A-Care 7280SRA-48C6M 4H Software 1 Month Support E-LTU	SVC-7280SRA-48C6M-1M-4H	JQ151AAE
Arista A-Care 7280SRA-48C6M 2H Software 1 Month Support E-LTU	SVC-7280SRA-48C6M-1M-2H	JQ152AAE
Arista A-Care 7280TRA-48C6 NBD Software 1 Month Support E-LTU	SVC-7280TRA-48C6-1M-NB	JQ153AAE
Arista A-Care 7280TRA-48C6 4H 1 Month Support E-LTU	SVC-7280TRA-48C6-1M-4H	JQ154AAE
Arista A-Care 7280CR2K-60 NBD Software 1 Month Support E-LTU	SVC-7280CR2K-60-1M-NB	JQ217AAE
Arista A-Care 7280CR2K-60 4H Software 1 Month Support E-LTU	SVC-7280CR2K-60-1M-4H	JQ218AAE
Arista A-Care 7280CR2K-60 2H Software 1 Month Support E-LTU	SVC-7280CR2K-60-1M-2H	JQ219AAE
Arista A-Care 7280CR2K-30 NBD Software 1 Month Support E-LTU	SVC-7280CR2K-30-1M-NB	JQ229AAE
Arista A-Care 7280CR2K-30 4H Software 1 Month Support E-LTU	SVC-7280CR2K-30-1M-4H	JQ230AAE
Arista A-Care 7280CR2K-30 2H Software 1 Month Support E-LTU	SVC-7280CR2K-30-1M-2H	JQ231AAE

Service and Support

HPE Pointnext's full portfolio of Consulting services as well as Support Services are available. The support services include Installation and Startup Services, Next Business Day Exchange, Next Business Day Onsite and 24x7 Onsite parts, Engineer and 4-hour committed response as well as Datacenter Care and Flex Capacity. (Arista A-Care services can also be purchased. Learn more at <http://www.arista.com>). For service depot locations, please see: <http://www.arista.com/en/service>

Warranty

The Arista 7280R switches come with a one-year limited hardware warranty that covers parts, repair, or replacement with a 10-business-day turnaround after the unit is received. Learn more at <http://www.arista.com>

Technical Specifications

Technical Specifications

Model Comparison					
	7280CR-48	7280QR-C72	7280QR-C36	7280SR-48C6	7280TR-48C6
Ports	48 x QSFP100 & 8 x QSFP+	72 x QSFP (56x QSFP+ and 16 x QSFP100)	36 x QSFP (24x QSFP+ and 12x QSFP100)	48 x SFP+ 6 x QSFP100	48 x 10G-T 6 x QSFP100
Max 100GbE Ports	48	16	12	6	6
Max 50GbE Ports	96	32	24	12	12
Max 40GbE Ports	56	72	36	6	6
Max 25GbE Ports	192	64	48	24	24
Max 10GbE Ports	224	160	144	72	72 (100MB-10GB)
Throughput	10.24 Tbps	6.4 Tbps	4.32 Tbps	2.16 Tbps	2.16 Tbps
Packets/Second	5.76 Bpps	2.88 Bpps	1.44 Bpps	720 Mpps	720 Mpps
Latency	From 3.8us	From 3.8us	3.8us	3.8us	3.8us
CPU	Multi-core x86	Multi-core x86	Quad-Core x86	Quad-Core x86	Quad-Core x86
System Memory	16 Gigabytes	8 GB (16GB optional)	8 GB (32GB optional)	8 GB (32GB optional)	8 GB (32GB optional)
Packet Buffer Memory	32GB	16GB	8GB	4GB	4GB
USB Ports	1	1	1	2	2
Flash Storage Memory	4GB	4GB	4GB	4GB	4GB
SSD Storage Option	Yes	Yes	Yes	Yes	Yes
100/1000 Mgmt Ports	1	1	1	1	1
RS-232 Serial Ports	1 (RJ-45)	1 (RJ-45)	1 (RJ-45)	1 (RJ-45)	1 (RJ-45)

Technical Specifications

Hot-swap Power Supplies	2 (1+1 redundant)	2 (1+1 redundant)	2 (1+1 redundant)	2 (1+1 redundant)	2 (1+1 redundant)
Hot-swappable Fans	4 (N+1 redundant)	4 (N+1 redundant)	4 (N+1 redundant)	4 (N+1 redundant)	4 (N+1 redundant)
Reversible Airflow Option	No (front to rear)	Yes	Yes	Yes	Yes
Rack Units	2U	2U	1U	1U	1U
Size (WxHxD)	19 x 3.5 x 22.2" (48.3 x 8.9 x 56.3cm)	19 x 3.5 x 22.2" (48.3 x 8.9 x 56.3cm)	19 x 1.75 x 20.6" (48.3 x 4.4 x 52.3cm)	19 x 1.75 x 16" (48.3 x 4.4 x 40.6cm)	19 x 1.75 x 16" (48.3 x 4.4 x 40.6cm)
Typical/Max Power Draw	1363W / 1710W	696W / 1200W	324W / 499W	263W / 381W	290W / 405W
Weight	46.7lbs (21.2kg)	47.3lbs (21.5kg)	21lbs (9.7kg)	17.8lbs (8.1kg)	22.2lbs (10.1kg)
NEBS	Yes	Yes	Yes	Yes	No
Power Supplies	1900W AC 1900W DC	1900W AC 1900W DC	745W AC 1900W DC	500W AC 500W DC	500W AC 500W DC
AlgoMatch	No	No	No	No	No
Accelerated sFlow	No	No	No	No	No
EOS Feature Licenser	LIC-FIX-4	LIC-FIX-4	LIC-FIX-3	LIC-FIX-2	LIC-FIX-2
Minimum EOS	4.17.1	4.18.1	4.17.1	4.17.1	4.17.1

Typical power consumption measured at 25C ambient with 50% load on all ports

* Not currently supported in EOS

Model Comparison

	7280QRA-C36S	7280SR2-48YC6	7280SR2A-48YC6	7280SRA-48C6	7280TRA-48C6
Ports	36 x QSFP (24x QSFP+ and 12x QSFP100)	48 x SFP25 6 x QSFP100	48 x SFP25 6 x QSFP100	48 x SFP+ 6 x QSFP100	48 x 10G-T 6 x QSFP100
Max 100GbE Ports	12	6	6	6	6
Max 50GbE Ports	24	12	12	12	12
Max 40GbE Ports	36	6	6	6	6

Technical Specifications

Max 25GbE Ports	48	72	72	24	24
Max 10GbE Ports	120	72	72	72	72 (100MB-10GB)
Throughput	3.84Tbps	3.6Tbps	3.6Tbps	2.16Tbps	2.16Tbps
Packets/Second	1.44Bpps	1.6Bpps	1.6Bpps	720Mpps	720Mpps
Latency	From 3.8us	3.8us	3.8us	From 3.8us	From 3.8us
CPU	Quad-Core x86	Quad-Core x86	Quad-Core x86	Quad-Core x86	Quad-Core x86
System Memory	8 GB (32GB Optional)	8 GB (32GB Optional)	8 GB (32GB Optional)	8 GB (32GB Optional)	8 GB (32GB Optional)
Packet Buffer Memory	8GB	8GB	8GB	4GB	4GB
USB Ports	2	2	2	2	2
Flash Storage Memory	4 GB	4 GB	4 GB	4 GB	4 GBYes
SSD Storage Option	Yes	Yes	Yes	Yes	Yes
100/1000 Mgmt Ports	1	1	1	1	1
RS-232 Serial Ports	1 (RJ-45)	1 (RJ-45)	1 (RJ-45)	1 (RJ-45)	1 (RJ-45)
Hot-swap Power Supplies	2 (1+1 redundant)	2 (1+1 redundant)	2 (1+1 redundant)	2 (1+1 redundant)	2 (1+1 redundant)
Hot-swappable Fans	4 (N+1 redundant)	4 (N+1 redundant)	4 (N+1 redundant)	4 (N+1 redundant)	4 (N+1 redundant)
Reversible Airflow Option	Yes	Yes	Yes	Yes	Yes
Rack Units	1U	1U	1U	1U	1U
Size (WxHxD)	19 x 1.75 x20.6" (48.3 x 4.4 x52.3cm)	19 x 1.75 x20.6" (48.3 x 4.4 x52.3cm)	19 x 1.75 x20.6" (48.3 x 4.4 x52.3cm)	19 x 1.75 x16" (48.3 x 4.4 x40.6cm)	19 x 1.75 x16" (48.3 x 4.4 x40.6cm)
Typical/Max Power Draw	419W / 570W	425W / 647W	450W / 685W	313W / 410W	290W / 405W
Weight	23.6lbs (10.7kg)	22.9lbs (10.4kg)	22.9lbs (10.4kg)	19.6lbs (8.9kg)	22.2lbs (10.1kg)
NEBS	Yes	Yes	Yes	Yes	No

Technical Specifications

Power Supplies	747W AC 1900W DC	747W AC 1900W DC	747W AC 1900W DC	500W AC 500W DC	500W AC 500W DC
AlgoMatch	Yes	No	Yes	Yes	Yes
Accelerated sFlow	No	No	Yes	No	No
EOS Feature Licenser	LIC-FIX-3	LIC-FIX-2	LIC-FIX-2	LIC-FIX-2	LIC-FIX-2
Minimum EOS	TBD	4.18.3	TBD	TBD	TBD

Model Comparison

	7280CR2-60	7280CR2A-60	7280CR2K-60	7280CR2K-30
Ports	60 x QSFP100	60 x QSFP100	60 x QSFP100	30 x QSFP100
Max 100GbE Ports	60	60	60	30
Max 50GbE Ports	120	120	120	60
Max 40GbE Ports	60	60	60	30
Max 25GbE Ports	240	240	240	120
Max 10GbE Ports	240	240	240	120
Throughput	12Tbps	12Tbps	12Tbps	6Tbps
Packets/Second	5.02 Bpps	5.02 Bpps	5.02 Bpps	2.51 Bpps
Latency	From 3.8us	From 3.8us	From 3.8us	From 3.8us
CPU	Multi-core x86	Multi-core x86	Multi-core x86	Multi-core x86
System Memory	16 Gigabytes	16 Gigabytes	16 Gigabytes	32 Gigabytes
Packet Buffer Memory	24GB	24GB	24GB	12GB
USB Ports	1	1	1	1

Technical Specifications

Flash Storage Memory	4 GB	4 GB	4 GB	4 GB
SSD Storage Option	Yes	Yes	Yes	Yes
100/1000 Mgmt Ports	1	1	1	1
RS-232 Serial Ports	1 (RJ-45)	1 (RJ-45)	1 (RJ-45)	1 (RJ-45)
Hot-swap Power Supplies	2 (1+1 redundant)	2 (1+1 redundant)	2 (1+1 redundant)	2 (1+1 redundant)
Hot-swappable Fans	4 (N+1 redundant)	4 (N+1 redundant)	4 (N+1 redundant)	4 (N+1 redundant)
Reversible Airflow Option	No (front to rear)	No (front to rear)	No (front to rear)	No (front to rear)
Rack Units	2U	2U	2U	1U
Size (WxHxD)	19 x 3.5 x 25.2" (48.3 x 8.9 x 64cm)	19 x 3.5 x 25.2" (48.3 x 8.9 x 64cm)	19 x 3.5 x 25.2" (48.3 x 8.9 x 64cm)	17.32 x 1.71 x 26.4" (48.3 x 4.4 x 67 cm)
Typical/Max Power Draw	1660W / 1850W	1760W / 1900W	1760W / 1900W	TBD
Weight	54.8lbs (24.9kg)	54.8lbs (24.9kg)	54.8lbs (24.9kg)	34.2lbs (15.5kg)
NEBS	No	No	No	No
Power Supplies	1900W AC 1900W DC	1900W AC 1900W DC	1900W AC 1900W DC	1600W AC
AlgoMatch	No	Yes	Yes	Yes
Accelerated sFlow	Yes	Yes	Yes	Yes
EOS Feature Licenser	LIC-FIX-4	LIC-FIX-4	LIC-FIX-4	LIC-FIX-4
Minimum EOS	TBD	TBD	TBD	TBD

Technical Specifications

Supported Optics and Cables	
Interface Type	QSFP+ ports
10GBASE-CR	0.5-3m QSFP+ to 4 x SFP+
40GBASE-CR4	0.5m to 5m QSFP+ to QSFP+
40GBASE-AOC	3m to 100m
40GBASE-UNIV	150m (OM3) /150m (OM4) /500m (SM)
40GBASE-SRBD	100m (OM3) /150m (OM4)
40GBASE-SR4	100m (OM3) /150m (OM4)
40GBASE-XSR4	300m (OM3) /400m (OM4)
40GBASE-PLRL4	1km (1km 4x10G LR/LRL)
40GBASE-LRL4	1km
40GBASE-PLR4	10km (10km 4x10G LR/LRL)
40GBASE-LR4	10km
40GBASE-ER4	40km

Interface Type	SFP+ ports
10GBASE-CR	SFP+ to SFP+: 0.5-5m
10GBASE-AOC	SFP+ to SFP+: 3m-30m
10GBASE-SRL	100m
10GBASE-SR	300m
10GBASE-LRL	1km
10GBASE-LR	10km
10GBASE-ER	40km
10GBASE-ZR	80km
10GBASE-DWDM	80km
100/1000BASE-T, 1GbE SX/LX	yes

Technical Specifications

Interface Type	QSFP100 ports
100GBASE-SR4	70m OM3 / 100m OM4 Parallel MMF
100GBASE-LRL4	1km SM Duplex
100GBASE-LR4	10km SM Duplex
100GBASE-CWDM4	2km SM duplex
100GBASE-DWDM	80km SM duplex
100GBASE-SWDM4	100m MM
100GBASE-BiDi	100m MM
100GBASE-PSM4	9 μ SMF / 500m
100GBASE-CR	1m to 3m lengths
25GBASE-CR	QSFP to SFP25: 1m to 3m lengths

Environmental Characteristics

Operating Temperature	0 to 40C **
Storage Temperature	-40C to 70C
Relative Humidity	5 to 95%
Operating Altitude	0 to 10,000 ft (0-3,000m)

Standards Compliance

EMC	Emissions: FCC, EN55022, EN61000-3-2, EN61000-3-3 or EN61000-3-11, EN61000-3-12 (as applicable) Immunity: EN55024 Emissions and Immunity: EN300 386
Safety	UL/CSA 60950-1, EN 60950-1, IEC 60950-1 CB Scheme with all country differences
Certifications	North America (NRTL) European Union (EU) BSMI (Taiwan) C-Tick (Australia) CCC (PRC) MSIP (Korea) EAC (Customs Union) VCCI (Japan)

Technical Specifications

European Union Directives

2006/95/EC Low Voltage Directive
 2004/108/EC EMC Directive
 2011/65/EU RoHS Directive
 2012/19/EU WEEE Directive

Power Supply Specifications						
Power Supply Model	PWR-500AC	PWR-500DC	PWR-745AC	PWR-1100AC	PWR-1900AC	PWR-1900DC
Input Voltage	100-240AC	40-72V DC	100-240VAC	200-240AC	200-240AC	40-72V DC
Typical Input Current	6.3 - 2.3A	13.1 - 7.3A 11A at -48V	10 - 4A	6.5 - 5.5A	11.2 - 9.5A	28 - 50A 46A at -48V
Input Frequency	50/60Hz	DC	50/60Hz	50/60Hz	50/60Hz	DC
Input Connector	IEC 320-C13	AWG #16-#12	IEC 320-C13	IEC 320-C13	IEC 60320 C20	AWG #6-3
Efficiency (Typical)	93% Platinum	90%	93% Platinum	93% Platinum	93% Platinum	90%
Compatibility	7280SR-48C6 7280TR-48C6	7280SR-48C6 7280TR-48C6	7280QR-C36	7260QX-64	7260CX-64	7260CX-64 7260QX-64

*Not currently supported in EOS

Summary of Changes

Date	Version History	Action	Description of Change
08-Jan-2018	From Version 8 to 9	Added	Models added: JQ195A, JQ196A, JQ197A, JQ206A, JQ208A
04-Dec-2017	From Version 7 to 8	Added	SKUs added: JH603AAE, JH604AAE, JH961AAE, JH962AAE, JH963AAE, JQ053AAE, JQ054AAE, JQ138AAE, JQ139AAE, JQ140AAE, JH523AAE, JH524AAE, JH525AAE, JH526AAE, JH527AAE, JH895AAE
06-Nov-2017	From Version 6 to 7	Added	Models added: JQ086A, JQ087A, JQ088A, JQ089A, JQ090A, JQ091A, JQ098A, JQ099A, JQ100A, JQ101A, JQ102A, JQ103A, JQ110A, JQ111A, JQ113A. SKUs added: JQ141A, JQ142A, JQ143A, JQ144A, JQ145A, JQ146A, JQ153A, JQ154A, JQ155A, JQ156A, JQ157A, JQ158A, JQ165A, JQ166A, JQ167A.
02-Oct-2017	From Version 5 to 6	Added	Models added: JQ173A, JQ174A, JQ175A, JQ176A, JQ177A, JQ178A SKUs added: JQ182A, JQ183A, JQ184A, JQ185A, JQ186A, JQ187A, JQ191A, JQ192A
		Changed	Technical Specifications updated
11-Sep-2017	From Version 4 to 5	Added	Models added: JQ078A, JQ079A, JQ081A, JQ092A, JQ093A, JQ094A, JQ095A, JQ096A, JQ097A SKUs added: JQ082A, JQ083A, JQ116A, JQ117A, JQ135A, JQ136A, JQ137A, JQ147A, JQ148A, JQ149A, JQ150A, JQ151A, JQ152A
		Changed	Updates made on Overview section
03-Jul-2017	From Version 3 to 4	Added	Models added: JQ072A, JQ073A SKUs added: JQ049A, JQ050A, JQ051A
		Changed	Technical Specifications updated. Minor format issues fixed.
08-May-2017	From Version 1 to 2	Added	SKUs added: JQ004A, JQ005A, JQ006A, JQ007A, JQ008A, JQ009A
		Changed	Overview, Configuration and Technical Specifications updated
06-Mar-2017	Version 1	Created	Document creation.



Sign up for updates



© Copyright 2018 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

To learn more, visit: <http://www.hpe.com/networking>

a00003394 - 15877 - Worldwide - V9 - 08-January-2018

Summary of Changes