Product Highlights

Performance
- 7280CR-48: 48x 100GbE and 8 x 40GbE
- 7280QR-C36: 24 x 40GbE and 12 x 100GbE
- 7280TR-48C6: 48x10GbE and 6x 100GbE
- 7280SR-48C6: 48x10GbE and 6x 100GbE
- Up to 48 wire-speed 100GbE ports
- Up to 10.24 terabits per second
- Up to 5.76 billion packets per second
- Wire speed L2 and L3 forwarding
- QSFP100: Quad 10GbE or 25GbE mode

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
- 1+1 redundant & hot-swappable power
- N+1 redundant & hot-swappable fans
- Front-to-rear or rear-to-front cooling
- Designed for NEBS
- Tool less rails for simple installation

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)
- IEEE 1588 PTP

Cloud Networking Ready
- 768K MAC Addresses
- 768K IPv4 and IPv6 Host Routes
- Over 1M IPv4 Routes

Resilient Control Plane
- High Performance x86 CPU
- Up to 16GB DRAM
- 4GB Flash
- User applications can run in a VM

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

Overview

The Arista 7280R Series are key components of the Arista 7000 Series portfolio of data center switches. The Arista 7280R Series are purpose built fixed configuration 10/40/100GbE systems built for the highest performance environments, and to meet the needs of the largest scale data centers. They combine 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 applications. The broad range of interfaces and density choice provides deployment flexibility.

The 7280R Series are available in a choice of models with a choice of 10GBASE-T, 10GbE SFP+ with 40/100GbE QSFP uplinks and a range of 1RU and 2RU 40/100GbE systems that offer up to 48 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 of Data Center Switches

Arista 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 10K-100K hosts

Cloud Control
- Standards based EOS with AEM, ZTP/ZTR, LANZ and DANZ
- Automated Monitoring for visibility and telemetry

Network Wide Virtualization
- 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.
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.

Arista Event Management (AEM)

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 the Supervisor module clock input port with a PPS source or 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.

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.
• 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 and 192K ACL entries per system allows for rich policy control
• 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 Series deliver unprecedented levels of buffering, scale and availability with a wide choice of high density 10/40/100GbE interfaces as shown below.

Arista 7280R Flexible Combinations

The Arista 7280R lowers total cost of ownership as they are designed to be efficient with power per port as low as 25W per 100GbE port which combined with front to rear cooling to optimize the data center environment produces the most reliable, dense and power efficient 100GbE fixed configuration switch.

7280R Deterministic Network Performance

The Arista 7280 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 PSUs 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)
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)
- 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
- Ingress / Egress ACLs using L2, L3, L4 fields
- Ingress / Egress ACL Logging and Counters
- Atomic ACL Hitless restart
- Control Plane Protection (CPP)
- DHCP Relay
- MAC Security
- 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)
- 802.1Qaz 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
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

Scalability

- 9216 Byte Jumbo Frame Support
- 8 Priority Queues per Port
- 1152 Link Aggregation Groups (LAG)
- 32 Ports per LAG
- 768K MAC Addresses
- 768K IPv4 Host Routes
- 768K IPv6 Unicast Host Routes
- Over 1M IPv4 Unicast LPM Routes
- Up to 768K IPv6 Unicast LPM Routes
- 768K Multicast Routes
- 24K ACL Entries per Forwarding Engine
- Up to 192K ACL Entries per system
- 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
- 802.3ae 10 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
- RFC 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-CONIFG-MAN-MIB
- ARISTA-REDUNDANCY-MIB
- RFC 2787 VRRPv2-MIB
- 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

* Not currently supported in EOS
<table>
<thead>
<tr>
<th>Model Comparison</th>
<th>7280CR-48</th>
<th>7280QR-C36</th>
<th>7280SR-48C6</th>
<th>7280TR-48C6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ports</td>
<td>48 x QSFP100 &amp; 8 x QSFP+</td>
<td>36 x QSFP (24x QSFP+ and 12x QSFP100)</td>
<td>48 x SFP+ 6 x QSFP100</td>
<td>48 x 10G-T 6 x QSFP100</td>
</tr>
<tr>
<td>Max 100GbE Ports</td>
<td>48</td>
<td>12</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Max 50GbE Ports</td>
<td>96</td>
<td>24</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Max 40GbE Ports</td>
<td>56</td>
<td>36</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Max 25GbE Ports</td>
<td>192</td>
<td>48</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Max 10GbE Ports</td>
<td>224</td>
<td>144</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Throughput</td>
<td>10.24Tbps</td>
<td>4.32Tbps</td>
<td>2.16Tbps</td>
<td>2.16Tbps</td>
</tr>
<tr>
<td>Packets/Second</td>
<td>5.76Bpps</td>
<td>1.44 Bpps</td>
<td>720Mpps</td>
<td>720Mpps</td>
</tr>
<tr>
<td>Latency</td>
<td>From 3.8us</td>
<td>3.8us</td>
<td>3.8us</td>
<td>3.8us</td>
</tr>
<tr>
<td>CPU</td>
<td>Multi-core x86</td>
<td>Quad-Core x86</td>
<td>Quad-Core x86</td>
<td>Quad-Core x86</td>
</tr>
<tr>
<td>System Memory</td>
<td>16 Gigabytes</td>
<td>8 GB (32GB optional)</td>
<td>8 GB (32GB Optional)</td>
<td>8 GB (32GB Optional)</td>
</tr>
<tr>
<td>Flash Storage Memory</td>
<td>4 GB</td>
<td>4 GB</td>
<td>4 GB</td>
<td>4 GB</td>
</tr>
<tr>
<td>Packet Buffer Memory</td>
<td>32GB (4GB per group of ports)</td>
<td>8GB (4GB per group of ports)</td>
<td>4GB per group of ports</td>
<td>4GB per group of ports</td>
</tr>
<tr>
<td>SSD Storage Option</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>100/1000 Mgmt Ports</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>RS-232 Serial Ports</td>
<td>1 (RJ-45)</td>
<td>1 (RJ-45)</td>
<td>1 (RJ-45)</td>
<td>1 (RJ-45)</td>
</tr>
<tr>
<td>USB Ports</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Hot-swap Power Supplies</td>
<td>2 (1+1 redundant)</td>
<td>2 (1+1 redundant)</td>
<td>2 (1+1 redundant)</td>
<td>2 (1+1 redundant)</td>
</tr>
<tr>
<td>Hot-swappable Fans</td>
<td>4 (N+1 redundant)</td>
<td>4 (N+1 redundant)</td>
<td>4 (N+1 redundant)</td>
<td>4 (N+1 redundant)</td>
</tr>
<tr>
<td>Reversible Airflow Option</td>
<td>No (front to rear)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Rack Units</td>
<td>2U</td>
<td>1U</td>
<td>1U</td>
<td>1U</td>
</tr>
<tr>
<td>Size (WxHxD)</td>
<td>17.32 x 3.5 x 22.2” (44.5 x 8.9 x 56.3cm)</td>
<td>17.32 x 1.75 x 20.6” (44.5 x 4.4 x 52.3cm)</td>
<td>17.32 x 1.75 x 20.6” (44.5 x 4.4 x 52.3cm)</td>
<td>17.32 x 1.75 x 20.6” (44.5 x 4.4 x 52.3cm)</td>
</tr>
<tr>
<td>Typical/Max Power Draw</td>
<td>1363W / 1710W</td>
<td>324W / 499W</td>
<td>263W / 381W</td>
<td>290W / 405W</td>
</tr>
<tr>
<td>Weight</td>
<td>46.7lbs (21.2kg)</td>
<td>22.4lbs (10.2kg)</td>
<td>22lbs (10.0kg)</td>
<td>22.2lbs (10.1kg)</td>
</tr>
<tr>
<td>NEBS</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Power Supplies</td>
<td>1900W AC 1900W DC</td>
<td>745W AC 1900W DC</td>
<td>500W AC 500W DC</td>
<td>500W AC 500W DC</td>
</tr>
<tr>
<td>EOS Feature Licenses</td>
<td>LIC-FIX-4 LIC-FIX-3 LIC-FIX-2 LIC-FIX-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Typical power consumption measured at 25C ambient with 50% load on all ports
## Supported Optics and Cables

<table>
<thead>
<tr>
<th>Interface Type</th>
<th>SFP+ ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>10GBASE-CR</td>
<td>0.5m-5m QSFP+ to 4x SFP+ (see note 1)</td>
</tr>
<tr>
<td>40GBASE-CR4</td>
<td>QSFP+ to QSFP+: 0.5m-5m</td>
</tr>
<tr>
<td>40GBASE-AOC</td>
<td>3m to 100m</td>
</tr>
<tr>
<td>40GBASE-UNIV</td>
<td>150m (OM3) / 150m (OM4), 500m (SM)</td>
</tr>
<tr>
<td>40GBASE-SRBD</td>
<td>100m (OM3) / 150m (OM4)</td>
</tr>
<tr>
<td>40GBASE-SR4</td>
<td>100m (OM3) / 150m (OM4)</td>
</tr>
<tr>
<td>40GBASE-XSR4</td>
<td>300m (OM3) / 400m (OM4)</td>
</tr>
<tr>
<td>40GBASE-PLRL4</td>
<td>1km (1km 4x10G LR/LRL)</td>
</tr>
<tr>
<td>40GBASE-PLR4</td>
<td>10km (10km 4x10G LR/LRL)</td>
</tr>
<tr>
<td>40GBASE-LRL4</td>
<td>1km</td>
</tr>
<tr>
<td>40GBASE-LR4</td>
<td>10km</td>
</tr>
<tr>
<td>40GBASE-ER4</td>
<td>40km</td>
</tr>
</tbody>
</table>

### 100GbE QSFP100 ports

<table>
<thead>
<tr>
<th>Interface Type</th>
<th>QSFP100 ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>100GBASE-SR4</td>
<td>70m OM3 / 100m OM4 Parallel MMF</td>
</tr>
<tr>
<td>100GBASE-LR4</td>
<td>10km SM Duplex</td>
</tr>
<tr>
<td>100GBASE-LRL4</td>
<td>2km SM Duplex</td>
</tr>
<tr>
<td>100GBASE-CWDM4</td>
<td>2km SM duplex</td>
</tr>
<tr>
<td>100GBASE-AOC</td>
<td>3m to 30m</td>
</tr>
<tr>
<td>100GBASE-CR4</td>
<td>QSFP to QSFP: 1m to 5m</td>
</tr>
<tr>
<td>25GBASE-CR</td>
<td>QSFP to SFP25: 1m to 3m lengths</td>
</tr>
</tbody>
</table>

### Environmental Characteristics

- **Operating Temperature**: 0 to 40°C (32 to 104°F)
- **Storage Temperature**: -40 to 70°C (-40 to 158°F)
- **Relative Humidity**: 5 to 95%
- **Operating Altitude**: 0 to 10,000 ft, (0-3,000m)

### Power Supply Specifications

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>PWR-500AC</th>
<th>PWR-500-DC</th>
<th>PWR-745AC</th>
<th>PWR-1900AC</th>
<th>PWR-1900-DC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Voltage</strong></td>
<td>100-240AC</td>
<td>40-72V DC</td>
<td>100-240VAC</td>
<td>200-240AC</td>
<td>40-72V DC</td>
</tr>
<tr>
<td><strong>Typical Input Current</strong></td>
<td>6.3 - 2.3A</td>
<td>13.1 - 7.3A 11A at 48V</td>
<td>10 - 4A</td>
<td>11.2 - 9.5A</td>
<td>28 - 50A 46A at 48V</td>
</tr>
<tr>
<td><strong>Input Frequency</strong></td>
<td>50/60Hz</td>
<td>DC</td>
<td>50/60Hz</td>
<td>DC</td>
<td>DC</td>
</tr>
<tr>
<td><strong>Input Connector</strong></td>
<td>IEC 320-C13</td>
<td>AWG #16-#12</td>
<td>IEC 320-C13</td>
<td>IEC 60320 C20</td>
<td>AWG #6-3</td>
</tr>
<tr>
<td><strong>Efficiency (Typical)</strong></td>
<td>93% Platinum</td>
<td>90%</td>
<td>93% Platinum</td>
<td>93% Platinum</td>
<td>90%</td>
</tr>
<tr>
<td><strong>Compatibility</strong></td>
<td>7280SR-48C6, 7280TR-48C6</td>
<td>7280SR-48C6, 7280TR-48C6</td>
<td>7280QR-C36</td>
<td>7280CR-48, 7280QR-C36</td>
<td></td>
</tr>
</tbody>
</table>

* Not currently supported in EOS
<table>
<thead>
<tr>
<th>Product Number</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCS-7280QR-C36-F</td>
<td>Arista 7280R, 24x40GbE QSFP+ &amp; 12x100GbE QSFP switch, front to rear air, 2x AC and 2x C13-C14 cords</td>
</tr>
<tr>
<td>DCS-7280QR-C36-R</td>
<td>Arista 7280R, 24x40GbE QSFP+ &amp; 12x100GbE QSFP switch, rear to front air, 2x AC and 2x C13-C14 cords</td>
</tr>
<tr>
<td>DCS-7280QR-C36#</td>
<td>Arista 7280R, 24x40GbE QSFP+ &amp; 12x100GbE QSFP switch, configurable fans and psu, 2x C13-C14 cords</td>
</tr>
<tr>
<td>DCS-7280QR-C36-M#</td>
<td>Arista 7280R, 24x40GbE QSFP+ &amp; 12x100GbE QSFP switch, expn mem, SSD, configurable fans and psu</td>
</tr>
<tr>
<td>DCS-7280QR-C36-M-FLX#</td>
<td>Arista 7280R, 24x40GbE QSFP+ &amp; 12x100GbE QSFP switch, expn mem, SSD, configurable fans and psu. Over 256K routes, MPLS and VXLAN</td>
</tr>
<tr>
<td>DCS-7280SR-48C6-F</td>
<td>Arista 7280R, 48x10GbE (SFP+) &amp; 6x100GbE QSFP switch, front to rear air, 2x AC and 2x C13-C14 cords</td>
</tr>
<tr>
<td>DCS-7280SR-48C6-R</td>
<td>Arista 7280R, 48x10GbE (SFP+) &amp; 6x100GbE QSFP switch, rear to front air, 2x AC and 2x C13-C14 cords</td>
</tr>
<tr>
<td>DCS-7280SR-48C6#</td>
<td>Arista 7280R, 48x10GbE (SFP+) &amp; 6x100GbE QSFP switch, configurable fans and psu, 2x C13-C14 cords</td>
</tr>
<tr>
<td>DCS-7280SR-48C6-M#</td>
<td>Arista 7280R, 48x10GbE (SFP+) &amp; 6x100GbE QSFP switch, expn mem, SSD, configurable fans and psu</td>
</tr>
<tr>
<td>DCS-7280SR-48C6-M-FLX#</td>
<td>Arista 7280R, 48x10GbE (SFP+) &amp; 6x100GbE QSFP switch, expn mem, SSD, configurable fans and psu. Over 256K routes, MPLS and VXLAN</td>
</tr>
<tr>
<td>DCS-7280TR-48C6-F</td>
<td>Arista 7280R, 48x10GbE RJ45 (1/10G) &amp; 6x100GbE QSFP switch, front to rear air, 2x AC and 2x C13-C14 cords</td>
</tr>
<tr>
<td>DCS-7280TR-48C6-R</td>
<td>Arista 7280R, 48x10GbE RJ45 (1/10G) &amp; 6x100GbE QSFP switch, rear to front air, 2x AC and 2x C13-C14 cords</td>
</tr>
<tr>
<td>DCS-7280TR-48C6#</td>
<td>Arista 7280R, 48x10GbE RJ45 (1/10G) &amp; 6x100GbE QSFP switch, configurable fans and psu, 2x C13-C14 cords</td>
</tr>
<tr>
<td>DCS-7280CR-48-F</td>
<td>Arista 7280R, 48x100GbE QSFP and 8x40GbE QSFP+ switch, front to rear air, 2x AC and 2x C19-C20 cords</td>
</tr>
<tr>
<td>DCS-7280CR-48#</td>
<td>Arista 7280R, 48x100GbE QSFP and 8x40GbE QSFP+ switch, configurable fans and psu, 2x C19-C20 cords</td>
</tr>
<tr>
<td>DCS-7280CR-48-D#</td>
<td>Arista 7280R, 48x100GbE QSFP and 8x40GbE QSFP+ switch, SSD, configurable fans and psu, 2x C19-C20 cords</td>
</tr>
<tr>
<td>DCS-7280CR-48-DC-F</td>
<td>Arista 7280R, 48x100GbE QSFP and 8x40GbE QSFP+ switch, front to rear air, 2x DC</td>
</tr>
</tbody>
</table>

**Optional Components and Spares**

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PWR-500AC-F</td>
<td>Spare 500 Watt AC power supply for Arista 7050X and 7280R 1RU Switches (front-to-rear airflow)</td>
</tr>
<tr>
<td>PWR-500AC-R</td>
<td>Spare 500 Watt AC power supply for Arista 7050X and 7280R 1RU Switches (rear-to-front airflow)</td>
</tr>
<tr>
<td>PWR-500-DC-F</td>
<td>Spare 500 Watt DC power supply for Arista 7050X and 7280R 1RU Switches (front-to-rear airflow)</td>
</tr>
<tr>
<td>PWR-500-DC-R</td>
<td>Spare 500 Watt DC power supply for Arista 7050X and 7280R 1RU Switches (rear-to-front airflow)</td>
</tr>
<tr>
<td>PWR-745AC-F</td>
<td>Spare 750 Watt AC power supply for Arista 7060X and 7280QR Series Switches (front-to-rear airflow)</td>
</tr>
<tr>
<td>PWR-745AC-R</td>
<td>Spare 750 Watt AC power supply for Arista 7060X and 7280QR Series Switches (rear-to-front airflow)</td>
</tr>
<tr>
<td>PWR-1900AC-F</td>
<td>Spare 1900 Watt AC power supply for Arista 7260CX and 7280CR Series Switches (front-to-rear airflow)</td>
</tr>
<tr>
<td>PWR-1900-DC-F</td>
<td>Spare 1900W DC Power Supply for 7260X and 7280CR Series Series Switches (front to rear airflow switch)</td>
</tr>
<tr>
<td>LIC-FIX-2-E</td>
<td>Enhanced L3 License for Arista fixed switches, 40-132 port 10G (BGP, OSPF, ISIS, PIM, NAT)</td>
</tr>
<tr>
<td>LIC-FIX-2-V</td>
<td>Virtualization license for Arista Fixed switches 40-132 port 10G (VMTracer and VXLAN)</td>
</tr>
<tr>
<td>LIC-FIX-2-Z</td>
<td>Monitoring &amp; provisioning license for Arista Fixed switches 40-132 port 10G (ZTP, LANZ, TapAgg, OpenFlow)</td>
</tr>
</tbody>
</table>

**Note:**
- Arista 7280CR-48 switches ship with two C19-C20 power cables (2m). Other power cables must be ordered separately.
- Front-to-rear means the air flows from the switch port side to the fan side. Rear to front means the air flows from the fan side to the switch port side.
## Product Number | Product Description
--- | ---
LIC-FIX-3-E | Enhanced L3 License for Arista Fixed switches, 144-256 port 10G (BGP, OSPF, ISIS, PIM, NAT)
LIC-FIX-3-V | Virtualization license for Arista Fixed switches, 144-256 port 10G (VMTracer and VXLAN)
LIC-FIX-3-Z | Monitoring & provisioning license for Arista Fixed switches, 144-256 port 10G (ZTP, LANZ, TapAgg, OpenFlow)
LIC-FIX-4-E | Enhanced L3 License for Arista Fixed switches, 288-640 port 10G (BGP, OSPF, ISIS, PIM, NAT)
LIC-FIX-4-V | Virtualization license for Arista Fixed switches, 288-640 port 10G (VMTracer and VXLAN)
LIC-FIX-4-Z | Monitoring & provisioning license for Arista Fixed switches 288-640 port 10G (ZTP, LANZ, TapAgg, OpenFlow)
LIC-FIX-2-FLX | Expanded L3 License for Arista Fixed switches, 40-256 port 10G (Over 256k Routes), MPLS and VXLAN
LIC-FIX-4-FLX | Expanded L3 License for Arista Fixed switches, 256-640 port 10G (Over 256K Routes), MPLS and VXLAN
FAN-7000-F | Spare fan module for Arista 7150, 7124SX(FX), 7050, 7280 & 7048-A switches (front-to-rear airflow)
FAN-7000-R | Spare fan module for Arista 7150, 7124SX(FX), 7050, 7280 & 7048-A switches (rear-to-front airflow)
FAN-7002H-F | Spare fan module for Arista 7260CX-64, 7320X and 7280CR switches (front-to-rear airflow)
KIT-7001 | Spare accessory kit for Arista 1RU tool-less switches
KIT-2POST | Spare 2RU 2 post rack mount installation kit for Arista 7250 / 7050, 7260X and 7280R switches
KIT-2POST-1U-NT | Spare 1RU 2 post rail kit for 1RU tool less systems (7050QX-32S, 7050SX/TX and 7280R)
KIT-4POST-NT | Spare 1RU/2RU tool-less rail kits for 4-post installation (7050QX-32S, 7050SX/TX, 7280R and 7250X)
KIT-7003 | Spare accessory kit for Arista 7260CX-64 and 7280CR-48 2RU switches

### Warranty
The Arista 7280R Series switches come with a one-year limited hardware warranty, which covers parts, repair, or replacement with a 10 business day turn-around after the unit is received.

### Service and Support
Support services including next business day and 4-hour advance hardware replacement are available. For service depot locations, please see: [http://www.arista.com/en/service](http://www.arista.com/en/service)