Product Highlights

System Scale and Performance

- 7280R4 Series: Up to 32 x 800 GbE
- Up to 25.6. Tbps / 9.6 Bpps throughput
- QSFP, OSFP and QSFP-DD for 100-800G
- 400G and 800G ZR and ZR+ Support
- Dedicated QSFP-Line System ports
- Synchronous Ethernet and IEEE 1588
- MACsec, IPsec and VXLANsec encryption

Cloud Grade Routing

- Secure Internet Peering
- Carrier Edge VPN Services
- Next Generation EVPN Services for 5G/ MEC, CIN, & Metro
- Carrier Core transport (LDP, RSVP-TE, SR-TE) and HA with FRR and TI-LFA
- Next Generation timing (PTP and SyncE)
- Open programmable APIs (JSON-RPC, NETCONF) for provisioning, telemetry, path selection/topology discovery

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
- Designed for NEBS

Virtualization and Provisioning

- CloudVision
- EVPN-VXLAN for next generation DC
- LANZ for microburst detection
- Zero Touch Provisioning (ZTP)
- Accelerated sFlow (RFC3176)

Cloud Networking Ready

- Up to 384K MAC Addresses
- Over 5M IPv4 Routes with 7280R4K
- Algorithmic ACLs for 400K+ rules

Resilient Control Plane

- High Performance eight-core x86 CPU
- 64GB DRAM and 480GB SSD

Arista Extensible Operating System

- Single 64-bit binary image
- Fine-grained truly modular network OS
- Stateful Fault Containment & Repair
- Full access to Linux shell and tools
- Extensible platform - bash, python, C++

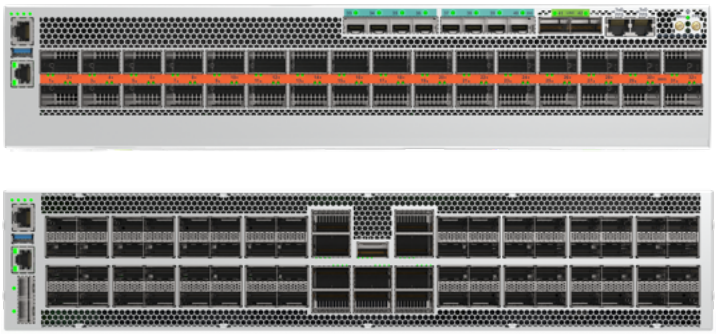
Overview

The 7280R4 Series is Arista's 7th generation of full-feature, deep-buffered fixed systems purpose built to meet the needs of demanding Cloud, AI/ML, Data Center, multimedia and Service Provider networks. 7280R4 Series switches provide up to 25.6 Tbps (51.2 Tbps Full Duplex) of line-rate, non-blocking throughput, with up to 32 ports of 800GbE.

Each model is available at two levels of scalability. With optimization for either data center workloads (R4 series) or large scale routing (R4K series) the 7280R4 Series are available with a wide choice of interfaces supporting speeds from 25GbE to 800GbE and dense 400G/800G DWDM to flexibly expand, upgrade or simplify existing infrastructure and reduce Opex.

The 7280R4 Series enables highly scalable and secure network designs with rich features for MPLS, Segment Routing and EVPN-VXLAN, adding advanced capabilities including precision timing, FlexRoute™, large scale Traffic Policies, Accelerated sFlow and Arista TunnelSec™ wire-speed strong encryption at layer 2 and layer 3.

Deterministic performance, multiple scaling options, strong encryption and a comprehensive open networking feature set are combined with a deep buffer, fully scheduled and lossless VOQ architecture, enabling deployment in a wide range of roles including big data, cloud, AI/ML environments, virtualized architectures and service provider WAN applications including core, peering, and metro networks.



Arista 7280R4 Series

Arista EOS

The Arista 7280R4 series run the same Arista EOS software as all Arista products, simplifying network administration. 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.

Arista's 64-bit EOS is purpose built for high performance, large scale workloads and embeds advanced monitoring, telemetry and automation capabilities. With a powerful x86 CPU subsystem and full access to Linux, a wealth of standard tools can also be run natively on the switch for simple integration into automation workflows.

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 EVPN for network virtualization flexibility
- Non blocking leaf-spine architecture for 10K-500K 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 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 High Performance Data Centers

The Arista 7280R4 Series deliver non-blocking switching capacity that enables dramatically faster and simpler network designs for data centers and lowers both capital and operational expenses. Arista's wide range of systems, with a single consistent EOS, allows for flexible, right-sized product choice for all tiers of the network with a strong focus on open standards and interoperability.

The 7280R4 family provides comprehensive support for all common data center architectures, including layer 2 MLAG, layer 3 ECMP and EVPN-VXLAN overlay networking. Leaf-spine topologies provide the most efficient foundation for modern high performance applications, scalable to hundreds of thousands of hosts, while providing predictable, non-blocking, low latency performance. Arista's Multi-Chassis Link Aggregation (MLAG) technology supports active/active L2 network topologies, while layer 3 Equal Cost Multi-Path (ECMP) designs enable construction of very high radix topologies for large scale deployment. Both designs support EVPN-VXLAN overlay networks for additional segmentation and can integrate with standards-based overlay controller solutions.

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. The Arista 7280R4 Series FlexRoute engine provides Internet scale routing to support deployment as an Internet border/peering router, enterprise CDN backbone or data center interconnect (DCI). 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.

Cloud Grade Routing

The 7280R4 series are key components of Arista's portfolio of Cloud Grade Routing platforms that encompasses a wide choice of fixed and modular systems. Combining Arista EOS's proven and feature rich Service Provider functionality, telemetry and open programmability with industry leading scale, density and power efficiency, the R4 series systems are designed for versatile deployment in a wide variety of open networking environments and end-to-end solutions.

Next generation multi-service environments require flexibility, security and open programmability to leverage the power efficiency and proven scale of cloud networks. The R4 Series routing solutions include large scale layer 2, layer 3 and EVPN based telco and cloud data center designs, low latency MEC overlay fabrics, data center interconnect (DCI) with long haul optics, provider edge networks with scaleable L2 and L3 VPN services, high density 100G/400G/800G traffic engineered MPLS and SR-TE cores, secure peering, 5G infrastructure and metro-aggregation for the backhaul of E-LINE services.

7280R4 Deterministic Network Performance

The Arista 7280R4 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 7280R4 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.

Routing Table Scale and FlexRoute™

Network scalability is directly impacted by the size of a system's forwarding tables. In many systems a 'one size fits all' approach is adopted using discrete fixed size tables for each of the common types of forwarding entry. The Arista 7280R4 Series leverage a database for forwarding resources which can be allocated for MAC, Routing, Host and ARP tables with a choice of forwarding profiles that optimizes these tables.

Arista's innovative FlexRoute Engine, with its patented algorithmic approach to building layer 3 forwarding tables on Arista R-Series, provides support for the full internet routing table in hardware. Scaling to more than 5 million routes in 7280R4, the R series Universal Spine and Leaf platforms have sufficient headroom for future growth in both IPv4 and IPv6. The flexibility coupled with the range of system forwarding profiles ensures optimal resource allocation for a wide range of network topologies and use cases including Internet Peering, virtualization, Carrier Edge and Security as well as datacenter spine and leaf.

800G Wire-speed Encryption with TunnelSec

7280R4K series platforms support Arista's TunnelSec technology, enabling line-rate, industry standard, authenticated strong encryption using the AES-256-GCM block cipher. TunnelSec devices offer IEEE 802.1AE MAC Security (MACsec), IPsec (RFC 4303) and VXLANsec for flexible encryption of layer 2, layer 3 or overlay networks. While MACsec operates at the link layer, offering point to point encryption, IPsec and VXLANsec enable the construction of encrypted IP tunnels that traverse multiple unencrypted hops between router or VTEP endpoints enabling line-rate strong encryption across third party infrastructure for WAN or DCI deployments.

The flexibility to offer multiple types of encryption enables a broad range of deployments and removes the need for additional encryption devices while providing orders of magnitude improvements in latency and throughput when compared to traditional appliance based implementations. The 7280R4K series support TunnelSec on all interface speeds, from 25G to 800G without a performance penalty. Encryption services are an EOS licensed feature and requires a license file to enable the encryption feature. License information is included in the ordering information section of this document.

Dense 400G and 800G DWDM

Arista's R4 platforms are optimized to support high power 400G and 800G ZR+ OSFP and QSFP-DD optical modules. ZR modules are software tunable, DWDM, coherent optical modules, with a reach of up to 120km. When combined with Arista's ZR Line System, up to 8x 800ZR modules can be multiplexed to transport 6.4 Tb/s over a single fiber pair. Arista's ZR Line System consists of the AMP-ZR, an optical amplifier packaged into a single transceiver module, and the CAB-LC8-CS, a simple fiber splitter/combiner that multiplexes up to 8x 800ZR modules into a fiber pair. Selected 7280R4 platforms include dedicated ports that can house the amplifier without using data plane ports. The combination of 7280R4, 800G-ZR and the ZR-LS represent a revolutionary plug-and-play approach, completely eliminating external transponders and line systems while reducing cost and complexity - allowing DCI links to be turned up as quickly and easily as inside-the-datacenter links.

Algorithmic ACLs

Algorithmic ACLs combine both software and hardware to enable more flexible and scalable solutions for access control, policy based forwarding and network telemetry. Combining general purpose memory with advanced software algorithms delivers higher scale, performance and efficiency with lower power and is more cost effective than traditional solutions. Algorithmic ACLs leverage efficient packet matching algorithms 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. Algorithmic ACLs are available on the 7280R4K Series of products.

- 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

Enhanced Features for High Performance Cloud Networks

The Arista 7280R4 Series 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.

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.

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 100G, 400G and 800Gbps 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 and SyncE)

Many modern and emerging applications are using precision timing as part of their service delivery requirements including 5G, Media production, manufacturing, IoT sensors, high frequency trading etc. To meet the stringent timing and synchronization requirements, Arista's hardware delivers various timing solutions, including high precision in-band time and frequency distribution support via Precision Time Protocol (PTP, IEEE 1588v2) and Synchronous Ethernet (ITU G.8261) as well as flexibility of time synchronization via external timing ports. It also supports Class C timing, to meet the enhanced accuracy requirements at the edge of the 5G networks. As part of PTP support, Arista platforms provide both Boundary and Transparent clock modes as well as PTP profiles (8275.1 and 8275.2) with full and partial timing support allowing greater flexibility in the distribution of end to end timing solutions.

Cluster Load Balancing (CLB)

AI clusters typically have low quantities of large bandwidth flows, which can result in high tail end latency if congestion occurs. Cluster Load Balancing is an innovative new AI aware load balancing mechanism, utilizing RDMA queue pairs to ensure optimal traffic distribution. CLB implements granular global flow placement to ensure high performance for all flows, minimizing job completion time. Traditional load balancing methods perform local load-aware flow placement, optimizing leaf-to-spine links, however traffic from spine-to-leaf is typically less optimized. CLB approaches this problem with a global view, and is able to simultaneously optimize flows from both leaf-to-spine and spine-to-leaf, maximizing network utilization and efficiency.

Virtualization

The foundation for Arista's Network Virtualization solutions is VXLAN, an open IETF specification designed to standardize an overlay encapsulation protocol. Arista solutions range from OVSDB and Openstack integration to BGP EVPN in conjunction with EOS CloudVision®, a platform for network-wide workload orchestration and workflow automation.

The 7280R4 builds on the deep buffer wire-speed gateway with EVPN/VXLAN for layer-2 and layer-3 stretch within data center as well as DCI use cases. The 7280R4 is the perfect solution for transit gateway between EVPN domains connected over MPLS.

Inband Network Telemetry

Inband network telemetry, or INT, is a standards approach to providing deep visibility into traffic in real-time, with no impact on switch performance. INT provides per-flow monitoring of traffic drops, latency, congestion and the network path. INT information can be exported in IPFIX or sFlow formats to a management system or collector such as Arista CloudVision, for predictive analytics and deep forensics to measure latency per device and across the network, trace packets and reconstruct path topology as well as detecting hot-spots. Inband Network Telemetry is available on the 7280R4 Series of products, with the ability to originate, pass and terminate, along with mirroring to external collectors.

7280R4 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. Traditional sFlow utilizes a system CPU for processing samples of hundreds of thousands of flows. In modern high performance systems guaranteed high rate sampling requires the capability to both sample and process packet rates of billions of packets per second. With the 7280R4 Series Accelerated sFlow feature the sampling and processing of flow samples into sFlow datagrams is handled via integrated sFlow engines capable of supporting 1:500 sampling rates on 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.

Maximum Network Design Flexibility

- Scalable designs with up to a 512-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
- Scalable routing tables to support internet route peering
- Choice of dense 100G and 800G interfaces with broad support for flexible 25G, 50G, 200G and 400G modes.
- Virtual output queue (VOQ) architecture and deep packet buffering to eliminate head of line blocking with low latency
- ACL scalability with up to hundreds of thousands of entries per forwarding engine allows for rich policy control
- Flexible allocation of L2 and L3 forwarding table resources for more design choice
- PTP, Accelerated 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

7280R4 System Overview

7280R4-32PE and 7280R4-32DE
32 port 800G OSFP or QSFP-DD

- 25.6 Tbps wire speed performance with 32GB buffer
- TunnelSec, SyncE and Large Scale options
- 8 x 25G SFP and 2 x QSFP-LS ports
- Field serviceable 8-core x86 supervisor

7280R4-64QC-10PE
64 port 100G QSFP and 10 port 800G OSFP

- 14.4 Tbps wire speed performance with 16GB buffer
- TunnelSec and Large Scale options
- 2 x 10G SFP and 1 x QSFP-LS ports
- Field serviceable 8-core x86 supervisor

Rear view of 7280R4 Series systems
- 7280R4 is shown with F-R airflow and PWR-2411-MC
- Field serviceable supervisor is accessible behind fan trays

To maximize uptime and reduce MTTR, the Arista 7280R4 series 2RU platforms introduce a field replaceable supervisor module.. The supervisor can be replaced in minutes by a single engineer, avoiding the need to disconnect network cabling or remove the chassis from the rack for control-plane related issues.

Power Supply Specifications

Power Supply	PWR-3211 HV	PWR-3211 DC	PWR-2411 AC	PWR-2411 DC
Input Voltage	200-277 VAC 240-380 VDC	-48 to -60 VDC	200-240 VAC	-48 to -60 VDC
Max Input Current	18 A at 200V AC	73 A Max (-48 V)	14 A	55 A Max (-48 V)
Input Frequency	50/60 Hz	DC	50/60 Hz	DC
Output Power	3200 W	3200 W	2400 W	2400 W
Input Connector	SAF-D	AWG #6 Max	IEC 60320 C20	AWG #6 Max
Efficiency	96%	96%	93% Platinum	94%

Model Comparison	7280R4-32PE	7280R4K-32PE	7280R4-32DE	7280R4K-32DE
Ports	32 x OSFP 800G 8 x SFP25	32 x OSFP 800G 8 x SFP25	32 x QSFP-DD 800G 8 x SFP25	32 x QSFP-DD 800G 8 x SFP25
Max 800G Ports [1]	32	32	32	32
Max 400G Ports [1]	64	64	64	64
Max 100G Ports [1]	256	256	256	256
Max 50G Ports [1]	256	256	256	256
Max 25G Ports [1]	256 + 8	256 + 8	256 + 8	256 + 8
Encryption	—	All OSFP Ports	—	All QSFP-DD Ports
Max Total Interfaces [2]	256 + 8	256 + 8	256 + 8	256 + 8
Throughput (FDX)	25.6 (51.2) Tbps	25.6 (51.2) Tbps	25.6 (51.2) Tbps	25.6 (51.2) Tbps
Packets/Second	9.6 Bpps	9.6 Bpps	9.6 Bpps	9.6 Bpps
Latency	From 3.8 us	From 3.8 us	From 3.8 us	From 3.8 us
CPU	Eight-Core x86	Eight-Core x86	Eight-Core x86	Eight-Core x86
System Memory	64 Gigabytes	64 Gigabytes	64 Gigabytes	64 Gigabytes
Packet Buffer Memory	32 GB	32 GB	32 GB	32 GB
Precision Timing	PTP and SyncE with OCXO and PPS/10M/ToD inputs			
QSFP-LS Ports	2			
SSD Storage	480 GB			
100/1000 Mgmt Ports	1			
USB and RS232 Ports	1 USB, 1 RS232 (RJ45)			
Supervisor Module	7001-SUP-L			
Hot-swap Power Supplies	2 (1+1 redundant)			
Hot-swappable Fans	4 (N+1 redundant)			
Airflow Direction	Front to Rear			
Rack Units	2 U			
Size (WxHxD) inc. handles	17.3 x 3.46 x 24.74 in (44 x 8.79 x 62.85cm)			
Typical/Max Power Draw [3]	805 W / 1874 W			
Weight	50.4 lbs (22.86 kg)			
Fan Tray	FAN-7022HQ			
Power Supplies	PWR-3211 (AC or DC)			
Accelerated sFlow	Yes			
EOS Feature Licenses	Group 5			
Minimum EOS	4.35.0			

1. Maximum port values are uni-dimensional, may require the use of break-outs and are subject to transceiver/cable capabilities. Detailed information can be found here.
2. Where supported by EOS, each system supports a maximum number of interfaces. Certain configurations may impose restrictions on which physical ports can be used
3. Typical power consumption measured at 25C ambient with 50% load on all ports, excludes transceivers.

Model Comparison	7280R4-64QC-10PE	7280R4K-64QC-10PE
Ports	10 x OSFP 800G 64 x QSFP 100G	10 x OSFP 800G 64 x QSFP 100G
Max 800G Ports [1]	10	10
Max 400G Ports [1]	20	20
Max 100G Ports [1]	144	144
Max 50G Ports [1]	80	80
Max 25G Ports [1]	80	80
Encryption	—	All QSFP and OSFP Ports
Max Total Interfaces [2]	144 + 2	144 + 2
Throughput (FDX)	14.4 (28.8) Tbps	14.4 (28.8) Tbps
Packets/Second	5.4 Bpps	5.4 Bpps
Latency	From 3.8 us	From 3.8 us
CPU	Eight-Core x86	Eight-Core x86
System Memory	64 Gigabytes	64 Gigabytes
Packet Buffer Memory	16 GB	16 GB
Precision Timing	PTP	
QSFP-LS Ports	1	
SSD Storage	480 GB	
100/1000 Mgmt Ports	1	
USB and RS232 Ports	1 USB, 1 RS232 (RJ45)	
Supervisor Module	7001-SUP-L	
Hot-swap Power Supplies	2 (1+1 redundant)	
Hot-swappable Fans	4 (N+1 redundant)	
Airflow Direction	Front to Rear and Rear to Front	
Rack Units	2 U	
Size (WxHxD) inc. handles	17.3 x 3.46 x 24.74 in (44 x 8.79 x 62.85cm)	
Typical/Max Power Draw [3]	630 W / 1317 W	
Weight	50.24 lbs (22.79 kg)	
Fan Tray	FAN-7022HQ	
Power Supplies	PWR-2411 (AC or DC)	
Accelerated sFlow	Yes	
EOS Feature Licenses	Group 5	
Minimum EOS	4.35.0	

1. Maximum port values are uni-dimensional, may require the use of break-outs and are subject to transceiver/cable capabilities. Detailed information can be found here.
2. Where supported by EOS, each system supports a maximum number of interfaces. Certain configurations may impose restrictions on which physical ports can be used
3. Typical power consumption measured at 25C ambient with 50% load on all ports, excludes transceivers.

Standards Compliance

EMC	FCC A ICES-003 Issue 7 EN 55032:2015 EN IEC 61000-3-2:2019 EN 61000-3-3 KS C 9832 VCCI-CISPR 32:2016 AS/NZS CISPR 32:2015 +A1 2020 EN 300 386 TEC/SD/DD/EMC-221 CNS 15936 BS EN 55032:2015+A11:2020 BS EN IEC 61000-3-2 BS EN 61000-3-3
Immunity	EN 55035:2017+A11:2020 EN 300 386 KS C9835 BS EN 55035:2017+A11:2020
Safety	EN 62368-1:2020+A11:2020 EN 62368-1:2014+A11:2017 IEC 62368-1: 2018 Korea KC Safety KC 62368-1 (2021-08) CSA/UL 62368-1:2019 NOM 019-SCFI-1998 CNS 15598-1 AS/NZS 62368.1:2022
Certifications	BSMI (Taiwan) FCC Class A (United States) ICES-003 (Canada) CE (European Union) KCC (South Korea) NRTL (North America) RCM (Australia / New Zealand) UKCA (United Kingdom) VCCI (Japan) TEC (India) ANATEL (Brazil) ICASA (South Africa) NOM Equivalency (Mexico)
European Union Directives	2014/35/EU Low Voltage Directive 2014/30/EU EMC Directive 2012/19/EU WEEE Directive 2011/65/EU RoHS Directive 2015/863/EU Commission Delegated Directive
Further Information	Product Certification Portal

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 90%
Operating Altitude	0 to 10,000 ft, (0-3,000m)

7280R4-32PE / -32DE Product Description

DCS-7280R4-32PE-F	Arista 7280R4, 32x800GbE OSFP switch router, front to rear air, 2 x AC
DCS-7280R4-32PE#	Arista 7280R4, 32x800GbE OSFP switch router, configurable fans and psu (-F louver kit)
DCS-7280R4K-32PE-F	Arista 7280R4, 32x800GbE OSFP switch router, large routes and enh. encryption, front to rear air, 2 x AC
DCS-7280R4K-32PE#	Arista 7280R4, 32x800GbE OSFP switch router, large routes and enh. encryption, configurable fans and psu (-F louver kit)
DCS-7280R4-32DE-F	Arista 7280R4, 32x800GbE QSFP-DD switch router, front to rear air, 2 x AC
DCS-7280R4-32DE#	Arista 7280R4, 32x800GbE QSFP-DD switch router, configurable fans and psu (-F louver kit)
DCS-7280R4K-32DE-F	Arista 7280R4, 32x800GbE QSFP-DD switch router, large routes and enh. encryption, front to rear air, 2 x AC
DCS-7280R4K-32DE#	Arista 7280R4, 32x800GbE QSFP-DD switch router, large routes and enh. encryption, configurable fans and psu (-F louver kit)
DCS-7001-SUP-L	7001 series Supervisor-L module with 8c/16t 3.3 GHz CPU, 64GB RAM, 480GB NVMe (spare, -F airflow, secure boot enabled)
FAN-7022HQ-RED	Spare Front-to-Rear High Speed Fan module for select Arista 7000 Series. Refer to product datasheets for compatibility.
PWR-3211-HV-RED	Spare Arista PSU, 1RU, HVAC/DC, 3200W, SAF-D, FORWARD, 73.5MM
PWR-3211-DC-RED	Spare Arista PSU, 1RU, DC/DC, 3200W, FORWARD, 73.5MM
KIT-7203	Spare tool-free accessory kit (v2) for Arista 2RU switches. 4-post mount. (2x SAF-D-C20, 2m)
KIT-7004-2U	Spare tool-free 4-post mount kit (v2) for 2-4RU Arista tool-free switches
KIT-7004-2UL	Spare extended tool-free 4-post mount kit (v2) for 2-4RU Arista tool-free switches
KIT-GND-EXT-2RU	Arista 7000 Series 2RU Ground Extender Kit for NEBS compliance

Note:
- For the complete contents of each accessory kit, please use the lookup tool here: https://www.arista.com/en/support/product-documentation/accessory-kit-lookup
- 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.

7280R4-64QC-10PE	Product Description
DCS-7280R4-64QC-10PE-F	Arista 7280R4, 64x100GbE QSFP and 10x800GbE OSFP switch router, front to rear air, 2 x AC
DCS-7280R4-64QC-10PE-R	Arista 7280R4, 64x100GbE QSFP and 10x800GbE OSFP switch router, rear to front air, 2 x AC
DCS-7280R4-64QC-10PE#	Arista 7280R4, 64x100GbE QSFP and 10x800GbE OSFP switch router, configurable fans and psu (-F louver kit)
DCS-7280R4K-64QC-10PE-F	Arista 7280R4, 64x100GbE QSFP and 10x800GbE OSFP switch router, large routes and enh. encryption, front to rear air, 2 x AC
DCS-7280R4K-64QC-10PE-R	Arista 7280R4, 64x100GbE QSFP and 10x800GbE OSFP switch router, large routes and enh. encryption, rear to front air, 2 x AC
DCS-7280R4K-64QC-10PE#	Arista 7280R4, 64x100GbE QSFP and 10x800GbE OSFP switch router, large routes and enh. encryption, configurable fans and psu (-F louver kit)
DCS-7001-SUP-L	7001 series Supervisor-L module with 8c/16t 3.3 GHz CPU, 64GB RAM, 480GB NVMe (spare, -F airflow, secure boot enabled)
FAN-7022HQ-RED	Spare Front-to-Rear High Speed Fan module for select Arista 7000 Series. Refer to product datasheets for compatibility.
FAN-7022HQ-BLUE	Spare Rear-to-Front High Speed Fan module for select Arista 7000 Series. Refer to product datasheets for compatibility.
KIT-7001-AFK-F	Forward airflow louver kit and tool for select 7000 Series 2RU systems. (Required to convert -R to -F)
KIT-7001-AFK-R	Reverse airflow louver kit and tool for select 7000 Series 2RU systems (Required to convert -F or # to -R)
PWR-2411-AC-RED	Spare Arista PSU, 1RU, AC/DC, 2400W, C19, FORWARD, 73.5MM
PWR-2411-AC-BLUE	Spare Arista PSU, 1RU, AC/DC, 2400W, C19, REVERSE, 73.5MM
PWR-2411-DC-RED	Spare Arista PSU, 1RU, DC/DC, 2400W, FORWARD, 73.5MM
PWR-2411-DC-BLUE	Spare Arista PSU, 1RU, DC/DC, 2400W, REVERSE, 73.5MM
KIT-7202	Spare tool-free accessory kit (v2) for Arista 2RU switches. 4-post mount. (2x C19-C20, 2m)
KIT-7004-2U	Spare tool-free 4-post mount kit (v2) for 2-4RU Arista tool-free switches
KIT-7004-2UL	Spare extended tool-free 4-post mount kit (v2) for 2-4RU Arista tool-free switches
KIT-GND-EXT-2RU	Arista 7000 Series 2RU Ground Extender Kit for NEBS compliance

Note:
- For the complete contents of each accessory kit, please use the lookup tool here: https://www.arista.com/en/support/product-documentation/accessory-kit-lookup
- 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.

Software Licenses	Product Description
LIC-FIX-5-E	Enhanced L3 License for Arista Group 5 Fixed switches, (BGP, OSPF, ISIS, PIM, NAT)
LIC-FIX-5-V	Virtualization license for Group 5 Arista Fixed switches (VMTracer and VXLAN)
LIC-FIX-5-V2	EOS Extensions, Security and Partner Integration license for Arista Group 5 Fixed switches
LIC-FIX-5-Z	Monitoring & Automation license for Arista Group 5 Fixed switches (ZTP, LANZ, TapAgg, API, Time-stamping, OpenFlow)
LIC-FIX-5-FLX-L	FLX-Lite License for Arista Fixed switches Group 5 - Full Routing Up to 256K Routes, EVPN, VXLAN, SR, base MPLS LSR (no TE or link/node protection)
LIC-FIX-5-FLX	FLX License for Arista Fixed Group 5 - Full Routing upto 2M Routes, >24K ACL, EVPN, VXLAN, SR, Adv MPLS-LER/LSR, with TE & link/node protection
LIC-FIX-5-MACSEC	MACSEC Encryption License for Arista Group 5 Fixed switches, MACSEC capable ports
LIC-FIX-5-ENCR	Enhanced Security Encryption License for Arista Group 5 Fixed switches, Encryption capable ports, TunnelSec, IPsec and MACsec

Warranty

The Arista 7280R4 Series 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

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