



Arista 7280E Series

### Arista 7280E Series Introduction

The Arista 7280E Series is a key component of the Arista 7000 Series portfolio of data center switches. The Arista 7280E series is a set of purpose built 10/40/100GbE fixed configuration systems designed for the highest performance environments, where wire speed L2 and L3 forwarding are combined with advanced features for network virtualization, open monitoring and network analysis, resiliency and architectural flexibility. The 7280E capabilities address the requirements for modern networking and rich multi-media where content delivery require a lossless forwarding solution.

### High Performance Leaf

- Industry first 100G 1RU Switch
- Up to 1.44Tbps Capacity
- Up to 900 million packets per second
- Wire speed unicast & multicast
- Under 4us latency (64 byte)
- High density 10G/40G/100G
- Ultra deep 9GB packet buffer
- Under 4W per 40G port

### Feature Rich

- High Availability
- Rich L2 and L3 features
- 128-Way MLAG
- 128-Way ECMP
- Hitless MLAG ISSU
- Zero touch provisioning
- IEEE 1588 precision timing
- Flexible airflow options

### High Scalability

- 128K-256K MAC Addresses
- 128K IPv4/IPv6 Host Routes
- 64K IPv4 Routes
- Up to 12k IPv6 Routes

### Built-in Solid State Storage

- 120GB Solid State Drive included
- Store logs and data captures
- Leverage linux tools with no limitations

### Virtualization & Monitoring

- VXLAN for next generation DC
- VM Tracer integration
- LANZ microburst detection
- DANZ advanced monitoring
- AEM proactive management
- sFlow for network visibility

### 7280E Advantages

- Industry first, standards-based 100G top of rack switch ideal for future proofing designs and high bandwidth needs such as in High Performance Storage or Content Delivery Networks (CDNs)
- Ultra deep buffers in a 1RU form factor makes for an ideal top of rack switch where lossless performance and in-cast problems are expected such as in data analytics, IP storage and big data environments
- Integrated SSD Storage allows for unique extensibility abilities and traffic monitoring for truly capable SDN
- Wire speed VXLAN tagging support, extending the next generation of scalable data centers
- Hardware assisted Precision Time Protocol enables accurate timing solutions across Ethernet based networks without costly investments in deploying separate timing networks
- Unique monitoring and provisioning features – LANZ, DANZ, AEM, IEEE 1588 PTP, ZTP, VM Tracer, VXLAN, and eAPI
- Comprehensive L2 and L3 feature set for open multi-vendor networks with no proprietary lock-in
- Balanced L2 and L3 table resources allow deployment flexibility in both large L2 and L3 environments with any-workload suitability
- Network-wide virtualization platform for next generation cloud bursting with wire-speed VXLAN hardware-based Tunnel Endpoint (VTEP) termination.

	7280SE-64	7280SE-68	7280SE-72
Total 10G Ports	64	56	72
SFP+ Ports	48	48	48
Uplink Ports	4 QSFP+	2 QSFP100	2 MXP
L2/3 Throughput	1.28 Tbps	1.36 Tbps	1.44 Tbps
Latency	3.8us	3.8us	3.8us
Typical Power Draw	261W	Approx 260W (tbd)	262W
Airflow	F/R or R/F	F/R or R/F	F/R or R/F

### Arista EOS

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.

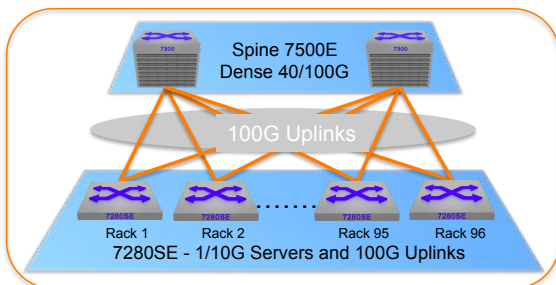
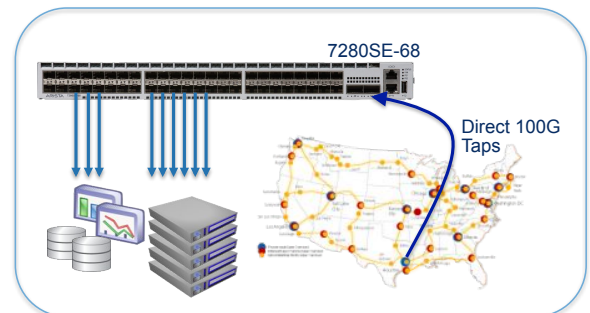
### 7280E Series Systems

The Arista 7280SE Series extends the Arista 1RU product portfolio, providing a combination of deep buffers, extensive features such as VXLAN and LANZ, and the industry's first 100G Top of Rack switch built for storage networks, content delivery networks, and lossless spine/leaf datacenter designs.

Feature	Description
DANZ Tap Aggregation	Delivering industry's first 1RU Tap Aggregator with 100G tap ports
Wirespeed VXLAN Gateway	Seamless integration between VXLAN and L2/L3 environments, physical and virtualized networks
Ultra Deep Buffers	Dynamic Buffer Allocation with 9GB of buffer per switch and up to 125MB of buffer per port
128-way ECMP & MLAG	Improve network scalability and balance traffic across large-scale leaf-spine designs or server load balancers
Latency Analyzer (LANZ)	Microsecond granularity on port utilization using buffering watermarks to provide immediate feedback and precision monitoring
Network Wide Virtualization	Multi-vendor API Support with eAPI, VXLAN and NSX, and other encapsulation techniques

### 7280E Deployment Scenarios

- **Virtualized and Cloud data centers:** Largest scale, flexible interface choices, balanced resources, deep buffers and non-blocking performance coupled with a rich L2/L3 feature set and innovative provisioning and monitoring features
- **IP Storage:** Dense 10G and 40G with deep buffers and predictable low latency in a non-blocking system
- **DANZ at 100G:** Direct 100G Taps into remote PoPs or data center interconnects provides high bandwidth without security and analysis compromise



- **High Performance Compute (HPC) and Research:** Low and predictable latency, non-blocking with high density 40G and 100G, precision timing, precision monitoring, and support for flexible 10G, 40G and 100G
- **Big Data and Hadoop:** High performance, high density, flexible 1G/10G/40G/100G, advanced monitoring and traffic control features for deterministic performance
- **Content Delivery Networks:** Ultra deep buffers create a lossless network for streaming media and content delivery networks that ensures reliable performance under peak load



- A choice of three systems for flexible options of 10/40/100G
- 7280SE-72** — 48 SFP+ & 2 MXP ports for 10/40/100G up to 72x 10GbE
  - 7280SE-68** — 48 SFP+ & 2 QSFP100 for 10/40/100G up to 56 x 10GbE
  - 7280SE-64** — 48 SFP+ & 4 QSFP+ ports for 10/40G up to 64 x 10GbE