



Arista 7060X4 and 7060X5 Series

Arista 7060X4 and 7060X5 Series Introduction

The Arista 7060X4 and 7060X5 Series are the next generation of devices, optimized for performance, scale and power efficiency in fixed configuration data center switches. The expansion of next generation applications for machine learning and artificial intelligence to support a broad spectrum of cloud applications and intelligent services is driving the evolution of scale-out networks. With up to 25.6 Tbps throughput, the 7060X5 series delivers the highest density of 400G and 800G switching in a single chip platform. Deterministic, low latency, line rate performance, proven layer 2 and layer 3 features, and advanced traffic awareness, congestion handling and instrumentation provide the ideal foundation for ultra-high performance applications with scale to match the largest clusters' requirements.

The Arista 7060X5 and 7060X4 series offer a rich choice of port speed and density including support for 25GbE, 50GbE, 100GbE, 200GbE, 400GbE and 800G enabling consistent network architectures that seamlessly scale from small dedicated clusters to the needs of the largest multi-tier networks.

The growth in datacenter performance is leading to the widespread adoption of 25G, 50G and 100G servers and accelerating the need for dense 400G and 100G networking solutions that accommodate a broad range of interface speeds. The Arista 7060X4 and 7060X5 Series extends Arista's industry leading fixed configurations with the highest performance, scalability, density and innovative features optimized for software driven cloud networking.

High Performance

- Up to 25.6 Tbps system capacity
- Up to 10.6 billion packets per second
- High density 800G/400G systems
- Flexible choices for 800G, 400G, 200G, 100G, 50G, 40G, 25G and 10G ports
- Up to 114MB shared packet buffer
- Under 14W per 800G port

Feature Rich

- DC optimized airflow
- Rich L2 and L3 features
- 128-Way MLAG
- Large Scale ECMP
- Zero Touch Provisioning
- Smart System Upgrade
- Hitless MLAG ISSU

Cloud Networking Ready

- 128-way ECMP for hyperscale networks
- Dynamic Load Balancing for advanced multi-pathing
- Advanced Congestion Management for NVMe and AI workloads
- Flow aware traffic scheduling
- Shared 114MB Buffer with burst absorption
- Up to 128K MAC addresses
- Over 800K IPv4 Routes
- Over 500K IPv6 Routes
- DirectFlow and eAPI

Provisioning & Monitoring

- CloudVision
- Zero Touch Provisioning (ZTP)
- LANZ for microburst detection
- DANZ Advanced Mirroring for visibility
- sFlow
- Self-configure and recover from USB

7060X4 and 7060X5 Deployment Flexibility

The Arista 7060X4 and 7060X5 portfolio of 1RU and 2RU data center switches, deliver a rich choice of interface speed and density allowing leaf-spine networks to seamlessly migrate from 10G/40G to 25G/100G and 200G/400G. The 7060X4 and 7060X5 devices are powered by Arista EOS, the worlds most advanced network operating system. These systems are available in a range of models:

- **7060X5** - High density 800G and 400G with QSFP-DD ports
- **7060X4** - 400G and 100G with a choice of OSFP & QSFP-DD ports

The flexibility combined with a consistent architecture offered by the 7060X4 and 7060X5 series ensures suitability for a variety of deployment scenarios. The following are a selection of use cases:

- **Hyper-scale cloud** — for large scale multi-tier networks
- **Dense top of rack** — for server racks with 1/10G, 25G to 100G systems
- **High performance storage** — NFS and NVMe high performance systems
- **Grid / HPC** — designs requiring cost effective and power efficient systems to enable non-blocking or minimal over-subscription for servers
- **Leaf-Spine** — open standards based L2 and L3 with monitoring and visibility features — VM Tracer, LANZ, sFlow and Tracers
- **100G Scale Out Designs** — Small to medium locations requiring power efficiency and high density compact systems
- **Software Defined Networking** — with support for CloudVision, VXLAN, OpenFlow, DirectFlow and eAPI
- **ECMP designs up to 128-way** — cost-effective multi-pathing using open protocols and fixed configuration spine switches

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.

7060X4 and 7060X5 Series Systems

Arista 7060X4 and 7060X5 Series all support hot-swappable power supplies and N+1 fan redundancy, EOS high availability and live software patching, a choice of L2 and L3 multi-pathing designs and powerful EOS innovations for visibility, application level performance monitoring, traffic management and virtualization.

Feature	Description
CloudVision	Network-wide workflow automation and workload orchestration as a turnkey solution for Cloud Networking
IEEE 1588 PTP	Build and scale accurate timing solutions with sub-microsecond accuracy
Smart System Upgrade	Optimized SW upgrades to reduce the impact of software upgrades and avoid network convergence
Hitless Speed Changes	Eliminate downtime when configuring different speeds and bringing up new links
128-way ECMP and 64-way MLAG	Improve network scalability and balance traffic across large-scale leaf-spine designs or server load balancers
Latency Analyzer	A solution to improve monitoring and visibility for congestion from persistent or microbursts.
Cloud Control & SDN	Support for Openflow and OpenStack automation and self-service provisioning with cloud scale economics
Scalable L2 & L3 Tables	Flexible allocation of L2 and L3 forwarding table resources for greater design choice in multi-tier networks
High Performance Shared Buffer Memory	Integrated packet buffer that is dynamically shared across ports to maximize the per port buffer for bursty applications and advanced congestion control for lossless traffic requirements in low latency networks

	7060DX5-64E 7060PX5-64E	7060DX5-64S	7060DX5-32	7060PX4-32 7060DX4-32
Description	32-Port OSFP-800G or QSFP-DD 800G	64-Port QSFP-DD 400G	32-Port QSFP-DD 400G	32-Port OSFP or QSFP-DD 400G and 2 SFP+
Size (RU)	1RU	2RU	1RU	1RU
Maximum 400G Ports	64	64	32	32
Maximum 200G Ports	128	128	64	64
Maximum 100G Ports	256	256	128	128
Max Throughput (Tbps)	25.6 Tbps	25.6 Tbps	12.8 Tbps	12.8 Tbps
Max Forwarding Rate (PPS)	10.6 Bpps	10.6 Bpps	5.3 Bpps	8 Bpps
Latency	825 ns	825 ns	825 ns	700 ns
Total System Buffer	114 MB	114 MB	57 MB	64 MB
Airflow	Front to Rear	Front to Rear	Front to Rear or Rear to Front	Front to Rear