The Arista 7050TX are members of the Arista 7050X Series and key components of the Arista portfolio of data center switches. The Arista 7050X Series are purpose built 10/40GbE data center switches in compact and energy efficient form factors with wire speed layer 2 and layer 3 features combined with low latency and advanced features for software defined cloud networking.

Increased adoption of 10 Gigabit Ethernet servers coupled with applications using higher bandwidth is accelerating the need for dense 10 and 40 Gigabit Ethernet switching. The 7050TX Series support from 32 to 96 ports of auto-negotiating 100Mb/1Gb/10GBASE-T and from 4 to 12 ports of 10/40GbE that allow customers to design large leaf and spine networks to accommodate the east-west traffic patterns found in modern data centers. The 7050TX backwards compatibility with existing gigabit Ethernet cabling reduces the cost of migrating to 10 Gigabit Ethernet and offers an easy evolution.

Featuring a choice of four 1RU models and one 2RU model the 7050TX Series deliver high density 10GbE based RJ45 ports and 10/40G ports using either QSFP+ or embedded optics with MXP multi-speed ports. The embedded MXP ports enable a flexible choice of 3x40GbE or 12x10GbE on each interface. Using fiber breakout cables these enable a wide range of 10GbE and 40GbE combinations.

All models in the 7050TX Series delivers rich layer 2 and layer 3 features with wire speed performance up to a maximum performance of 2.56Tbps. The Arista 7050TX switches offer low latency and a shared 12 MB packet buffer pool that is allocated dynamically to ports that are congested. With typical power consumption of less than 5 watts per 10GbE port the 7050TX Series are power efficient. An optional built-in SSD supports advanced logging, data capture and other services directly on the switch. Combined with Arista EOS the 7050X Series delivers advanced features for big data, cloud, virtualized and traditional data center designs.

### Product Highlights

#### Performance
- 7050TX-128: 96 x 1/10GbE and 8x 40GbE
- 7050TX-96: 48 x 1/10GbE and 12x 40GbE
- 7050TX-72: 48 x 1/10GbE and 6x 40GbE
- 7050TX-72Q: 48 x 1/10GbE and 6x 40GbE
- 7050TX-64: 48 x 1/10GbE and 4x 40GbE
- 7050TX-48: 32 x 1/10GbE and 4x 40GbE
- Up to 2.56 terabits per second
- Up to 1.44 billion packets per second
- Wire speed L2 and L3 forwarding
- Latency from 3 microseconds

#### Data Center Optimized Design
- Typical power under 5W per 10GbE port
- Over 93% efficient power supplies
- 1+1 redundant & hot-swappable power
- N+1 redundant & hot-swappable fans
- Front-to-rear or rear-to-front cooling
- Tool less rails for simple installation

#### Cloud Networking Ready
- VXLAN and VM Tracer
- OpenFlow, DirectFlow and eAPI
- 288K MAC entries
- 144K IPv4 Routes / 208K IPv4 Host Routes
- 12MB Dynamic Buffer Allocation

#### Resilient Control Plane
- High Performance x86 CPU
- Up to 8GB DRAM
- 4GB Flash
- User applications can run in a VM

#### Built-in Storage
- Solid State Drive option
- Store logs and data captures
- Leverage linux tools with no limitations

#### Advanced Provisioning & Monitoring
- Zero Touch Provisioning (ZTP)
- LANZ for microburst detection
- DANZ Advanced Mirroring & Tap Aggregation for improved visibility
- IEEE 1588 PTP
- sFlow
- Self-configure and recover from USB

#### Arista Extensible Operating System
- Single binary image for all products
- 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++

### Overview

The Arista 7050TX runs 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.

With Arista EOS, advanced monitoring and automation capabilities such as Zero Touch Provisioning, VMTracer and Linux based tools can be run natively on the switch with the powerful x86 CPU subsystem.
High Availability

The Arista 7050X series switches were designed for high availability from both a software and hardware perspective. Key high availability features include:

- 1+1 hot-swappable power supplies and four N+1 hot-swap fans
- Color coded PSU's and fans
- Live software patching
- Self healing software with Stateful Fault Repair (SFR)
- Smart System Upgrade (SSU) and Accelerated Software Update (ASU)*
- Up to 64 10GbE or 40GbE ports per link aggregation group (LAG)
- Multi-chassis LAG for active/active L2 multi-pathing
- 64-way ECMP routing for load balancing and redundancy

Dynamic Buffer Allocation

In cut-through mode, the Arista 7050TX switches forward packets with a latency of under 3 microseconds. Upon congestion, the packets are buffered in shared packet memory that has a total size of 12 Mbytes. Unlike other architectures that have fixed per-port packet memory, the 7050X Series use Dynamic Buffer Allocation (DBA) to allocate up to 6.7MB of packet memory to a single port for lossless forwarding.

Scaling Data Center Performance

The Arista 7050X series delivers line rate switching at layer 2 and layer 3 to enable dramatically faster and simpler network designs for data centers that dramatically lowers the network capital and operational expenses. When used in conjunction with the Arista 7000 series of fixed and modular switches it allows networks to scale to over 110,000 10G servers in a low-latency two-tier 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. Arista EOS advanced features provide control and visibility with single point of management.

Number of 10GbE Nodes Interconnected Using Arista Leaf-Spine Designs
Maximum Flexibility for Scale Out Network Designs

Scale out network designs enable solutions to start small and evolve over time. A simple two-way design can grow as far as 64-way without significant changes to the architecture. The Arista 7050X include enhancements that allow for flexible scale-out designs:

- 64-way ECMP and 64-way MLAG to provide scalable designs and balance traffic evenly across large scale 2 tier leaf-spine designs
- Custom hash algorithms for efficient hashing, persistent hashing and custom lookups for tunneled protocols.
- Flexible allocation of L2 and L3 forwarding table resources for more design choice
- Wide choice of dense 10G/40G ports with QSFP+ and MXP interfaces for single port multi-speed flexibility
- VXLAN routing, bridging and gateway for physical to virtualization communication to enable next generation data center designs
- DANZ, sFlow and multi-port mirroring to detect micro-burst congestion and provide network wide visibility and monitoring

Software Defined Networking

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.

Smart System Upgrade

Smart System Upgrade is a network application designed to address one of the most complicated and challenging tasks facing data center administrators - network infrastructure maintenance. Changes to the underlying network infrastructure can affect large numbers of devices and cause significant outages. SSU provides a fully customizable suite of features that tightly couples data center infrastructure to technology partners allowing for intelligent insertion and removal, programmable updates to software releases and open integration with application and infrastructure elements.

Advanced Event Management (AEM)

Simplifying the overall operations, AEM provides the tools to customize alerts and actions. AEM is a powerful and flexible set of tools to automate tasks and customize the behavior of EOS and the operation of the overall data center switching infrastructure. 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.

Enhanced Features for High Performance Networks

The Arista 7050TX deliver a suite of advanced traffic control and monitoring features to improve the agility of modern high performance environments, with solutions for data monitoring, and next-generation virtualization.

Precise Data Analysis

Arista Latency Analyzer (LANZ) is an integrated feature of EOS. 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.

Virtualization

Supporting next-generation virtualized data centers requires tight integration with orchestration tools and emerging encapsulation technologies such as VXLAN. The 7050X 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 7050X 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.

Unified Forwarding Table

Cloud network scalability is directly impacted by the size of a switches 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 7050X leverages a common Unified Forwarding Table for the L2 MAC, L3 Routing, L3 Host and IP Multicast forwarding entries, which can be partitioned per entry type. The ideal size of each partition varies depending on the network deployment scenario. The flexibility of the UFT coupled with the range of pre-defined configuration profiles available on the 7050X ensures optimal resource allocation for all network topologies and network virtualization technologies.
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
  - 104 groups per system
- Multi-Chassis Link Aggregation (MLAG)
  - 64 ports per MLAG
- Custom LAG Hashing
- Resilient LAG Hashing
- 802.1AB Link Layer Discovery Protocol
- 802.3x Flow Control
- Jumbo Frames (9216 Bytes)
- IGMP v1/v2/v3 snooping
- Storm Control
- Private VLANs
- RAIL

Layer 3 Features

- Routing Protocols: OSPF, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2
- 64-way Equal Cost Multipath Routing (ECMP)
- Resilient ECMP Routes
- VRF
- BFD
- Route Maps
- IGMP v2/v3
- PIM-SM / PIM-SSM
- Anycast RP (RFC 4610)
- VRRP
- Virtual ARP (VARP)
- Policy Based Routing (DirectFlow)
- Network Address Translation *
  - Static NAT
  - Dynamic NAT
- uRPF

Advanced Monitoring and Provisioning

- Zero Touch Provisioning (ZTP)
- Latency Analyzer and Microburst Detection (LANZ)
  - Configurable Congestion Notification (CLI, Syslog)
  - Streaming Events (GPB Encoded) *
  - Capture/Mirror of congested traffic *
- Advanced Monitoring and Aggregation
  - Port Mirroring (4 active sessions)
  - L2/3/4 Filtering on Mirror Sessions*
  - Mirror to EOS/SSD*
- Advanced Event Management suite (AEM)
  - CLI Scheduler
  - Event Manager
  - Event Monitor

Virtualization Support

- VXLAN Gateway (draft-mahalingam-dutt-dcops-vxlan-01)
- VXLAN Routing *
- VXLAN Bridging
- VXLAN Tunnel Endpoint
- VM Tracer VMware Integration
  - VMware vSphere support
  - VM Auto Discovery
  - VM Adaptive Segmentation
  - VM Host View

Security Features

- IPv4 / IPv6 Ingress & Egress ACLs using L2, L3, L4 fields
- MAC ACLs
- ACL Drop Logging
- ACL Counters
- Control Plane Protection (CPP)
- DHCP Relay / Snooping
- MAC Security
  - TACACS+
  - RADIUS

Quality of Service (QoS) Features

- Up to 8 queues per port
- 802.1p based classification
- DSCP based classification and remarking *
- Explicit Congestion Notification (ECN)
- QoS interface trust (COS / DSCP)
- Strict priority queueing
- Weighted Round Robin (WRR) Scheduling *
- Per-Priority Flow Control (PFC)
- Data Center Bridging Extensions (DCBX)
- 802.1Qaz Enhanced Transmissions Selection (ETS) *
- ACL based DSCP Marking *
- ACL based Policing *
- Policing/Shaping
- Rate limiting
- Audio Video Bridging (AVB) *

* Not currently supported in EOS
Network Management
- CloudVision Task-Oriented Multi-Device CLI
- 10/100/1000 Management Port
- RS-232 Serial Console Port
- USB Port
- SNMP v1, v2, v3
- Management over IPv6
- Telnet and SSHv2
- Syslog
- AAA
- Industry Standard CLI
- Accelerated Software Upgrade (ASU)

Extensibility
- Linux Tools
  - Bash shell access and scripting
  - RPM support
  - Custom kernel modules
- Programmatic access to system state
  - Python
  - C++
- Native KVM/QEMU support

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
- 802.3ab 1000BASE-T
- 802.3an 10GBASE-T
- 802.3z Gigabit Ethernet
- 802.3ae 10 Gigabit Ethernet
- 802.3ba 40 Gigabit Ethernet
- RFC 2460 Internet Protocol, Version 6 (IPv6) Specification
- RFC 4861 Neighbor Discovery for IP Version 6 (IPv6)
- RFC 4862 IPv6 Stateless Address Autoconfiguration
- RFC 4443 Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification

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
- IPRMROUTE-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

Table Sizes

<table>
<thead>
<tr>
<th>Feature</th>
<th>Base Mode</th>
<th>UFT Modes</th>
</tr>
</thead>
<tbody>
<tr>
<td>STP Instances</td>
<td>64 (MST)</td>
<td>510 (RPVST+)</td>
</tr>
<tr>
<td>IGMP Groups</td>
<td>288K</td>
<td>with 8K unique groups</td>
</tr>
<tr>
<td>ACLs</td>
<td>4K</td>
<td></td>
</tr>
<tr>
<td>Egress ACLs</td>
<td>1K</td>
<td></td>
</tr>
<tr>
<td>ECMP</td>
<td>64-way, 1K groups</td>
<td></td>
</tr>
<tr>
<td>MAC Addresses</td>
<td>32K</td>
<td>288K</td>
</tr>
<tr>
<td>IPv4 Hosts</td>
<td>16K</td>
<td>208K</td>
</tr>
<tr>
<td>IPv4 Routes - Unicast</td>
<td>16K</td>
<td>144K</td>
</tr>
<tr>
<td>IPv4 Routes - Multicast</td>
<td>16K</td>
<td>104K</td>
</tr>
<tr>
<td>IPv6 Hosts</td>
<td>16K</td>
<td>104K</td>
</tr>
<tr>
<td>IPv6 Routes - Unicast</td>
<td>8K</td>
<td>77K</td>
</tr>
<tr>
<td>IPv6 Routes - Multicast</td>
<td>4K</td>
<td>52K</td>
</tr>
</tbody>
</table>

Maximum values dependent on shared resources in some cases

* Not currently supported in EOS
### Specifications

<table>
<thead>
<tr>
<th>Ports</th>
<th>7050TX-128</th>
<th>7050TX-96</th>
<th>7050TX-72Q</th>
<th>7050TX-72</th>
<th>7050TX-64</th>
<th>7050TX-48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 40GbE Ports</td>
<td>8</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total 10GbE Ports</td>
<td>96</td>
<td>96</td>
<td>72</td>
<td>72</td>
<td>64</td>
<td>48</td>
</tr>
<tr>
<td>100M/1G/10GBASE-T (RJ45)</td>
<td>96</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>32</td>
</tr>
<tr>
<td>Throughput</td>
<td>2.56 Tbps</td>
<td>1.92 Tbps</td>
<td>1.44 Tbps</td>
<td>1.44 Tbps</td>
<td>1.28 Tbps</td>
<td>960 Gbps</td>
</tr>
<tr>
<td>Packets/Second</td>
<td>1440 Mpps</td>
<td>1440 Mpps</td>
<td>1080 Mpps</td>
<td>1080 Mpps</td>
<td>960 Mpps</td>
<td>720 Mpps</td>
</tr>
<tr>
<td>Latency (RJ45 to uplinks)</td>
<td>3 usec</td>
<td>3 usec</td>
<td>3 usec</td>
<td>3 usec</td>
<td>3 usec</td>
<td>3 usec</td>
</tr>
<tr>
<td>CPU</td>
<td>Quad-Core x86</td>
<td>Quad-Core x86</td>
<td>Quad-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>8 Gigabytes</td>
<td>4 Gigabytes</td>
<td>4 Gigabytes</td>
<td>4 Gigabytes</td>
<td>4 Gigabytes</td>
<td>4 Gigabytes</td>
</tr>
<tr>
<td>Flash Storage Memory</td>
<td>4 Gigabytes</td>
<td>4 Gigabytes</td>
<td>4 Gigabytes</td>
<td>4 Gigabytes</td>
<td>4 Gigabytes</td>
<td>4 Gigabytes</td>
</tr>
<tr>
<td>SSD Storage (optional)</td>
<td>100 Gigabytes</td>
<td>120 Gigabytes</td>
<td>No</td>
<td>120 Gigabytes</td>
<td>120 Gigabytes</td>
<td>120 Gigabytes</td>
</tr>
<tr>
<td>Packet Buffer Memory</td>
<td>12MB (Dynamic Buffer Allocation)</td>
<td>12MB (Dynamic Buffer Allocation)</td>
<td>12MB (Dynamic Buffer Allocation)</td>
<td>12MB (Dynamic Buffer Allocation)</td>
<td>12MB (Dynamic Buffer Allocation)</td>
<td>12MB (Dynamic Buffer Allocation)</td>
</tr>
<tr>
<td>10/100/1000 Mgmt Port</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>RS-232 Serial Ports</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>USB Ports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot-swap Power Supply</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>
<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>
<td>4 (N+1 redundant)</td>
<td>4 (N+1 redundant)</td>
</tr>
<tr>
<td>Reversible Airflow</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Size (WxHxD)</td>
<td>19 x 3.5 x 18.1&quot; (48.3 x 8.8 x 45.9cm)</td>
<td>19 x 1.75 x 20.6&quot; (48.3 x 4.4 x 52.3cm)</td>
<td>19 x 1.75 x 20.6&quot; (48.3 x 4.4 x 52.3cm)</td>
<td>19 x 1.75 x 20.6&quot; (48.3 x 4.4 x 52.3cm)</td>
<td>19 x 1.75 x 15.8&quot; (48.3 x 4.4 x 40.2cm)</td>
<td>19 x 1.75 x 15.8&quot; (48.3 x 4.4 x 40.2cm)</td>
</tr>
<tr>
<td>Weight</td>
<td>34.3lbs (15.6kg)</td>
<td>22.5lbs (10.2kg)</td>
<td>20.1lbs (9.1kg)</td>
<td>22lbs (10kg)</td>
<td>19lbs (8.6kg)</td>
<td>17lbs (7.7kg)</td>
</tr>
</tbody>
</table>

### Power Supply Specifications

<table>
<thead>
<tr>
<th>Power Supply Model</th>
<th>PWR-500AC</th>
<th>PWR-500-DC</th>
<th>PWR-745AC</th>
<th>PWR-1100AC</th>
<th>PWR-1100-DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>100-240VAC</td>
<td>40-72V DC</td>
<td>100-240VAC</td>
<td>200-240VAC</td>
<td>40-72V DC</td>
</tr>
<tr>
<td>Typical Input Current</td>
<td>6.3 - 2.3A</td>
<td>13.1 - 7.3A</td>
<td>11A at -48V</td>
<td>10 - 4A</td>
<td>6.5 - 5.5A</td>
</tr>
<tr>
<td>Input Frequency</td>
<td>50/60Hz</td>
<td>DC</td>
<td>50/60Hz</td>
<td>50/60Hz</td>
<td>DC</td>
</tr>
<tr>
<td>Input Connector</td>
<td>IEC 320-C13</td>
<td>AWG #16-12</td>
<td>IEC 320-C13</td>
<td>IEC 320-C13</td>
<td>AWG #10-3</td>
</tr>
<tr>
<td>Efficiency (Typical)</td>
<td>94% Platinum</td>
<td>-</td>
<td>93% Platinum</td>
<td>93% Platinum</td>
<td>-</td>
</tr>
<tr>
<td>Compatibility</td>
<td>7050TX-48, 7050TX-64, 7050TX-72, 7050TX-72Q, 7050TX-96</td>
<td>7050TX-128</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Typical power consumption measured at 25C ambient with 50% load

Note: Performance rated over operation with average packets larger than 200 bytes.
## Environmental Characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>0 to 40°C (32 to 104°F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-25 to 70°C (-13 to 158°F)</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>5 to 95%</td>
</tr>
<tr>
<td>Operating Altitude</td>
<td>0 to 10,000 ft, (0-3,000m)</td>
</tr>
</tbody>
</table>

## 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)
- RCM (Australia)
- CCC (PRC)
- MSIP (Korea)
- EAC (Customs Union)
- VCCI (Japan)

### European Union Directives
- 2006/95/EC Low Voltage Directive
- 2004/108/EC EMC Directive
- 2011/65/EU RoHS Directive
- 2012/19/EU WEEE Directive

## Supported Optics and Cables

<table>
<thead>
<tr>
<th>Interface Type</th>
<th>QSFP+ 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>0.5m to 5m QSFP+ to QSFP+</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-SR8D</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>
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<tr>
<td>40GBASE-PLRL4</td>
<td>1km (1km 4x10G LR/LRL)</td>
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<tr>
<td>40GBASE-LRL4</td>
<td>1km</td>
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<tr>
<td>40GBASE-PLR4</td>
<td>10km (10km 4x10G LR/LRL)</td>
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<tr>
<td>40GBASE-LR4</td>
<td>10km</td>
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<tr>
<td>40GBASE-ER4</td>
<td>40km</td>
</tr>
</tbody>
</table>

Note 1. Not supported on 7050TX-128 QSFP+ ports
# Ordering Information

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCS-7050TX-128-F</td>
<td>Arista 7050X, 96x10GbE (1/10GBASE-T) &amp; 8xQSFP+ switch, front-to-rear, 2xAC, 2xC13-C14 cords</td>
</tr>
<tr>
<td>DCS-7050TX-128-R</td>
<td>Arista 7050X, 96x10GbE (1/10GBASE-T) &amp; 8xQSFP+ switch, rear-to-front, 2xAC, 2xC13-C14 cords</td>
</tr>
<tr>
<td>DCS-7050TX-128#</td>
<td>Arista 7050X, 96x10GbE (1/10GBASE-T) &amp; 8xQSFP+ switch, no fans, no psu (requires fan and psu)</td>
</tr>
<tr>
<td>DCS-7050TX-128-D#</td>
<td>Arista 7050X, 96x10GbE (1/10GBASE-T) &amp; 8xQSFP+ switch, SSD, no fans, no psu (requires fan and psu)</td>
</tr>
<tr>
<td>DCS-7050TX-96-F</td>
<td>Arista 7050X, 48x10GbE (1/10GBASE-T) &amp; 12x40GbE (4xMXP) switch, front-to-rear, 2xAC, 2xC13-C14 cords</td>
</tr>
<tr>
<td>DCS-7050TX-96-R</td>
<td>Arista 7050X, 48x10GbE (1/10GBASE-T) &amp; 12x40GbE (4xMXP) switch, rear-to-front, 2xAC, 2xC13-C14 cords</td>
</tr>
<tr>
<td>DCS-7050TX-96#</td>
<td>Arista 7050X, 48x10GbE (1/10GBASE-T) &amp; 12x40GbE (4xMXP) switch, no fans, no psu (requires fan and psu)</td>
</tr>
<tr>
<td>DCS-7050TX-96-D#</td>
<td>Arista 7050X, 48x10GbE (1/10GBASE-T) &amp; 12x40GbE (4xMXP) switch, SSD, no fans, no psu (requires fan and psu)</td>
</tr>
<tr>
<td>DCS-7050TX-72Q-F</td>
<td>Arista 7050X, 48x10GbE (1/10GBASE-T) &amp; 6x40GbE QSFP+ switch, front-to-rear, 2xAC, 2xC13-C14 cords</td>
</tr>
<tr>
<td>DCS-7050TX-72Q-R</td>
<td>Arista 7050X, 48x10GbE (1/10GBASE-T) &amp; 6x40GbE QSFP+ switch, rear-to-front, 2xAC, 2xC13-C14 cords</td>
</tr>
<tr>
<td>DCS-7050TX-72Q#</td>
<td>Arista 7050X, 48x10GbE (1/10GBASE-T) &amp; 6x40GbE QSFP+ switch, no fans, no psu (requires fan and psu)</td>
</tr>
<tr>
<td>DCS-7050TX-72-F</td>
<td>Arista 7050X, 48x10GbE (1/10GBASE-T) &amp; 6x40GbE (2xMXP) switch, front-to-rear, 2xAC, 2xC13-C14 cords</td>
</tr>
<tr>
<td>DCS-7050TX-72-R</td>
<td>Arista 7050X, 48x10GbE (1/10GBASE-T) &amp; 6x40GbE (2xMXP) switch, rear-to-front, 2xAC, 2xC13-C14 cords</td>
</tr>
<tr>
<td>DCS-7050TX-72#</td>
<td>Arista 7050X, 48x10GbE (1/10GBASE-T) &amp; 6x40GbE (2xMXP) switch, no fans, no psu (requires fan and psu)</td>
</tr>
<tr>
<td>DCS-7050TX-72-D#</td>
<td>Arista 7050X, 48x10GbE (1/10GBASE-T) &amp; 6x40GbE (2xMXP) switch, SSD, no fans, no psu (requires fan and psu)</td>
</tr>
<tr>
<td>DCS-7050TX-64-F</td>
<td>Arista 7050X, 48xRJ45 (1/10GBASE-T) &amp; 4xQSFP+ switch, front-to-rear airflow and dual AC power supplies</td>
</tr>
<tr>
<td>DCS-7050TX-64-R</td>
<td>Arista 7050X, 48xRJ45 (1/10GBASE-T) &amp; 4xQSFP+ switch, rear-to-front airflow and dual AC power supplies</td>
</tr>
<tr>
<td>DCS-7050TX-64#</td>
<td>Arista 7050X, 48xRJ45 (1/10GBASE-T) &amp; 4xQSFP+ switch, no fans, no psu (requires fans and psu)</td>
</tr>
<tr>
<td>DCS-7050TX-64-D#</td>
<td>Arista 7050X, 48xRJ45 (1/10GBASE-T) &amp; 4xQSFP+ switch, SSD, no fans, no psu (requires fans and psu)</td>
</tr>
<tr>
<td>DCS-7050TX-48-F</td>
<td>Arista 7050X, 32xRJ45 (1/10GBASE-T) &amp; 4xQSFP+ switch, front-to-rear airflow and dual AC power supplies</td>
</tr>
<tr>
<td>DCS-7050TX-48-R</td>
<td>Arista 7050X, 32xRJ45 (1/10GBASE-T) &amp; 4xQSFP+ switch, rear-to-front airflow and dual AC power supplies</td>
</tr>
<tr>
<td>DCS-7050TX-48#</td>
<td>Arista 7050X, 32xRJ45 (1/10GBASE-T) &amp; 4xQSFP+ switch, no fans, no psu (requires fans and psu)</td>
</tr>
<tr>
<td>DCS-7050TX-48-D#</td>
<td>Arista 7050X, 32xRJ45 (1/10GBASE-T) &amp; 4xQSFP+ switch, SSD, no fans, no psu (requires fans and psu)</td>
</tr>
<tr>
<td>LIC-FIX-2-E</td>
<td>Enhanced L3 License for Arista Fixed switches, 40-128 port 10G (BGP, OSPF, ISIS, PIM, NAT)</td>
</tr>
<tr>
<td>LIC-FIX-2-V</td>
<td>Virtualization license for Arista Fixed switches 40-128 port 10G (VMTracer and VXLAN)</td>
</tr>
<tr>
<td>LIC-FIX-2-Z</td>
<td>Monitoring &amp; provisioning license for Arista Fixed switches 40-128 port 10G (ZTP, LANZ, TapAgg, OpenFlow)</td>
</tr>
</tbody>
</table>

## Spare Options

<table>
<thead>
<tr>
<th>Spare Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAN-7002-F</td>
<td>Spare fan module for Arista 7050X/7250X 2RU and 7300 switches (front-to-rear airflow)</td>
</tr>
<tr>
<td>FAN-7002-R</td>
<td>Spare fan module for Arista 7050X/7250X 2RU and 7300 switches (rear-to-front airflow)</td>
</tr>
</tbody>
</table>
7050TX Series | Contact Information

**Product Number | Product Description**

**Spare Options**

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Product Description</th>
</tr>
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<tbody>
<tr>
<td>FAN-7000-F</td>
<td>Spare fan module for Arista 7150, 7124SX(FX), 7050 &amp; 7048-A switches (front-to-rear airflow)</td>
</tr>
<tr>
<td>FAN-7000-R</td>
<td>Spare fan module for Arista 7150, 7124SX(FX), 7050 &amp; 7048-A switches (rear-to-front airflow)</td>
</tr>
<tr>
<td>PWR-1100AC-F</td>
<td>Spare 1100 Watt AC power supply for Arista 7250QX-64 / 7050X 1 and 2RU Switches (front-to-rear airflow)</td>
</tr>
<tr>
<td>PWR-1100AC-R</td>
<td>Spare 1100 Watt AC power supply for Arista 7250QX-64 / 7050X 1 and 2RU Switches (rear-to-front airflow)</td>
</tr>
<tr>
<td>PWR-1100-DC-F</td>
<td>Spare 1100 Watt DC power supply for Arista 7250QX-64 / 7050X 1 and 2RU Switches (front-to-rear airflow)</td>
</tr>
<tr>
<td>PWR-1100-DC-R</td>
<td>Spare 1100 Watt DC power supply for Arista 7250QX-64 / 7050X 1 and 2RU Switches (rear-to-front airflow)</td>
</tr>
<tr>
<td>PWR-745AC-F</td>
<td>Spare 750 Watt AC power supply for Arista 7050TX-128 2RU Switches (front-to-rear airflow)</td>
</tr>
<tr>
<td>PWR-745AC-R</td>
<td>Spare 750 Watt AC power supply for Arista 7050TX-128 2RU Switches (rear-to-front airflow)</td>
</tr>
<tr>
<td>PWR-500AC-F</td>
<td>Spare 500 Watt AC power supply for Arista 7050X and 7280 Switches (front-to-rear airflow)</td>
</tr>
<tr>
<td>PWR-500AC-R</td>
<td>Spare 500 Watt AC power supply for Arista 7050X and 7280 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 7280 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 7280 Switches (rear-to-front airflow)</td>
</tr>
<tr>
<td>KIT-7002</td>
<td>Spare accessory kit for Arista 2RU switches with tool-less rails</td>
</tr>
<tr>
<td>KIT-7001</td>
<td>Spare accessory kit for Arista 1RU switches with tool-less rails</td>
</tr>
<tr>
<td>KIT-2POST-1U-NT</td>
<td>Spare 1RU 2 post rail kit for Arista 1RU tool less systems (7050QX-32S, 7050SX/TX and 7280)</td>
</tr>
<tr>
<td>KIT-2POST</td>
<td>Spare 2 post rack mount installation kit for Arista 7050X and 7250X 2RU switches</td>
</tr>
<tr>
<td>KIT-4POST-NT</td>
<td>Spare 1RU/2RU tool-less rail kits for 4-post installation (7280, 7250QX, 7050SX/TX, 7050QX-32S)</td>
</tr>
</tbody>
</table>

**Warranty**

The Arista 7050 switches comes 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)

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