

Datasheet

## Product Highlights

#### Performance

- High Performance Modular PoE System
- Compact form factors with 384 PoE ports in 10RU or 240 ports in 7RU
- 8 Slot and 5 Slot systems
- Dedicated switch cards and supervisors
- Supervisor modules with 40/100G or 10/25G uplinks
- PoE Line cards with 48 ports
- 1G (10Mb/100Mb/1G) with 90W
- mGig (100Mb/1G/2.5G) with 60W
- 10G-T (1/2.5/5/5/10G) with 60W

#### Secure Segmentation

- Built in 802.1AE MACsec on all ports
- 802.1x Multi-host and Auth
- MAC Based Authentication
- IPv4/v6 VRFs
- 16.7 Million VXLAN networks
- EVPN Type 2 and Type 5

#### Advanced Provisioning & Monitoring

- Manageable by CloudVision
- Secure Zero Touch Provisioning (ZTP)
- LANZ for microburst detection
- Self-configure and recover from USB
- sFlow and IPFIX
- FlowTracker to monitor conversations

#### **Cognitive Campus Resilience**

- Resilient centralized switching fabrics
- Dual Supervisor with all ports active
- Independent control plane & dataplane
- Hotswap and insert of all modules
- N+N or N+1 power redundancy
- Dynamic power management and Continuous PoE
- N+1 Fan redundancy with hot-swap
- Arista SSU for hitless software upgrade and patching

#### 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 Cognitive Campus 750X series deliver best in class reliability and performance, advanced features with intelligent power management and rich telemetry for modern cognitive campus networks. Campus networks have evolved from traditional wired and PoE to modern IoT and WiFi enablers with the need for always on services with secure connectivity.

The 750X series combine high density, space and power efficient systems, with wire speed performance for the most demanding campus requirements addressing the evolving requirements for WiFi6 and growth of IoT.

CloudVision management capabilities including FlowTracker Telemetry and device analyzer provide unprecedented visibility into flows within the network and visibility into wired & wireless infrastructure, allowing security teams to get granular views into IoT traffic. The 750X series integrated end to end security uses industry standard MACsec.

The 750X series of modular systems addresses the need for next generation networks with up to 90W of PoE, with cognitive power management, support for 10Mb to 10G for a full suite of IoT devices and high availability enhancements including Smart System Upgrade and cognitive PoE.

The 750X series enables both Layer-2 & Layer-3 designs, enabling scalable designs based on open standards for networking, while reducing complexity, automating provisioning and monitoring and eliminating the silos of networking in traditional campus designs. Proven technologies like MLAG enable active-active forwarding, while EVPN provides options for scalable segmentation across the campus taking advantage of VXLAN and extending consistent segmentation to the datacenter and beyond. The 750X series deliver high performance combined with rich EOS innovations for resilience, pervasive security, simplified automation and network observability for the modern campus





Arista 750X Series Modular Campus Switches

### Arista EOS

The Arista 750X series 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 inmemory 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 and Linux based tools can be run natively on the x86 CPU subsystem.

## 750X Series | Model Overview

A choice of two Arista 750X series systems and a range of PoE line cards (1G, 2.5G, 5G, 10G) provides the flexibility for a wide range of campus design options. The 750X series 8-slot system delivers up to 384 ports and each line card provides 48 ports, all with PoE. Speed and capacity options allow for cost effective future proofing. Campus networks demand high availability and the 750 system offers active-standby resiliency with fully independent control plane & data plane. Redundant switch cards and supervisors are combined with SSO. Active/standby switch cards enable hitless communication with Campus Spines & Splines. Complementing management & control plane redundancy, the 750X series uses non-blocking, hot-swappable switch cards for end users and devices.

The 750X series support fully loaded 90W 802.3bt deployments for the latest WiFi Access Points and other demanding applications. The 750X series can also tunnel WiFi traffic directly using standards based VXLAN, eliminating the need for expensive and proprietary Wireless anchor controllers.

### **Cognitive Power Management**

Arista leverages both state of the art switch and power management technology that delivers enhanced power delivery options supporting the latest PoE standards, more efficiently and reliably than standard PoE delivery, allowing administrators to support more IoT and WiFi devices cost effectively. Dynamic PoE management enhances power budgeting and allocation features to help economize power allocation to powered devices (PD) connected to each switch and dynamically allocates PoE power based on priority settings. Concurrent PoE leverages power supply load sharing and power allocation to all ports allows customers to share power within a system, utilizing allocated but unused power to power more PoE devices. Continuous PoE provides power to the powered device (PD) connected to PoE ports even when the system is reloading avoiding downtime and loss of service. With CloudVision monitoring controlling and reporting the instantaneous and peak power utilization levels are tracked in real time with persistent logging so administrators can accurately monitor and report service levels and infrastructure power demands.

## 750X Series Systems

The 750X series are wirespeed, high density 10Mb to 10G Modular POE systems architected for the needs of today and for many years to come. Delivered in a choice of 2 compact systems, the 750X series 5-slot system supports up to 5 line cards as well as 2 management modules in just 7 rack units while the 750X series 8-slot model allows up to 8 line cards, again with dual management modules for high availability in just 10 rack units.



Arista 750X Series 5-slot



Arista 750X Series 8-slot

## 750X Series Switch Cards

The 750X series leverage a dedicated centralized switch architecture that provides high throughput, consistent low latency with low jitter and high scale. The switch card runs the dataplane for all forwarding with the management plane and control plane on the separate Supervisor module. With redundant switch cards failover from active to standby occurs without a control plane change, increasing system reliability. Switch cards are hot-swappable and accessed from the system rear, avoiding any impact to network cabling during maintenance. The switch card provides up to 1.6Tbps of switching, 160K MAC addresses and 160K IPv4 hosts, supporting the needs of the largest enterprises, with a fully shared 32MB packet buffer that accommodates traffic bursts and manages speed changes as well as all packet processing for L2 and L3 forwarding, QoS, security policy enforcement, VXLAN and EVPN segmentation.



## Supervisor Modules

ARISTA

The 750X series supervisor module is a high performance module common to both the 5-slot and 8-slot, with a quad core CPU, 16GB of memory and an integrated 120GB SSD to run the 750X series control plane and management plane. Each supervisor module includes high performance uplinks with a choice of 10/25G SFP ports or 40/100G QSFP ports, supporting a wide range of optics and cables, including multi-rate and bidi, to facilitate easy integration to existing networks and allow for migration to 25G and 100G performance as needs evolve with no change to existing fiber cabling. The supervisor module uplinks are all active, even in a dual supervisor deployment, with no disabled ports. Uplinks also continue to be available during supervisor switchover or software upgrades with SSU. With dual supervisors the aggregate uplinks can support 400Gbps of capacity, for the most demanding wired and wireless access requirements. Additional local storage can be connected to the Supervisor module USB port, with a choice of SFP and RJ45 ports for Ethernet management.

#### Arista 750X Series Supervisor Modules

### **Line Card Modules**

The 750X series line cards support a variety of interface speed and PoE combinations. The line cards all connect to the centralized switch cards which performs the packet processing. Mixing and matching modules provides flexibility and pay as you grow capacity. All traffic even within a set of ports on a single line card is handled by the high capacity switch cards, ensuring feature consistency with a single set of logical resources and fully shared packet buffers.

All 750X series line cards deliver PoE with a choice of 1G, mGig and 10G-T. Up to 90W of 802.3bt PoE is supported with cognitive power management on all ports to dynamically manage power allocations and increase power efficiency based on detection of end device state and network flows. The line cards support interfaces from 10Mbps to 10G allowing connectivity for a broad range of devices.





### Integrated MACsec Security

The 750X series supports encryption on all ports for dataplane security using industry standard MACsec encryption that avoids common threats including snooping in a zero trust environment. Every line card access port and supervisor uplink port supports 256 bit MACsec encryption, to secure communications between MACsec capable devices including Arista's MACsec capable WiFi access points and to the network campus core. MACsec is a separately licensed feature for each system.

### **Power and Cooling**

The 750X series leverages a set of high efficiency 3.3kW power supplies for both system power and PoE power. Load sharing and redundancy at both power supply (N+1) and power source (N+N) level ensures the system is fully resilient to common failure modes. With up to 10 platinum efficiency rated power supplies in a single system the 750X series is optimized for modern campus environments. Each power supply can operate on either 100V-240V inputs.

With as few as two power supplies the system is redundant. As additional power supplies are added the system delivers up to 90W of PoE on all ports. The intelligent power management ensures the system prioritizes power to critical resources at all times even during SW upgrades or reload. Overall system power efficiency delivers class leading PoE budget for IOT devices.

The 750X series fan modules deliver cooling to the entire system and are incorporated to the switch cards, with an efficient front to rear airflow, in common with the 720 series fixed PoE switches. The compact design with integrated fans allowing the 750X series to take just 10U and 7U respectively. Fan modules are individually removable, providing support for simple servicing with hot swap operation and no risk of system shutdown during maintenance windows. The 750X series system has multiple temperature sensors monitoring critical resources and both inlet and exhaust air temperature. Fan speeds are dynamically adjusted by EOS to optimize system operation and reduce noise. The compact design on the 750X series allows it to be installed in small wiring closets in both 2 post and 4 post racks, with front, center or rear mounting options. Convenient handles are provided to help during installation and to simplify future moves adds and changes.



Arista 750X Series Power Supply



Arista 750X Series Fan Modules

## **High Availability**

The 750X series enables highly available and reliable networks. The reliability model is based on dual redundant elements at all parts of the system with centralized switch cards connected to the line cards, with no midplane or backplane, using direct orthogonal connections, for higher performance, and a fully shared buffer for all PoE and uplink ports eliminating oversubscription and inter-chip links. Dual switch cards, dual supervisor modules and redundant connections between all parts of the control plane and the data plane round out the resilient architecture. The control plane and data plane are kept separate to further improve reliability - the switch card is dedicated to the data plane, and the management and control planes run on the supervisor modules x86 CPU.

### Telemetry

Network telemetry for unified edge with FlowTracker support, native in the Arista 750X series, delivers real time updates for all device state, performance statistics, and application flows, to bolster Artificial Intelligence and Machine Learning mechanisms that reduces operational expense, reduces mean time to resolution, and the networks ability to integrate wired and wireless telemetry enhancing security and segmentation policies.



### CloudVision

CloudVision is a network-wide approach for workload orchestration and workflow automation as a turnkey solution for Cognitive Campus and 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.

## **Cognitive Segmentation**

The 750X series supports industry standard 802.1X authentication schemes and interoperates with leading authentication solutions. Authorized users and devices can be automatically segmented into assigned 802.1Q or EVPN VXLAN segmented networks, facilitating infrastructure and data security. Wire-speed layer 3 VRF segmentation is also supported, giving administrators additional flexibility for supporting the most sophisticated campus use cases. The 750X series switches also help administrators with WiFi segmentation by providing hardware based VXLAN de-encapsulation of tunneled WiFi traffic.

## **Campus Overlay Scale**

The 750X series switches utilizes advanced virtualization features to provide hundreds of segmented networks to thousands of users and devices. In addition to 4K 802.1Q VLANs for uplinks, the 750X series delivers 16K (port,vlan) combinations for downlinks and 16.7 million VXLAN overlay networks with CVX and EVPN control plane support. The combination of virtualization scale plus the layer 2 and 3 hardware scale of the 750X series ensures administrators can implement large segmented and secure campus networks with the ability to scale in the future.

### **EOS Licensing**

Arista 750X series with EOS and CloudVision, are designed to provide flexibility both in the choice of the appropriate feature functionality and in the software consumption model. The base feature set of Arista EOS comes bundled with the Arista products and systems. A set of feature licenses are available to enable additional functionality in advanced feature sets. The traditional licensing procurement model employs a perpetual term for the right to use the feature, set at a fixed price. For Arista CloudVision the functionality is available as a monthly subscription, for an agreed upon term.

**Routing:** General Routing functionality (BGP, OSPF, Multicast, etc) is available in the EOS Enhanced (E) license. The EOS Flex-route (FLX) Lite license expands that to include key features like BGP-EVPN for VXLAN.

Automation/Visibility: CloudVision is the most complete offering for advanced automation and visibility. Arista also offers subsets of CloudVision Lite, for entry-level GUI functionality. CloudVision is offered as an on-premises appliance (virtual or physical appliance) or as a SaaS-based software application that is fully managed by Arista. The EOS V2 license includes capability to run custom extensions natively or via containers in EOS. In addition, the V2 license gives customers an option of integrating with Arista's best of breed ecosystem for security, analytics, visibility, and other use-cases.

## Arista Optics and Cables

The Arista 750X series supports a wide range of 1G, 10G and 25G, or 40G and 100G pluggable optics and cables in the SFP and QSFP ports of the supervisor modules. For details about the different optical modules and the minimum EOS Software release required for each of the supported optical modules, visit <u>https://www.arista.com/en/products/transceivers-cables</u>

Multi-rate 10G/25G optics with extended reach for existing cable installations facilitate the easy migration from 10G to 25G with no changes to existing fiber cable plant. The 40G and 100G optics and cable options include multi-mode and single-mode to allow reaches from 100m to 10km over duplex or parallel fiber, with the option to enable 4x10G and 4x25G modes or 40G or 100G modes.



## 750X Series | Features

## Layer 2 Features

- 802.1w Rapid Spanning Tree
- 802.1s Multiple Spanning Tree Protocol
- Rapid Per VLAN Spanning Tree (RPVST+)
- 4096 VLANs
- 16K (port,vlan) VLANs
- Q-in-Q
- 802.3ad Link Aggregation/LACP
  - 8 Ports / Channel on uplink ports
    - 8 groups per system
- MLAG (Multi-Chassis Link Aggregation)
  - Uses IEEE 802.3ad LACP
  - 8 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
- VXLAN Tunnel Virtual Port Termination: 4K

## Layer 3 Features

- Routing Protocols: OSPF, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2
- 64-way Equal Cost Multi-path Routing (ECMP)
- Resilient ECMP Routes
- VRF
- Bi-Directional Forwarding Detection (BFD)
- Route Maps
- IGMP v2/v3
- PIM-SM / PIM-SSM / PIM-BiDir
- Anycast RP (RFC 4610)
- VRRP
- Virtual ARP (VARP)
- Unicast Reverse Path Forwarding (uRPF)
- GRE Tunnelling

## Advanced Monitoring and Provisioning

- Latency Analyzer and Microburst Detection (LANZ) \*
- Streaming Events (GPB Encoded)
- Capture/Mirror of congested traffic
- Zero Touch Provisioning (ZTP)
- Integrated packet capture/analysis with TCPDump
- Advanced Mirroring Port Mirroring (16 sessions)
  - Enhanced Remote Port Mirroring
  - Port Mirroring (4 active sessions)
  - L2/3/4 Filtering on Mirror Sessions
- Advanced Event Management suite (AEM)
  - CLI Scheduler
  - Event Manager
  - Event Monitor
  - Linux tools
- FlowTracker features
- RFC 3176 sFlow

- IPFIX support
- Restore & configure from USB
- Software Defined Networking (SDN)
  - eAPI
    - OpenStack Neutron Support
- IEEE 1588 PTP (Transparent Clock and Boundary Clock)

## Virtualization Support

- VXLAN Routing and Bridging
  - EOS CVX control plane
  - EVPN type 2 and type 5

## **Security Features**

- 256bit MACsec
- MSS-G
- Service ACLs
- Control Plane Protection (CPP)
- Ingress / Egress ACLs using L2, L3, L4 fields
- Ingress / Egress ACL Logging and Counters
- MAC ACLs
- 802.1X Enhancements
  - Multi-Host 802.1X AUTH
  - MAC-Based AUTH (MAB)
  - Dynamic VLAN assignment
  - Named VLAN support
- ACL Deny Logging
- ACL Counters
- DHCP Relay
- MAC access list security
- TACACS+
- RADIUS
- RadSec
- NDR Switch Sensor
- ARP trapping and rate limiting

## 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)
- ACL based DSCP Marking
- ACL based Policing
- Policing/Shaping
- Rate limiting

## 750X Series | Features

## **PoE** Capabilities

- LLDP enhancements for PoE including Media Endpoint Discovery (MED) attributes reporting
- PoE Controls
- VLAN for VoIP, QoS

## Network Management

- CloudVision
- Configuration rollback and commit
- Smart System Upgrade (SSU)
- 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
- MLAG ISSU
- Maintenance mode

## Extensibility

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

## Standard 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
- 802.1 AB Link Layer Discovery Protocol
- 802.3ad Link Aggregation with LACP
- 802.3x Flow Control \*
- 802.3u 100BASE-TX
- 802.3ab 1000BASE-T
- 802.3z 1000BASE-X
- 802.3ae 10 Gigabit Ethernet
- 802.3af/at 15W/30W Power over Ethernet (PoE)
- 802.3bt 60W/90W Power over Ethernet (PoE)

- 802.3by 25 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 Auto-configuration
- RFC 2463 Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification
- IEEE 1588-2008 Precision Time Protocol

## SNMP

- 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
- IPMROUTE-STD-MIB
- SNMP Authentication Failure trap
- ENTITY-SENSOR-MIB support for DOM (Digital Optical Monitoring)
- User configurable custom OIDs

System	CCS-758 (8-Slot)	CCS-755 (5-Slot)
Supervisor slots	2	2
Linecard slots	8	5
Maximum 10G 60W Ports	384	240
Maximum 2.5G 60W Ports	384	240
Maximum 1G 30W Ports	384	240
Maximum 1G 90W Ports	384	240
System Height (RU)	10	7
Hot-swap Power Supplies	10	б
Hot-swappable Fans	8	б
Dimensions (HxWxD)	17.3 x 17.4 x 16.5" (43.9 x 44.2 x 41.2cm)	12 x 17.4 x 16.5" (30.5 x 44.2 x 41.2cm)
Weight (Empty)	69.52 lbs (31.6 kg)	54.56 lbs (24.8 kg)
Acoustics: Measured (ISO 7779)	69.85 dBA @50% 79.53 dBA @ 100%	69.1 dBA @ 50% 77.9 dBA @100%
Acoustics: Declared (ISO 9296)	71.53 dBA @50% 80.32 dBA @100%	69.9 dBA @ 50% 78.7 dBA @100%
Minimum EOS	EOS-4.25.0FX-750X	EOS-4.25.0FX-750X

Switch Card	CCS-758-X3-SC	CCS-755-X3-SC
Redundancy	1+1 Active / Standby	1+1 Active / Standby
Throughput	1.6Tbps	1.15Tbps
Packets / Sec	850Mpps	850Mpps
Typical Power (Maximum)	101W (174W)	82W (160W)
Physical Dimensions (WxHxD)	16.2 x 4.06 x 8.64" (41.2 x 10.3 x 21.9cm)	11 x 4.06 x 8.64" (27.9 x 10.3 x 21.9cm)
Weight	11.9 lbs (5.4 kg)	9.2 lbs (4.2 kg)



Supervisor Module	CCS-750-SUP100	CCS-750-SUP25
Processor	Quad-Core x86	Quad-Core x86
System Memory	16GB	16GB
Storage Memory	120GB	120GB
Uplink ports	2 x 100G QSFP	4 x SFP 25G
Speeds Supported	1G, 10G, 25G, 40G, 100G	1G, 10G, 25G
Physical Dimensions (WxHxD)	16.85 x 1.03 x 7.76" (42.8.x 2.6 x 19.7cm)	16.85 x 1.03 x 7.76" (42.8.x 2.6 x 19.7cm)
Weight	5.5 lbs (2.5 kg)	5.3 lbs (2.4 kg)
Typical Power (Maximum)	79W (94W)	70W (80W)
Chassis Support	758-CH and 755-CH	758-CH and 755-CH
Uplink Bandwidth	200Gbps	100Gbps
Minimum EOS	EOS-4.25.0FX-750X	EOS-4.25.0FX-750X

Linecard Module (PoE)	CCS-750X-48ZXP-LC	CCS-750X-48ZP-LC	CCS-750X-48TP-LC	CCS-750X-48THP-LC
Ports	48 x 10G-T RJ45	48 x mGig RJ45	48 x 1000-T RJ45	48 x 1G Base-T RJ45
Speeds Supported	100Mb, 1G, 2.5G, 5G, 10G	100Mb, 1G, 2.5G	10Mb, 100Mb, 1G	10Mb, 100Mb, 1G
Max 1G	48	48	48	48
Max 2.5G	48	48	0	0
Max 5G	48	0	0	0
Max 10G	48	0	0	0
Weight	7.48 lbs (3.4 kg)	5.5 lbs (2.5 kg)	5.1 lbs (2.3 kg)	5.4 lbs (2.45 kg)
PoE	60W all ports	60W all ports	30W all ports	90W all ports
Typical Power (Max excl. PoE)	148W (160W)	83W (87W)	42W (43W)	42W (43W)
Dimensions (HxWxD)	1.63 x 16.85 x 7.76" (4.14 x 42.8 x 19.7 cm)	1.63 x 16.85 x 7.76" (4.14 x 42.8 x 19.7 cm)	1.63 x 16.85 x 7.76" (4.14 x 42.8 x 19.7 cm)	1.63 x 16.85 x 7.76" (4.14 x 42.8 x 19.7 cm)
Minimum EOS	4.26.0	4.25.1	4.25.1	4.28.1
Chassis Support		CCS-758-CH	l and CCS-755-CH	



Fiber Linecard Module (Non PoE)	CCS-750X-48SX-LC
Ports	48 x SFP+
Speeds Supported	1G, 10G
Max 1G	48
Max 10G	48
Weight	7.5 lbs (3.4 kg)
Maximum Power	227W
Dimensions (HxWxD)	1.63 x 16.85 x 10.5" (4.14 x 42.8 x 26.7 cm)
Minimum EOS	4.31.1F
Chassis Support	CCS-758-CH and CCS-755-CH

Operating Temperature <sup>1</sup>

Storage Temperature

**Relative Humidity** 

**Operating Altitude** 

Table Sizes	750X Series
Integrated packet buffer memory	32MB
MAC entries	160K Max
Virtual ports	32K
Virtual forwarding instances (VFI)	16K
VLANs	4K for uplinks 16K sum of (port, vlan) combos for downlinks
VLAN translation	8K ingress and 8K egress
MAC-based VLANs	8K
L3 hosts	IPv4: 160K IPv6: 80K max
L3 LPM	IPv4: 12K IPv6/64: 6K IPv6/128: 3K
L3 multicast groups (IPMC)	32K (maximum of 256K members across all IPMC groups)
Environmental Characteristics	5

0 to 40C (32 to 104F)

-40 to 70C (-40 to 158F)

5 to 95%

0 to 10,000 ft, (0-3,000m)

Power Supply S	Specifications	PWR-3351-AC-RED	
Input Voltage		100 - 120V, 16A 200 - 240V, 16A	
Input Frequency		50/60 Hz, single phase AC	
Output Power		3300W at 220-240VAC 1400W at 100-120VAC	
Input Connector		IEC 320 C19	
Efficiency (Typica	al)	Over 94% Titanium	
Hot swappable		Yes	
Standards Com	·	003, EN 55032, EN IEC N 61000-3-3	
Immunity	EN 55035 EN 300 386		
Safety	EN 62368-1:2014 IEC-62368-1:2014	+ A11:2017	
Certifications	BSMI (Taiwan) CE (European Uni KCC (South Korea NRTL (North Ame RCM (Australia/Ne UKCA (United Kin VCCI (Japan)	) rica) ew Zealand)	
European Union Directives	2014/35/EU Low V 2014/30/EU EMC 2012/19/EU WEEE 2011/65/EU RoHS	Directive Directive	
Further Information	Product Certificat	ion Portal	

## Arista Optics and Cables

The Arista CCS-722 Series supports a wide range of 1G, 10G and 25G pluggable optics and cables in the SFP ports. For details about the different optical modules and the minimum EOS Software release required for each of the supported optical modules, visit **https://www.arista.com/en/products/transceivers-cables** 

Supported	Optics	and	Cables
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Interface Type	40/100G QSFP Ports
10GBASE-CR	0.5m-5m QSFP+ to 4x SFP+
40GBASE-CR4	0.5m to 5m QSFP+ to QSFP+
40GBASE-AOC	3m to 100m
40GBASE-UNIV	150m (OM3) /150m (OM4) MMF /500m (SM)
40GBASE-SRBD	100m (OM3) /150m (OM4) Duplex MMF
40GBASE-SR4	100m (OM3) /150m (OM4) Parallel MMF
40GBASE-XSR4	300m (OM3) /400m (OM4) Parallel MMF
40GBASE-PLRL4	1km (1km 4x10G LR/LRL) SM Parallel
40GBASE-LRL4	1km SM Duplex
40GBASE-PLR4	10km (10km 4x10G LR/LRL) SM Duplex
40GBASE-LR4	10km SM Duplex
40GBASE-ER4	40km SM Duplex
100G	40/100G QSFP Ports
100GBASE-CR4	QSFP100 to QSFP100: 1m to 5m
25GBASE-CR	QSFP to SFP25: 1m-5m
100GBASE-AOC	1m to 30m
100GBASE-SR4	70m OM3 / 100m OM4 Parallel MMF
100GBASE-XSR4	150m OM3 / 300m OM4 Parallel MMF
100GBASE-SWDM4	70m OM3 / 100m OM4 Duplex MMF

100G	100G QSFP Ports
100GBASE-SRBD	70m OM3 / 100m OM4 Duplex MMF
100GBASE-ERL4	40km SM Duplex
100GBASE-PSM4	500m SM Parallel
100GBASE-CWDM4	2km SM Duplex
100GBASE-XCWDM4	10km SM Duplex
100GBASE-LR4	10km SM Duplex
100GBASE-LRL4	2km SM Duplex
100GBASE-DR	500m SM Duplex
100GBASE-FR	2km SM Duplex
100GBASE-LR	10km SM Duplex
100GBASE-ERL4	40km SM Duplex
10G	10/25G SFP Ports
10GBASE-CR	SFP+ to SFP+: 0.5m-5m
10GBASE-AOC	SFP+ to SFP+: 3m-30m
10GBASE-T	30m **
10GBASE-SRL	100m MMF Duplex
10GBASE-SR	300m MMF Duplex
10GBASE-LRL	1km SM Duplex
10GBASE-LR	10km SM Duplex
10GBASE-ER	40km SM Duplex
10GBASE-ZR	80km SM Duplex
10GBASE-DWDM	80km SM Duplex
1GbE SX/LX/TX	1m to 10 km
25G	10/25G SFP Ports
25GBASE-CR	SFP25 to SFP25: 1m-5m
25GBASE-AOC	SFP+ to SFP+: 3m-30m
25G-MR-XSR (10/25G Multi)	200m OM3 / 300m OM4 Duplex MMF
25GBASE-SR	70m Duplex MMF
25G-MR-LR (10/25G Multi)	10km SM Duplex
25GBASE-LR	10km SM Duplex

\*\* 10G-T pluggable inserted in 25G SFP ports



# 750X Series | Ordering Information

Product Number	Product Description
CCS-755-100-BND	Arista 755 Chassis bundle. Includes 750X 5-slot Chassis, 1 Switch Card, 1 Sup100
CCS-755-25-BND	Arista 755 Chassis bundle. Includes 750X 5-slot Chassis, 1 Switch Card, 1 Sup25
CCS-758-100-BND	Arista 758 Chassis bundle. Includes 750X 8-slot Chassis, 1 Switch Card, 1 Sup100
CCS-758-25-BND	Arista 758 Chassis bundle. Includes 750X 8-slot Chassis, 1 Switch Card, 1 Sup25
CCS-750X-48TP-LC	Arista 750 Series 48 port 1G PoE (30W) linecard
CCS-750X-48THP-LC	Arista 750 Series 48 port 1G-T PoE (90W) linecard
CCS-750X-48ZP-LC	Arista 750 Series 48 port mGig PoE (60W) linecard
CCS-750X-48ZXP-LC	Arista 750 Series 48 port 10G-T PoE (60W) linecard
CCS-750X-48SX-LC	Arista 750 Series 48 port 10G SFP linecard
CCS-750-SUP100	Arista 750 Series Supervisor module with QSFP100 (spare)
CCS-750-SUP25	Arista 750 Series Supervisor module with SFP25 (spare)
Software Licences	
LIC-MOD-G-FLX-L	FLX-Lite License Arista 5 and 8 slot Modular 1G/mG Ethernet Switches - Full Routing, EVPN, VXLAN
LIC-MOD-G-E	Enhanced License for Arista 5 and 8 slot Modular 1G/mG Ethernet Switches (OSPF, BGP, ISIS, PIM)
LIC-MOD-G-V2	EOS Extensions, Security and Partner Integration license for Arista 5 and 8 slot Modular 1G/mG switches
LIC-MOD-G-MACSEC	MACSEC Encryption License for Arista Modular PoE switches
SS-CVS-MOD-G-SWITCH-1M	CloudVision as-a-Service Sub License for 1-Month for 1 Switch. Arista 5 and 8 slot Modular 1G/mG Ethernet Switches. Electronic Delivery Only.
SS-CVS-MOD-G-T1-1M	CloudVision as-a-Service Subscription License for 1-Month for 150 to 499 device count. Arista 5 and 8 slot Modular 1G/mG Ethernet Switches. Electronic Delivery Only.
SS-CVS-MOD-G-T2-1M	CloudVision as-a-Service Subscription License for 1-Month for 500 to 1000 device count. Arista 5 and 8 slot Modular 1G/mG Ethernet Switches. Electronic Delivery Only.
SS-CV-MOD-G-T1-1M	CloudVision SW Subscription License for 1-Month for 150 to 499 device count. Arista 5 and 8 slot Modular 1G/mG Ethernet Switches.
SS-CV-MOD-G-T2-1M	CloudVision SW Subscription License for 1-Month for 500 to 1000 device count. Arista 5 and 8 slot Modular 1G/mG Ethernet Switches.
SS-CV-LT-MOD-G-T1-1M	CloudVision Lite SW Subscription License for 1-Month for 150 to 499 device count. Arista 5 and 8 slot Modular 1G/mG Ethernet Switches.
SS-CV-LT-MOD-G-T2-1M	CloudVision Lite SW Subscription License for 1-Month for 500 to 1000 device count. Arista 5 and 8 slot Modular 1G/mG Ethernet Switches.



#### **Optional Components and Spares**

CCS-758-CH	Arista 750 Series 8 Slot Chassis, 2 Sup slots, 8 linecard slots, 10 PS slots	CCS-758-CH
CCS-755-CH	Arista 750 Series 5 Slot Chassis, 2 Sup slots, 5 linecard slots, 6 PS slots	CCS-755-CH
CCS-758-X3-SC	Arista 758 X3 Switch Card for CCS-758 Chassis	CCS-758-X3-SC
CCS-755-X3-SC	Arista 755 X3 Switch Card for CCS-755 Chassis	CCS-755-X3-SC
PWR-3351-AC-RED	Arista 3300W AC PSU POE Front to Rear	PWR-3351-AC-RED
FAN-752M-RED	Spare fan module for Arista 750 Series. Regular Fan Speed (front-to-rear airflow)	FAN-752M-RED
CCS-750-LCVR	Spare Blank Cover for 750 Series Linecard Slot	CCS-750-LCVR
CCS-750-SCVR	Spare Blank Cover for 750 Series Supervisor Slot	CCS-750-SCVR
KIT-CCS-750-4P	Spare Rack Mount Kit for 750 Series Switches, 4 Post, standard depth	KIT-CCS-750-4P
KIT-CCS-750-4PL	Spare Rack Mount Kit for 750 Series Switches, 4 Post, extended depth	KIT-CCS-750-4PL
KIT-CCS-750	Spare accessory kit for Arista CCS-750 switches. 2-post mount. (Power cords available separately)	KIT-CCS-750
Power Cords	Product Description	Region / Country
CAB-C19-C20	Power Cord C19 to C20 (2m)	International / PDU
CAB-C19-L6-20P	Power Cord C19 to L6-20P (2.5m)	International / PDU
CAD C10 C20 1M		
CAB-C19-C20-1M	Power Cord C19 to C20 (1m)	
CAB-C19-IND	Power Cord C19 to C20 (1m) Power Cord, India, C19 cordset for 16A (2m) , BIS	
		International / PDU India
CAB-C19-IND	Power Cord, India, C19 cordset for 16A (2m) , BIS	International / PDU
CAB-C19-IND CAB-C19-6-20	Power Cord, India, C19 cordset for 16A (2m) , BIS Power Cord, NA, C19 - NEMA 6-20, 20A/250V, 2.5M, UL/CSA	International / PDU India International / PDU
CAB-C19-IND CAB-C19-6-20 CAB-C19-316P6	Power Cord, India, C19 cordset for 16A (2m) , BIS Power Cord, NA, C19 - NEMA 6-20, 20A/250V, 2.5M, UL/CSA Power Cord, EU, C19 - IEC60309 316P6, 16A/250V, 2.5M, EN	International / PDU India International / PDU Europe
CAB-C19-IND CAB-C19-6-20 CAB-C19-316P6 CAB-C19-EUR	Power Cord, India, C19 cordset for 16A (2m) , BIS Power Cord, NA, C19 - NEMA 6-20, 20A/250V, 2.5M, UL/CSA Power Cord, EU, C19 - IEC60309 316P6, 16A/250V, 2.5M, EN Power Cord, EU/Russia, C19 - CEE7/7, 16A/250V, 2.5M, CE/EAC	International / PDU India International / PDU Europe Europe, Russia
CAB-C19-IND CAB-C19-6-20 CAB-C19-316P6 CAB-C19-EUR CAB-C19-NA	Power Cord, India, C19 cordset for 16A (2m) , BIS Power Cord, NA, C19 - NEMA 6-20, 20A/250V, 2.5M, UL/CSA Power Cord, EU, C19 - IEC60309 316P6, 16A/250V, 2.5M, EN Power Cord, EU/Russia, C19 - CEE7/7, 16A/250V, 2.5M, CE/EAC Power Cord, NA, C19 - NEMA 5-20, 20A/125V, 2.5M, CUL	International / PDU India International / PDU Europe Europe, Russia North America
CAB-C19-IND CAB-C19-6-20 CAB-C19-316P6 CAB-C19-EUR CAB-C19-NA CAB-C19-AUS	Power Cord, India, C19 cordset for 16A (2m) , BIS Power Cord, NA, C19 - NEMA 6-20, 20A/250V, 2.5M, UL/CSA Power Cord, EU, C19 - IEC60309 316P6, 16A/250V, 2.5M, EN Power Cord, EU/Russia, C19 - CEE7/7, 16A/250V, 2.5M, CE/EAC Power Cord, NA, C19 - NEMA 5-20, 20A/125V, 2.5M, CUL Power Cord, Australia, C19 - AS3112, 15A/250V, 3M, SAA	International / PDU India International / PDU Europe Europe, Russia North America Australia
CAB-C19-IND CAB-C19-6-20 CAB-C19-316P6 CAB-C19-EUR CAB-C19-NA CAB-C19-NA CAB-C19-AUS CAB-C19-ITY	Power Cord, India, C19 cordset for 16A (2m) , BIS Power Cord, NA, C19 - NEMA 6-20, 20A/250V, 2.5M, UL/CSA Power Cord, EU, C19 - IEC60309 316P6, 16A/250V, 2.5M, EN Power Cord, EU/Russia, C19 - CEE7/7, 16A/250V, 2.5M, CE/EAC Power Cord, NA, C19 - NEMA 5-20, 20A/125V, 2.5M, cUL Power Cord, Australia, C19 - AS3112, 15A/250V, 3M, SAA Power Cord, Italy, C19 - CEI2350, 16A/250V, 3M, IMQ	International / PDU India International / PDU Europe Europe, Russia North America Australia Italy

### Warranty

The Arista 750X series switches come with a one-year limited hardware warranty, which covers parts, repair, or replacement with a 10 business day turnaround 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: <u>http://www.arista.com/en/service</u>

#### Headquarters

5453 Great America Parkway Santa Clara, California 95054 408-547-5500

### Support

support@arista.com 408-547-5502 866-476-0000

#### Sales

sales@arista.com 408-547-5501 866-497-0000

#### <u>www.arista.com</u>

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