Product Highlights

Power over Ethernet plus 10G

710P-12
- 12 x 10M-1Gbe RJ45 @ 30W
- 2 x 1/10G SFP+ Uplinks

710P-16P
- 12 x 10M-1Gbe RJ45 @ 30W
- 2 x mGig (1Gb - 5Gb) RJ45 @ 60W
- 1 x mGig (1G - 5Gb) RJ45 PD up to 90W
- 1 x mGig (1G - 5Gb) RJ45
- 2 x 1/10G SFP+ Uplinks

Hardware
- Fanless for silent operation
- Small form factor for constrained spaces
- Mode button for hard reset or factory reset

Operational Simplicity
- Zero Touch Provisioning
- On-Prem or Cloud Managed
- PoE Powered Capable

Power over Ethernet
- PoE Pass through
- Continuous PoE
- Powered Device / Power Sourcing Equipment capable

Traffic and Flow Monitoring
- sFlow
- IPFIX

Segmentation and Overlay
- 802.1Q VLANs
- VXLAN
- EVPN L2 (type 2)

Arista Extensible Operating System (EOS®)
- 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 CCS-710 fanless compact power over ethernet switch series was designed to extend the Cognitive Campus network into space-constrained and quiet environments such as conference rooms, retail showrooms, broadcast control rooms and small enclosures like ATMs. With multiple mounting options, the CCS-710 series switches are well suited for any deployment where sound and space are as important as reliable network operations.

Arista 710P Series PoE Switches

Arista EOS

The Arista 710P series runs the same single binary Arista EOS software as all Arista routing and switching products, simplifying network administration and software life cycle management.

Arista EOS is a modular operating system with an architecture that separates state from protocol processing and application logic. Built on top of a hardened Linux kernel, all EOS processes run in protected memory spaces and exchange state through an in-memory database. This multi-process state sharing architecture provides the foundation for smart system updates and self-healing resiliency. With Arista EOS, Linux based tools for monitoring and automation can be run natively on the switch.

CloudVision

CloudVision is Arista's management plane solution for simplifying network operations. Built on a modern state-streaming architecture, CloudVision is a multi-function software platform that enables a suite of capabilities for automated provisioning, change control, continuous compliance, real-time telemetry, predictive analytics and 3rd party management plane orchestration. As a multi-domain solution, CloudVision is a single management platform across data center, campus, WiFi, multi-cloud, and routing interconnect use-cases. CloudVision is offered as an on-premise appliance (virtual or physical) as well as a SaaS solution, CloudVision-as-a-Service.

CloudVision Cognitive Unified Edge

The Arista 710P also supports CloudVision CUE, a SaaS-based management platform delivering a simplified CloudVision experience focused on the network edge to the commercial market space. This 'Edge as-a-Service' approach provides streamlined dashboards to manage both wired and wireless connectivity, with plug and play Zero Touch Provisioning and AI-powered insights to simplify the network edge with a turnkey solution.

Cognitive Campus

Arista's family of switching and WiFi platforms are managed through a single Cognitive Management Plane in CloudVision. Real time telemetry, time series database for after the fact troubleshooting with sub second granularity, and AI/ML powered analytics to monitor the infrastructure, users and applications on the Network. Rich change control used to simplify and automate the deployment and maintenance of campus infrastructure.

Cognitive Segmentation

The CCS-710 compact series supports industry standard 802.1X and RADIUS authentication and interoperates with leading authentication solutions. Authorized users and devices can be placed into policy assigned VLAN segments in the network, automating the network layer of zero trust architecture. EVPN VXLAN features are supported, providing additional methodologies to meet or exceed your segmentation and security policies.

Cognitive Continuous PoE

Continuous PoE enables powering downstream devices even when the system is rebooted on a per port basis. Providing uninterrupted power to a devices and eliminates the need for a backup power source. The CCS-710P-16P has one PoE input port that gives the ability to power itself and PoE end devices by drawing 802.3bt up to 90W from the wiring closet.

POE for Workspaces

The CCS-710 delivers PoE networking in a compact, light weight and fanless form factor. It supports new scenarios for deploying powered ethernet outside the wiring closet and into conference rooms, retail environments, remote or temporary workspaces, or sensitive locations such as classrooms and broadcast control booths where traditional fan cooled systems are too noisy or ambient cooling is preferred to forced air.
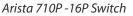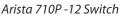
Power supplies

The CCS-710 compact series switches are powered by external 150W or 280W power supplies providing a choice of PoE budget of 100W or 230W. The 710P-16P can also be powered through the 5 Gigabit PoE PSE uplink port, drawing up to 90W (802.3bt Type 4) of power from an upstream PoE switch. The CCS-710's modest 40W system power requirement offers administrators a variety of POE subscriber budgets allowing them to optimize their equipment and power budget for workspace POE applications even when powered from upstream PoE switches.

Arista 710P Series Power Supply

Arista 710P -16P Switch

Arista 710P -12 Switch

Arista Optics and Cables

The Arista 710P series supports a wide range of 1G and 10G pluggable optics and cables. 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

Mounting Options

The CCS-710's modern aesthetics work in office desktop use cases. The optional magnetic mount allows the compact switch to be mounted to metal fixtures, in either vertical or under-counter applications. The optional "L" bracket kit, allows fixing to bottom/top flat surfaces. The optional 19" rack mount kit allows the switch and its external power supply to be installed in common IDF or datacenter racks. The DIN rail mount option allows the switch to be deployed in manufacturing or warehousing environments.

Layer 2 Features

• 802.1w Rapid Spanning Tree
• 802.1s Multiple Spanning Tree Protocol
• Rapid Per VLAN Spanning Tree (RPVST+)
• 4096 VLAN IDs, 510 active VLANs
• Q-in-Q
• 802.3ad Link Aggregation/LACP
• MLAG (Multi-Chassis Link Aggregation)
   • Uses IEEE 802.3ad LACP
• 802.1Q VLANs/Trunking
• 802.1AB Link Layer Discovery Protocol
• 802.3x Flow Control On Uplinks
• Jumbo Frames (9216 Bytes)
• IGMP v1/v2/v3 snooping
• Storm Control

Layer 3 Features

• Routing Protocols: OSPF, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2
• 64-way Equal Cost Multi-path Routing (ECMP)
• Bi-Directional Forwarding Detection (BFD)
• Route Maps
• IGMP v2/v3
• PIM-SM / PIM-SSM / PIM-BIDIR
• Anycast RP (RFC 4610)
• VRRP
• Virtual ARP (VARP)
• GRE IP Decap
• Selective Route Download

Advanced Monitoring and Provisioning

• Zero Touch Provisioning (ZTP)
• Latency Analyzer and Microburst Detection (LANZ)
• Integrated packet capture/analysis with TCPDump
• Advanced Mirroring - Port Mirroring (4 sessions)
   • Enhanced Remote Port Mirroring
   • 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
• eAPI
• IEEE 1588 PTP (Transparent Clock and Boundary Clock)

• EOS CVX control plane
• EVPN type 2

Security Features

• 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
• Atomic ACL Hitless restart
• DHCP Relay
• MAC access list security
• TACACS+
• RADIUS
• 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
• ACL based DSCP Marking
• ACL based Policing
• Policing/Shaping
• Rate limiting

PoE Capabilities

• LLDP enhancements for PoE including Media Endpoint Discovery (MED) attributes reporting
• PoE Controls
• VLAN for VoIP, QoS
• PD Pass through
• Cognitive PoE

Virtualization Support

• VXLAN Bridging
• VXLAN Tunnel Virtual Port Termination: 1K

* Not currently supported in EOS

For detailed EOS feature support visit https://www.arista.com/en/support/product-documentation/supported-features

Network Management

• CloudVision
• Configuration session commit and rollback
• 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++
- 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
- 802.1AB Link Layer Discovery Protocol
- 802.3ad Link Aggregation with LACP
- 802.3x Flow Control
- 802.3u 100BASE-TX
- 802.3ab 1000BASE-T
- 802.3z Gigabit Ethernet
- 802.3ae 10 Gigabit Ethernet
- 802.3af/at 15W/30W Power over Ethernet (PoE)
- 802.3bt 60W Power over Ethernet (PoE)
- 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

Table Sizes

Ingress / Egress ACLs	2K / 512
MAC addresses	32K
IPv4/v6 Hosts	16K / 8K
IPv4/v6 Routes	8K / 2K
ECMP	64-way
IGMP Groups	up to 2K

See EOS release notes for Supported MIBs

*Not currently supported in EOS

Specifications

Feature/Model	710P-16P	710P-12
Ports	16 RJ45 2 10G SFP	12 RJ45 2 10G SFP
10M-1G UTP (30W)[1]	12	12
1G-5G UTP (60W)[2]	2	0
1G-5G UTP [3]	2	0
10G	2	2
Throughput (FDX)	104Gbps	64Gbps
Packets/Second	155 Mpps	95 Mpps
Latency (RJ-45)	1.2 microseconds	1.2 microseconds
CPU	Dual Core-x86	Dual Core-x86
System Memory	4GB	4GB
System Flash	8GB	8GB
Packet Buffer	2MB	2MB
USB Ports	1	1
Console Ports	1	1
Power (Max, excluding PoE)	51W	46W
Power Input	PoE pass though 150W external 280W external	150W external 280W external
Size (WxHxD)	1U 10.6" x 1.75" x 9.8" (26.9 x 4.4 x 24.8 cm)	
Weight	5 lbs (2.27kg)	4.51 lbs (2.05kg)
EOS License Group (LIC-FIX)	G1	
CloudVision License Group	G1	
Minimum EOS	4.27.2	

PoE Budget - Power Supply Models	710P-16P	710P-12
150W AC external PS	99W	104W
280W AC external PS	229W	234W
PoE Input Port (60W/90W)	9W/39W	N/A

1: 802.3af/at
2: 802.3bt
3: 1 Powered Device port up to 90W, 1 data only port

Arista Optics and Cables

The Arista CCS-710 Series supports a wide range of 1G and 10G 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

Interface Type	10G
10GBASE-CR	SFP+ to SFP+: 0.5m-5m
10GBASE-AOC	SFP+ to SFP+: 3m-30m
10GBASE-SRL	100m
10GBASE-SR	300m
10GBASE-LRL	1km
10GBASE-LR	10km
10GBASE-ER	40km
100Mb TX,1GbE SX/LX/TX	Yes

Power Supply Specifications

Supply	PWR-150-ADP	PWR-280-ADP
Output Power	150W	280W
Input Voltage	100-240VAC	
Input Current	2.78-3.06A	2.78-5.18A
Input Frequency	50-60Hz	
Input Connector	IEC 320-C13	
Efficiency (Typical)	88%	87.5%

Environmental Characteristics

Operating Temperature [1]	0 to 40˚C (32 to 104˚F)
Storage Temperature	-40 to 70˚C (-40 to 158˚F)
Relative Humidity	5 to 95%
Operating Altitude	0 to 10,000 ft, (0-3,000m)

Emissions and Safety Compliance

EMC	FCC Class A, ICES-003, EN 55032, EN IEC 61000-3-2:2019, EN 61000-3-3
Immunity	EN 55035 EN 300 386
Safety	EN 62368-1:2014 + A11:2017 IEC-62368-1:2014
Certifications	BSMI (Taiwan) CE (European Union) KCC (South Korea) NRTL (North America) RCM (Australia/New Zealand) UKCA (United Kingdom) VCCI (Japan)
European Union Directives	2014/53/EU Radio Equipment Directive 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

1. Certain airflow configurations or the use of higher power or reduced temperature range optics may reduce maximum operating temperature.

Product Number	Product Description
CCS-710P-12-EU	Arista 710P, 12 x 1G PoE, 2x10G SFP+ compact switch 150W power adapter, EU Power Cord
CCS-710P-12-JPN	Arista 710P, 12 x 1G PoE, 2x10G SFP+ compact switch 150W power adapter, JPN Power Cord
CCS-710P-12-NA	Arista 710P, 12 x 1G PoE, 2x10G SFP+ compact switch 150W power adapter, NA Power Cord
CCS-710P-12-UK	Arista 710P, 12 x 1G PoE, 2x10G SFP+ compact switch 150W power adapter, UK Power Cord
CCS-710P-12	Arista 710P, 12 x 1G PoE, 2x10G SFP+ compact switch 150W power adapter, no power cord
CCS-710P-12#	Arista 710P, 12 x 1G PoE, 2x10G SFP+ compact switch (power adapter sold separately)
CCS-710P-16P-EU	Arista 710P, 12 x 1G PoE, 2 x 5G PoE, 2 x 5G (1 data only, 1 PD/PSE), 2x10G SFP+ compact switch 280W power adapter, EU Power Cord
CCS-710P-16P-JPN	Arista 710P, 12 x 1G PoE, 2 x 5G PoE, 2 x 5G (1 data only, 1 PD/PSE), 2x10G SFP+ compact switch 280W power adapter, JPN Power Cord
CCS-710P-16P-NA	Arista 710P, 12 x 1G PoE, 2 x 5G PoE, 2 x 5G (1 data only, 1 PD/PSE), 2x10G SFP+ compact switch 280W power adapter, NA Power Cord
CCS-710P-16P-UK	Arista 710P, 12 x 1G PoE, 2 x 5G PoE, 2 x 5G (1 data only, 1 PD/PSE), 2x10G SFP+ compact switch 280W power adapter, UK Power Cord
CCS-710P-16P	Arista 710P, 12 x 1G PoE, 2 x 5G PoE, 2 x 5G (1 data only, 1 PD/PSE), 2x10G SFP+ compact switch 280W power adapter
CCS-710P-16P#	Arista 710P, 12 x 1G PoE, 2 x 5G PoE, 2 x 5G (1 data only, 1 PD/PSE), 2x10G SFP+ compact switch (power adapter sold separately)
PWR-150-ADP	Arista Power Adapter, 150W, POE, AC (Spare)
PWR-150-ADP#	Arista Power Adapter, 150W, POE, AC (Ships with switch)
PWR-280-ADP	Arista Power Adapter, 280W, POE, AC (Spare)
PWR-280-ADP#	Arista Power Adapter, 280W, POE, AC (Ships with switch)
KIT-CCS-710	Spare accessory kit for Arista 710P Series switches. (Power cords available separately)
KIT-CCS-710-DIN	Spare DIN-Rail Mount Kit for Arista 710P Series switches
KIT-CCS-710-RM	Spare Rack Mount Kit for Arista 710P Series switches
KIT-CCS-710-MGN	Spare Magnet Mount Kit for Arista 710P Series switches (include 3-in-1 bracket, Magnet)
LIC-FIX-G1-FLX-L	FLX-Lite License for Arista Fixed 1G/mG Group 1 Ethernet Switches - Full Routing upto 8K routes, EVPN, VXLAN (includes E Features)
SS-CV-G1-SWITCH-1M	CloudVision Subscription Lic for 1-Month for 1 Switch. Arista Fixed 1G/mG Group 1 Platforms. Delivered via download only. Includes E, FLX-L.
SS-CV-LT-G1-SWITCH-1M	CloudVision Lite Subscription Lic for 1-Month for 1 Switch. Arista Fixed1G/mG Group 1 Platforms. Delivered via download only.
SS-CVS-G1-SWITCH-1M	CloudVision as-a-Service Subscription Lic for 1-Month for 1 Switch. Arista Fixed 1G/mG Group 1 Platforms. Includes E, FLX-L.
SS-CVS-LT-G1-SWITCH-1M	CloudVision Lite as-a-Service Subscription Lic for 1-Month for 1 Switch. Arista Fixed 1G/mG Group 1 Platforms.
SS-CVSC-G1-SWITCH-1M	CloudVision CUE as-a-Service Subscription Lic for 1-Month for 1 Switch. Arista Fixed 1G/mG Group 1 Platforms.

Product Number	Product Description
CAB-C13-US	Power Cord, North America, C13 to NEMA 5-15P, 8 Feet (2.5m)
CAB-C13-C14-INTL	Power Cord C13 to C14 (2m)
CAB-C13-EU	Power Cord, Europe, C13 to CEE 7/7, 8 Feet (2.5m)
CAB-C13-UK	Power Cord, United Kingdom, C13 to BS 1363/A, 8 Feet (2.5m)
CAB-C13-AUS	Power Cord, Australia, C13 to AS/NZS 3112, 8 Feet (2.5m)
CAB-C13-IT	Power Cord, Italy, C13 to CEI 23-16, 8 Feet (2.5m)
CAB-C13-AR	Power Cord, Argentina, C13 to IRAM 2073, 8 Feet (2.5m)
CAB-C13-IN	Power Cord C13 to India (10A) 2m

Warranty

The Arista CCS-710 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: http://www.arista.com/en/service

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

www.arista.com

ARISTA