

## Product Highlights

### Performance

- 2 x Coherent 200G DWDM uplinks, 32 x 1/10GbE and 8 x 1/10/25GbE
- Wire speed L2 and L3 forwarding
- Optimized for Data Center Interconnect (DCI) and mobile back-haul aggregation
- Ethernet over DWDM: Transparent to Layer2 and Layer3 applications

### Wire-speed Encryption

- IEEE 802.1AE MACsec encryption on the CFP2-DCO coherent ports

### Metro and Long Haul Applications

- 100G PM-QPSK Modulation: 2500+ km
- 200G PM-8QAM Modulation: 1000 km
- 200G PM-16QAM Modulation: 500 km
- >80km of un-amplified reach

### Data Center Optimized Design

- 4GB of Ultra-deep packet buffer
- Virtual Output Queues per port to eliminate head of line blocking
- Redundant & hot-swap power and fans
- Front-to-rear or rear-to-front cooling
- NEBS compliant

### Cloud Networking Ready

- 768K MAC Addresses
- 768K IPv4 and IPv6 Host Routes
- Over 1M IPv4 Routes

### Investment Protection and Flexibility

- 96 channels at 50GHz spacing and 48 channels at 100GHz spacing
- Flex Grid and grid-less tuning for future growth
- Two 200G modes for long haul and metro

### Resilient Control Plane

- High Performance x86 CPU
- 32GB System memory
- 4GB Flash
- User applications can run in a VM

### 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 7280SRM-40CX2 is a high performance, compact, 1RU, 7280R Series switch router with built-in wire speed MACsec encryption and DWDM interfaces.

The 7280SRM-40CX2 delivers scalable L2 and L3 resources with advanced features for network monitoring, precision timing and network virtualization to deliver scalable and deterministic network performance while simplifying designs and reducing opex.

The 7280SRM-40CX2 provides in-built IEEE 802.1AE defined MACsec encryption at wire speed, eliminating the need for external encryption devices and provides security against intrusion, passive wire tapping and other playback attacks. MACsec encryption meets regulatory compliance requirements and provides data protection without loss of performance.

The two CFP2-DCO DWDM ports can be independently operated in 200G PM-16QAM, 200G PM-8QAM, or 100G PM-QPSK modes, enabling DWDM reaches from 80km (un-amplified) to 2500+ km for amplified links, with fiber capacity up to 19.2 Tbps (96 channels at 50GHz spacing)

An open and programmable solution like the Arista 7280R DWDM platform decouples the optical interface from the line system components (multiplexers, amplifiers, ROADMs) and can be integrated with existing legacy line systems or any widely available open line system.

The integration of a rich set of L2 and L3 features, together with MACsec and DWDM, in a single 1RU form-factor, enables the 7280SRM-40CX2 to be deployed in a wide range of applications including secure Data Center Interconnect (DCI), mobile back-haul, and metro aggregation networks. Deep packet buffers and large routing tables allow for internet peering applications.



*Arista 7280R DWDM Coherent System*

## Arista EOS

All Arista products including the 7280R Series runs the same Arista EOS software, binary image simplifying network administration with a single standard across all switches. 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 together with stateful switchover without the loss of data plane forwarding.

Arista EOS enables advanced monitoring and automation capabilities such as Zero Touch Provisioning, LANZ, VM Tracer and Linux based tools to be run natively on the switch.

## Model Overview

The Arista 7280SRM-40CX2 delivers unprecedented levels of buffering, scale and availability with wire speed MACsec encryption and integrated DWDM.

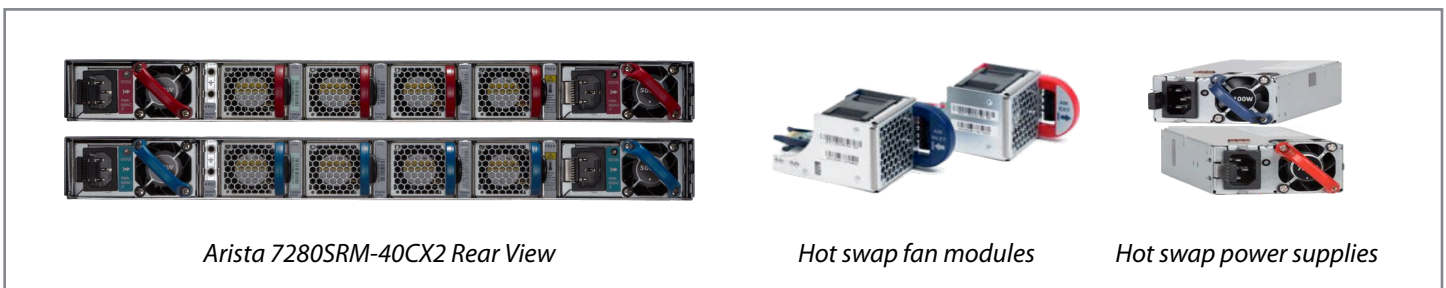
7280SRM-40CX2: 40 ports SFP+ and 2 ports CFP2

- Offers 32 wire speed 1/10G SFP+ ports and 8 wire speed 1/10G/25G SFP+ ports
- 2 x CFP2-DCO Coherent DWDM ports (with 80 km un-amplified reach, and 2500+ km amplified reach)
- 1.6Tbps of wire speed performance with 4GB of buffer
- Support for Accelerated sFlow

## 7280R High Availability

The Arista 7280R switches are designed for continuous operation with system wide monitoring of both hardware and software components, simple serviceability and provisioning to prevent single points of failure. Key high availability features include:

- 1+1 hot-swappable power supplies and four hot-swap fans provide dynamic temperature control combined with N+1 redundancy
- Color coded PSU's and fans that deliver platinum level power efficiency
- Live software patching
- Self healing software with Stateful Fault Repair (SFR)
- Smart System Upgrade (SSU) and Accelerated Software Update (ASU)



## 100G Wire-speed Encryption

The 7280SRM-40CX2 has built-in 100G wire-speed encryption on the 2 CFP2-DCO ports. Standards-based IEEE 802.1AE (MAC Security standard, hereafter referred to as MACsec) capabilities provide line-rate frame encryption and authentication for traffic transported across DWDM. This optional functionality removes the need for additional intermediate devices and provides encryption which ensures confidentiality as well as provides anti-replay protection and therefore confidence in the integrity of encrypted traffic.

MACsec uses a long-term key to derive session keys used for encryption utilizing the MACsec Key Agreement Protocol per IEEE 802.1X-2010. Long term keys can either be statically defined or derived via RADIUS server(s)\*. Data is encrypted using the 128 bit or 256-bit\* GCM-AES-XPB block cipher suite. MACsec encryption is a licensed feature and requires a license file to enable the encryption feature. License information is included in the ordering information section of this document.

## Open, Programmable and Scalable platform

The Arista 7280R DWDM solution offers a high capacity, high performance platform that is open, scalable and highly programmable. The open architecture enables integration of the coherent CFP2 uplink ports with existing line systems as alien wavelengths to enable cost effective bandwidth expansion. The grid-less wavelength, modulation format and transmit and receive powers are all software tunable making it ideal to work with flex-grid open-line systems as well as legacy lines incorporating fixed-grid optical multiplexers/demultiplexers, optical amplifiers and reconfigurable optical add-drop multiplexers (ROADMs).

## 7280R Accelerated sFlow

sFlow is a powerful tool used commonly by network operators for advanced network telemetry, capacity planning, security analysis and quality of experience monitoring. All models of the 7280R Series enable sFlow utilizing the high performance CPU. Within modern high performance systems traffic sampling requires the capability to both sample and process packet rates of hundreds of millions of packets per second. With the 7280R Series Accelerated sFlow feature the sampling and processing of flow samples into sFlow datagrams is handled via a dedicated sFlow engine capable of generating up to 1.6Mpps of sFlow data, and of supporting 1:1000 sampling rates of full wire speed systems or higher rates with selective sampling based on triggers and filters. All sFlow v5 information is included in the sFlow records ensuring consistent integration with existing standard sFlow collection and analysis tools and no loss of information.

\* Not currently supported in EOS

## 7280R Deterministic Network Performance

The Arista 7280R Series uses a deep buffer virtual output queue (VOQ) architecture that eliminates head-of-line (HOL) blocking and virtually eliminates packet drops even in the most congested network scenarios. An advanced traffic scheduler fairly allocates bandwidth between all virtual output queues while accurately following queue disciplines including weighted fair queuing, fixed priority, or hybrid schemes. As a result, the Arista 7280 can handle the most demanding data center requirements with ease, including mixed traffic loads of real-time, multicast, and storage traffic while still delivering low latency.

## Feature-rich, simple, high performance and versatile solution

The 7280SRM-40CX2 integrates feature rich and high performance layer 2 and layer 3 switching, wire-speed MACsec encryption and coherent DWDM interfaces into a single compact rack unit. It reduces complexity and at the same time delivers a cost effective and highly scalable solution for a variety of applications.

When configured in 200G 16QAM mode, the 7280SRM-40CX2 has an un-amplified reach of 100km (80km with mux/demux), making it ideal for Metro DCI applications (Figure 1). Longer reaches (2500km+) can be achieved by using external amplifiers and different modulation modes (Figure 2). The CFP2-DCO DWDM interfaces on the 7280SRM-40CX2 can also interconnect with the CFP2-ACO interfaces on the 7500R-8CFPX DWDM line card in Arista's 7500R platform, enabling the 7280SRM-40CX2 to aggregate multiple 10G and 25G downlinks, and provide 200G coherent uplinks to a 7500R Chassis (Figure 3).

The open and programmable nature of EOS, and the use of pluggable CFP2-DCO optics, allows easy integration into third party line systems. By deploying 7280SRM-40CX2 DWDM interfaces as alien waves over an open line system or ROADM network, the 7280SRM-40CX2 can be used in mobile backhaul and metro aggregation networks (Figure 4).



Figure 1: Un-amplified metro DCI (80km - 100km)



Figure 2: Amplified metro / long-haul DCI (500km - 2500km+ depending on modulation)



Figure 3: DCI between 7500R Series 8CFPX line card and 7280SRM-40CX2



Figure 4: Mobile back-haul and metro aggregation

EDFA: Erbium-doped fiber amplifier

## 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
  - 54 Ports / Channel
  - 48 groups per system
- MLAG (Multi-Chassis Link Aggregation)
  - Uses IEEE 802.3ad LACP
  - 96 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
- 802.1 AVB
- SMPTE-2059-2

## Layer 3 Features

- Static Routes
- Routing Protocols: OSPF, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2
- 128-way Equal Cost Multipath Routing (ECMP)
- VRF
- Bi-Directional Forwarding Detection (BFD)
- Unicast Reverse Path Forwarding (uRPF)
- VRRP
- Virtual ARP (VARP)
- Policy Based Routing (PBR)
- Route Maps

## Multicast

- IGMP v2/v3
- Protocol Independent Multicast (PIM-SM / PIM-SSM)
- PIM-BiDir
- Anycast RP (RFC 4610)
- Multicast Source Discovery Protocol (MSDP)

## Advanced Monitoring and Provisioning

- Latency Analyzer and Microburst Detection (LANZ)
  - Configurable Congestion Notification (CLI, Syslog)
  - Streaming Events (GPB Encoded)
  - Capture/Mirror of congested traffic \*
- Zero Touch Provisioning (ZTP)
- Advanced Mirroring
  - Port Mirroring (16 sessions)
  - Enhanced Remote Port Mirroring
  - SPAN/TAP M:N Aggregation
  - L2/3/4 Filtering
- Advanced Event Management suite (AEM)
  - CLI Scheduler
  - Event Manager
  - Event Monitor
  - Linux tools

- Integrated packet capture/analysis with TCPDump
- Restore and Configure from USB
- RFC 3176 sFlow
- Built-in SSD for logging and data capture
- IEEE 1588 PTP

## Virtualization Support

- VXLAN Bridging and Routing (VRF, MLAG)
- VM Tracer VMware Integration

## Security Features

- PDP
- Service ACLs
- Ingress / Egress ACLs using L2, L3, L4 fields
- Ingress / Egress ACL Logging and Counters
- MAC ACLs\*
- ACL Deny Logging
- ACL Counters
- DHCP Relay / Snooping
- MAC Security
- TACACS+
- RADIUS
- ARP trapping and rate limiting

## Quality of Service (QoS) Features

- Up to 8 queues per port
- Strict priority queueing
- 802.1p based classification
- DSCP based classification and remarking
- Egress shaping / Weighted round robin (WRR)
- Policing / Shaping
- Rate limiting
- Explicit Congestion Notification (ECN) marking
- 802.1Qbb Per-Priority Flow Control (PFC)
- 802.1Qaz Enhanced Transmission Selection (ETS)\*
- Data Center Bridging Extensions (DCBX)

## Network Management

- CloudVision
- Configuration rollback and commit
- 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

\* Not currently supported in EOS

## Extensibility

- Linux Tools
  - Bash shell access and scripting
  - RPM support
  - Custom kernel modules
- Software Defined Networking (SDN)
  - eAPI
  - OpenStack Neutron Support
- Programmatic access to system state
  - Python
  - Chef
  - Puppet
  - C++
  - eAPI
  - GO
  - OpenConfig
  - OpenStack Neutron Plug-in support
- Native KVM/QEMU support

## System Scalability

- 9216 Byte Jumbo Frame Support
- 8 Priority Queues per Port
- 1152 Link Aggregation Groups (LAG)
- 32 Ports per LAG
- Virtual Output Queueing
- Distributed Scheduler
- WFQ, CIR\*, ETS\*, Fixed Priority

## 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
- 802.3x Flow Control
- 802.3ab 1000BASE-T
- 802.3z Gigabit Ethernet
- 802.3ae 10 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 Autoconfiguration
- RFC 2463 Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification
- IEEE 1588-2008 Precision Time Protocol

## 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
- IPMROUTE-STD-MIB
- SNMP Authentication Failure trap
- ENTITY-SENSOR-MIB support for DOM (Digital Optical Monitoring)\*
- ARISTA-XCVR-DWDM-MIB
- User configurable custom OIDs

See EOS release notes for latest supported MIBs

Model	7280SRM-40CX2
Ports	40 x SFP+, 2 x CFP2-DCO
Max 100/200GbE Ports	2
Max 25GbE Ports	8
Max 1/10GbE Ports	40
Throughput	1.6Tbps
Packets/Second	720Mpps
Latency	From 3.8us
CPU	Quad-Core x86
System Memory	32 Gigabytes
Packet Buffer Memory	4GB
USB Ports	1
Flash Storage Memory	4GB
SSD Storage	Yes
100/1000 Mgmt Ports	1
RS-232 Serial Ports	1 (RJ-45)
Hot-swap Power	2 (1+1 redundant)
Hot-swap Fans	4 (N+1 redundant)
Reversible Airflow	Yes
Rack Units	1U
Size (WxHxD)	17.3" x 1.7" x 15.8" (44.0 x 4.35 x 40.2 cm)
Typical / Max Power Draw	183W / 283W
Weight	19.1lbs (8.7kg)
NEBS	Yes
Power Supplies	500W AC, 500W DC
Accelerated sFlow	Yes
EOS Feature License	LIC-FIX-2
Minimum EOS	4.21.0
Modulation format and Data Rate/ port	PM-QPSK: 100Gbps PM-8QAM: 200Gbps PM-16QAM: 200Gbps

## 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) C-Tick (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

## Environmental Characteristics

Operating Temperature	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)

## Scale **7280SRM-40CX2**

MAC Addresses	768K
IPv4 Host Routes	768K
IPv6 Unicast Host Routes	768K
IPv4 Unicast LPM Routes	Over 1M
IPv6 Unicast LPM Routes	1M
Multicast Routes	Up to 768K
ACL Entries	24K

Power Supply	PWR-500AC	PWR-500-DC
Input Voltage	100-240V AC	40-72V DC
Typical Input Current	6.3 - 2.3A	13.1 - 7.3A 11A at -48V
Input Frequency	50/60Hz	DC
Input Connector	IEC 320-C13	AWG #16-#12
Efficiency (Typical)	93% Platinum	90%

## Digital Coherent CFP2 Specifications

The 7280SRM-40CX2 utilizes the industry's latest digital Coherent CFP2 (CFP2-DCO) optical technology. Pluggable coherent optics enable seamless field replacement and easy trouble shooting which minimize network downtime.

Each CFP2 can be independently operated in 100G PM-QPSK, 200G PM-8QAM or 200G PM-16QAM modes. Highly sensitive coherent detection and powerful Soft Decision Forward Error Correction (SD-FEC) deliver robust optical signal to noise ratio (OSNR) and resilience to fiber impairments such as chromatic dispersion (CD), polarization mode dispersion (PMD) and abrupt changes in state of polarization (SOP)

Arista Coherent CFP2-DCO transceivers offer full digital optical monitoring and can be tuned to any wavelength in the ITU-T defined C-band grid. They also support grid-less tuning for improved spectral efficiency.

Optics Module	CFP2-200G-DCO-A
Channel Range (Tunable)	191.25 to 195.95 THz*
Channel Grid	100GHz, 50GHz, Flex Grid & Grid-less
Physical Dimensions (WxHxD)	41.5 x 12.4 x 107.5 mm
Connector Type	Duplex LC Straight
Weight	0.25 lbs (115 gms)
Max power consumption	20.5 W
Tx Optical output power (Avg)	+2 dBm
Tx Optical output power tuning range	15 dB
Shuttered output power	- 30 dBm
Rx Optical input power	-23 to 0 dBm
Forward Error Correction (FEC)	SD-FEC

## Modulation Formats

Mode of Operation	Bit Rate	Reach	OSNR Sensitivity**	CD Tolerance	Polarization Mode Dispersion (PMD) tolerance (mean)
PM-QPSK	100Gbps	2500+ km	11.3 dB	40 ns/nm	30 ps
PM-8QAM	200Gbps	1000 km	18 dB	19 ns/nm	15 ps
PM-16QAM	200Gbps	500 km	19.5 dB	15.5 ns/nm	15 ps

## Supported Optics and Cables

Interface Type	25G and 10G/1G SFP+ ports
10GBASE-CR	SFP+ to SFP+: 0.5m-5m
10GBASE-AOC	SFP+ to SFP+: 3m-30m
10GBASE-SRL	100m
10GBASE-SR	300m (OM3) / 400m (OM4)
10GBASE-LRL	1km
10GBASE-LR	10km
10GBASE-ER	40km
10GBASE-ZR	80km
10GBASE-DWDM	80km
1GBASE-SX/LX/T	Yes
100BASE-TX	Yes, 10G/1G SFP+ ports only
10M	Not supported

Interface Type	25G SFP+ ports
25GBASE-CR	SFP25 to SFP25: 1m-5m
25GBASE-AOC	SFP+ to SFP+: 3m-30m
25GBASE-SR	70m (OM3) / 100m (OM4)
25GBASE-LR	10km

\* Default channel at power up is 193.1 THz, 1552.52nm (50GHz grid). Extended Channel range: 191.15 THz to 196.1 THz is available upon request.

\*\* OSNR specification is typical, in back to back configuration and referenced to 0.1nm noise bandwidth.

Product Number	Product Description
DCS-7280SRM-40CX2-F	Arista 7280R, 40x10GbE (SFP+) & 2x200GbE Coherent DWDM switch with MACsec, front to rear air, 2x AC and 2xC13-C14 cords
DCS-7280SRM-40CX2-R	Arista 7280R, 40x10GbE (SFP+) & 2x200GbE Coherent DWDM switch with MACsec, rear to front air, 2x AC and 2xC13-C14 cords
DCS-7280SRM-40CX2#	Arista 7280R, 40x10GbE (SFP+) & 2x200GbE Coherent DWDM switch with MACsec, configurable fans and psu
CFP2-200G-DCO-A	100G/200G Coherent Tunable CFP2, Digital Interface, DP-QPSK, 8QAM and 16QAM modulation with gridless tuning and Nyquist shaping
PWR-500AC-F	Spare 500 Watt AC power supply for Arista 7050X and 7280R 1RU Switches (front-to-rear airflow)
PWR-500AC-R	Spare 500 Watt AC power supply for Arista 7050X and 7280R 1RU Switches (rear-to-front airflow)
PWR-500-DC-F	Spare 500 Watt DC power supply for Arista 7050X and 7280R 1RU Switches (front-to-rear airflow)
PWR-500-DC-R	Spare 500 Watt DC power supply for Arista 7050X and 7280R 1RU Switches (rear-to-front airflow)
FAN-7000H-F	Spare high speed fan module for Arista 7280R 1RU switches (front to rear airflow)
FAN-7000H-R	Spare high speed fan module for Arista 7280R 1RU switches (rear to front airflow)
LIC-FIX-2-MACSEC	MACSEC Encryption License for Arista Fixed switches, 1-6 MACSEC capable ports
LIC-FIX-2-E	Enhanced L3 License for Arista Fixed switches, 40-132 port 10G (BGP, OSPF, ISIS, PIM, NAT)
LIC-FIX-2-V	Virtualization license for Arista Fixed switches, 40-132 port 10G (VMTracer and VXLAN)
LIC-FIX-2-Z	Monitoring & provisioning license for Arista Fixed switches, 40-132 port 10G (ZTP, LANZ, TapAgg, OpenFlow)
LIC-FIX-2-FLX	FLX License for Arista Fixed Group 2 - Full Routing upto 2M Routes, >24K ACL, EVPN, VXLAN, SR, Adv MPLS-LER/LSR, with TE & link/node protection
LIC-FIX-2-FLX-L	FLX-Lite License for Arista Fixed switches Group 2 - Full Routing Up to 256K Routes, EVPN, VXLAN, SR, base MPLS LSR (no TE or link/node protection)
KIT-7001	Spare accessory kit for Arista 1RU tool-less switches
KIT-2POST-1U-NT	Spare 1RU 2 post rail kit for 1RU tool less systems (7050QX-32S, 7050SX/TX and 7280R)
KIT-4POST-NT	Spare 1RU/2RU tool-less rail kits for 4-post installation (7050QX-32S, 7050SX/TX, 7280R and 7250X)



## Arista 100GHz Channel Numbers and Wavelengths (100GHz ITU grid)

Channel Number	Frequency (THz)	Wavelength (nm)	Channel Number	Frequency (THz)	Wavelength (nm)	Channel Number	Frequency (THz)	Wavelength (nm)
1	191.2	1567.95	17	192.8	1554.94	33	194.4	1542.14
2	191.3	1567.13	18	192.9	1554.13	34	194.5	1541.35
3	191.4	1566.31	19	193.0	1553.33	35	194.6	1540.55
4	191.5	1565.49	20	193.1	1552.52	36	194.7	1539.76
5	191.6	1564.68	21	193.2	1551.72	37	194.8	1538.97
6	191.7	1563.86	22	193.3	1550.92	38	194.9	1538.18
7	191.8	1563.04	23	193.4	1550.11	39	195.0	1537.39
8	191.9	1562.23	24	193.5	1549.31	40	195.1	1536.61
9	192.0	1561.42	25	193.6	1548.51	41	195.2	1535.82
10	192.1	1560.60	26	193.7	1547.71	42	195.3	1535.03
11	192.2	1559.79	27	193.8	1546.91	43	195.4	1534.25
12	192.3	1558.98	28	193.9	1546.12	44	195.5	1533.46
13	192.4	1558.17	29	194.0	1545.32	45	195.6	1532.68
14	192.5	1557.36	30	194.1	1544.52	46	195.7	1531.90
15	192.6	1556.55	31	194.2	1543.73	47	195.8	1531.11
16	192.7	1555.74	32	194.3	1542.93	48	195.9	1530.33

## Arista 50GHz Channel Numbers and Wavelengths (50GHz ITU grid)

Channel Number	Frequency (THz)	Wavelength (nm)	Channel Number	Frequency (THz)	Wavelength (nm)	Channel Number	Frequency (THz)	Wavelength (nm)
1	191.2	1567.95	33	192.8	1554.94	65	194.4	1542.14
2	191.25	1567.54	34	192.85	1554.53	66	194.45	1541.74
3	191.3	1567.13	35	192.9	1554.13	67	194.5	1541.35
4	191.35	1566.72	36	192.95	1553.73	68	194.55	1540.95
5	191.4	1566.31	37	193.0	1553.33	69	194.6	1540.55
6	191.45	1565.90	38	193.05	1552.92	70	194.65	1540.16
7	191.5	1565.49	39*	193.1	1552.52	71	194.7	1539.76
8	191.55	1565.08	40	193.15	1552.12	72	194.75	1539.37
9	191.6	1564.68	41	193.2	1551.72	73	194.8	1538.97
10	191.65	1564.27	42	193.25	1551.32	74	194.85	1538.58
11	191.7	1563.86	43	193.3	1550.92	75	194.9	1538.18
12	191.75	1563.45	44	193.35	1550.51	76	194.95	1537.79
13	191.8	1563.04	45	193.4	1550.11	77	195.0	1537.39
14	191.85	1562.64	46	193.45	1549.71	78	195.05	1537.00
15	191.9	1562.23	47	193.5	1549.31	79	195.1	1536.61
16	191.95	1561.82	48	193.55	1548.91	80	195.15	1536.21
17	192.0	1561.42	49	193.6	1548.51	81	195.2	1535.82
18	192.05	1561.01	50	193.65	1548.11	82	195.25	1535.43
19	192.1	1560.60	51	193.7	1547.71	83	195.3	1535.03
20	192.15	1560.20	52	193.75	1547.31	84	195.35	1534.64
21	192.2	1559.79	53	193.8	1546.91	85	195.4	1534.25
22	192.25	1559.39	54	193.85	1546.52	86	195.45	1533.86
23	192.3	1558.98	55	193.9	1546.12	87	195.5	1533.46
24	192.35	1558.58	56	193.95	1545.72	88	195.55	1533.07
25	192.4	1558.17	57	194.0	1545.32	89	195.6	1532.68
26	192.45	1557.77	58	194.05	1544.92	90	195.65	1532.29
27	192.5	1557.36	59	194.1	1544.52	91	195.7	1531.90
28	192.55	1556.96	60	194.15	1544.13	92	195.75	1531.50
29	192.6	1556.55	61	194.2	1543.73	93	195.8	1531.11
30	192.65	1556.15	62	194.25	1543.33	94	195.85	1530.72
31	192.7	1555.74	63	194.3	1542.93	95	195.9	1530.33
32	192.75	1555.34	64	194.35	1542.54	96	195.95	1529.94

\* Default channel at power up: 193.1 THz, 1552.52nm (50GHz grid)

## Warranty

The Arista DWDM fixed system switches and Arista optical transceivers come 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>

### Headquarters

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

### Support

[support@arista.com](mailto:support@arista.com)  
408-547-5502  
866-476-0000

### Sales

[sales@arista.com](mailto:sales@arista.com)  
408-547-5501  
866-497-0000