ACX7100 SERIES

Product Overview

Emerging 5G, IoT, and low-latency virtualized edge services present a unique opportunity for network operators to transform their networks for new applications and experience-first networking. The Juniper Networks ACX7100 Series brings new benchmarks of capacity, density, agility, and low latency to the ACX Series family of access and aggregation solutions. Designed to address the accelerating requirements of traffic growth, latency-dependent applications, and cloud-inspired port rates, ACX7100 delivers the service-aware features and capabilities required to facilitate experience-first networking in a single, converged, multiservice network.

Product Description

The Juniper Networks® ACX7100 Series is designed to help operators achieve their capital, operational, and user experience goals. The ACX7100 offers industry-leading power efficiency in a compact form factor. It delivers 4.8 Tbps of ASIC forwarding capacity, cloud-inspired native port speeds that include 400GbE quad small form-factor pluggable transceiver (QSFP56-DD) interfaces, and Media Access Control Security (MACsec) options—making it ideal for metro high-end aggregation, large enterprise, and top-of-rack, spine-leaf data center applications.

Combined with the power of Junos® OS Evolved and the Juniper Paragon Automation Portfolio, the ACX7100 is fully equipped to help operators realize their capital and operational objectives while thriving in the 5G, IoT, and cloud era. Platform capabilities include: deep buffers; a full complement of Layer 2/Layer 3 and MPLS protocols and features; advanced programmability, telemetry, and network slicing technologies enabling dynamic service creation; and the ability to seamlessly integrate with emerging distributed edge compute architectures. Designed for metro, large enterprise, and data center use cases, the ACX7100 is also a foundational building block of an IP services fabric in a Juniper Cloud Metro solution.

ACX7100 Product Offering

The ACX7100 Router comes in two models, each equipped to address the challenges and opportunities of the 5G, IoT, and cloud era:

- **ACX7100-32C**: The ACX7100-32C provides full duplex ASIC throughput of 4.8 Tbps in a 1 U fixed platform designed for applications that require dense fan-out in a small, power-efficient footprint. It supports 32 ports of 100GbE and 4 ports of 400GbE QSFP56-DD, including MACsec support on all ports.
- **ACX7100-48L**: The ACX7100-48L provides full duplex ASIC throughput of 4.8 Tbps in a 1 U fixed platform designed for applications that require dense fan-out in a small, power-efficient footprint. It supports cloud-inspired service rates, and port-by-port configuration of native 10GbE (SFP+), 25GbE (SFP28), and 50GbE (SFP56) on all 48 service ports, including 6 ports of 400GbE QSFP56-DD for granular aggregation in metro, large enterprise, and data center applications.

ACX7100 platforms provide investment protection to operators. Juniper incorporates an innovative circuit board design to deliver groundbreaking performance, increased system memory for enhanced scaling, and cooling innovations that enable the use of cutting-edge pluggable transceiver technologies. Efficient cooling within these 1 U platforms enables ZR/ZR+ pluggable transceiver technology to be fully deployed on all 100GbE and 400GbE ports simultaneously, delivering industry-leading flexibility and capacity. Integrated port variety, density, and flexibility provide previously unattainable levels of scale and long-term transformation in a fixed form factor.

The Juniper Networks ACX Series family offers a variety of access and aggregation solutions, including Juniper Networks ACX500, ACX710, ACX1000, ACX2000, ACX4000, ACX5000, ACX6000 and ACX7100 Series. The density, capacity, agility, and flexibility of the broad ACX Series supports a range of use cases.

- Universal Metro Access and Aggregation: ACX Series platforms offer a full suite of routing features, allowing you to choose a deployment model that best fits your exacting business and technical requirement. Create a converged multiservice metro or Cloud Metro architecture that best supports your business, residential, and wholesale connectivity service needs. The ACX Series can be deployed as highly versatile access routers, Ethernet VPN (EVPN) and virtual private LAN service (VPLS) routers, MPLS label-switching (LSR) routers, and as Layer 2 Ethernet or Layer 3 IP routers. Select platforms incorporate packet optical convergence capabilities enabling dense wavelength-division multiplexing (DWDM) wavelengths to efficiently interconnect IP/packet and DWDM networks.
- Data Center and Edge Compute: The ACX7100 Router is ideal for data center/cloud applications, with support for multiple overlay encapsulation methods, including Virtual Extensible LAN (VXLAN), network virtualization using GRE (NVGRE), MPLS over UDP, MPLS over GRE, 802.1BR, SR-MPLS, and SR-v6. The ACX7100-32C router also supports data plane security with inline MACsec on all ports.
- Enterprise WAN: Enterprises and government agencies worldwide use ACX Series platforms to build their own Layer 2, Layer 3, and MPLS networks.
- Mobile Backhaul: ACX Series platforms support highly scalable and reliable hardware-based timing that meets the strictest 4G/5G requirements. These include Synchronous Ethernet for frequency and the Precision Time Protocol (PTP) for frequency and phase synchronization, enabling deployment in next-generation mobile applications such as 5G.

Packet Optical Convergence: When the application calls for increased transport capacity, reach, resiliency, or to interconnect an IP/packet network to an optical transport network, it is convenient and cost effective to leverage a routing platform that offers integrated DWDM interfaces. Referred to as packet optical convergence platforms, these types of platforms have the ability to convert Ethernet circuits into a DWDM signal, which can be multiplexed with other DWDM channels onto a single optical fiber and efficiently transported over an optical layer without the need for additional, costly, standalone DWDM transponders.

With the advent of new, small form-factor technologies like QSFP56-DD pluggable optics and 400ZR/ZR+ pluggable transceivers, it is now possible to choose on a port-by-port basis between grey client interfaces (400GbE LR4) for shorter distances and coherent DWDM interfaces (400ZR/ZR+) for longer distances, as well as transport over active optical line systems—all without sacrificing platform density. Juniper's integration of QSFP-DD Interfaces in its solutions, including the ACX7100 Router, allows for considerable capital savings for operators compared to the traditional use of external DWDM transponders.

Architecture and Key Components

Powered by the Junos® OS Evolved operating system, the ACX7100 adds a new dimension to Juniper's portfolio of service provider, large enterprise, and data center solutions. Designed to address the rapid growth of mobile, video, and edge compute services, the ACX Series has been integral to Juniper's proven IP/MPLS leadership from core and edge to access and aggregation. As services change, though, so must service architectures.

The emergence of 5G, IoT, and cloud are influencing how services are delivered. What's needed are purpose-built platforms that combine to create an agile IP service fabric capable of intelligently steering traffic to dynamic resource instantiations. Operators with the ability to strategically locate virtualized services across a distributed cloud and meet the service experience expectations of every user over a single, converged service network will be able to optimize capital investments, reduce operational expenses, and enable experience-first networking.

- Cloud Metro: Juniper's Cloud Metro is a converged multiservice networking solution that takes the most powerful cloud principles used in massive hyperscale data centers and adapts them to metro networking. It is designed to optimize the experience of both network operators and the customers they serve in the 5G, IoT, and cloud era. It redefines outcomes from being purely connectivity-driven, to being completely experience-driven. A Cloud Metro, deployable in both brownfield and greenfield environments, intelligently and efficiently steers traffic to the best physical and virtual resource to minimize latency and optimize user experiences. It leverages automation to accelerate and simplify network operations and showcase service delivery sophistication and quality that only network operators, and their Cloud Metro networks, can achieve:
  - One converged metro for all use cases
  - Agile service delivery with network slicing and active assurance
  - Advanced protocols, timing, scale, and automation

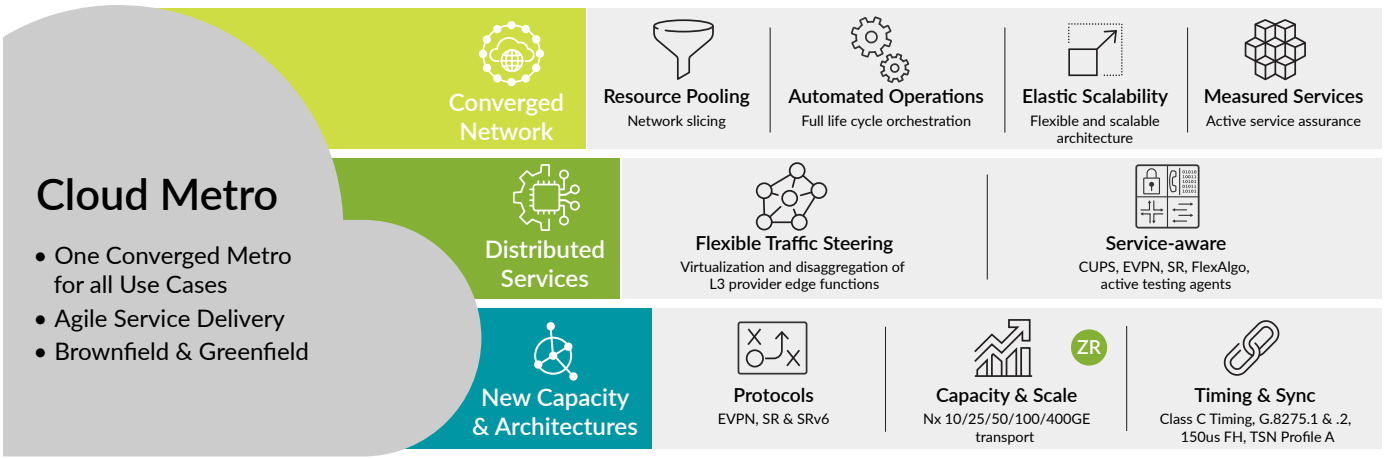

Figure 1. Juniper Cloud Metro—built for experience-first networking

- **Ubiquitous**: The ACX Series family of access and aggregation routers covers the breadth of use cases and applications in traditional metro architectures. Deployed within a Cloud Metro architecture, the ACX Series portfolio becomes part of an IP service fabric capable of steering traffic to physical and virtual resources strategically placed across a distributed cloud architecture for optimum user experience. Control and user plane separation (CUPS) is used to enable independent steering of user plane functions to the best resource option that conforms to SLA requirements. Network slicing technologies are used to established and manage virtualized and customized traffic engineering across a Cloud Metro to achieve experience-first networking. The ACX7100 has been engineered to excel within a Cloud Metro architecture.
- **Dense Fan-Out**: ACX Series platforms provide a variety of port speeds to address the exacting needs of access and aggregation use cases. The innovative design of the ACX7100 has been engineered to establish new benchmarks for what can be achieved in a 1 U platform that delivers:
  - 100GbE, 400GbE services, and cloud-inspired port rate diversity (10GbE, 25GbE, 50GbE, 100GbE, and 400GbE)
  - 4.8 Tbps of ASIC forwarding capacity
  - The thermal efficiencies required to support a fully loaded compact platform of 100GbE and 400GbE services.
- **Junos OS Evolved**: Junos OS Evolved is a unified, end-to-end network operating system that provides reliability, agility, and open programmability for successful cloud-scale deployments. With Junos OS Evolved, you can enable higher availability, accelerate your deployments, innovate more rapidly, and operate your network more efficiently.
  - Junos OS Evolved is a modern network operating system supporting third-party applications and tools due to its ability to run natively on Linux.
  - It uses an integrity solution called Integrity Measurement Architecture (IMA), and a companion mechanism called the Extended Verification Module (EVM).
  - These open-source protections are part of a set of Linux Security Modules that are industry-standard and consistent with the trust mechanisms specified by the Trusted Computing Group.
  - Junos OS Evolved also supports other security features such as trusted platform model infrastructure, hardened secure BIOS, and secure boot.

Juniper has aligned Junos OS Evolved with Junos® operating system so that you can seamlessly continue to manage and automate your Juniper network while receiving a consistent One Junos experience.

Table 1. Built-In Interface Options for ACX7100 Models

Model	10GbE/25GbE/ 50GbE SFP-56	100GbE QSFP28/ QSFP-DD	400GbE QSFP56-DD
ACX7100-32C	0	32	4
ACX7100-48L	48[1]	0	6

[1] One of these ports support 10G/25G only

All ports on ACX7100 platforms support service breakout options.

Table 2. Maximum Port Capacity Supported Per Port Speed

Port Speed	ACX7100-32C	ACX7100-48L
400GbE	4	6
100GbE	48	24
50GbE	96	95[2]
40GbE	36	6
25GbE	96	96[3]
10GbE	96	96[3]

1 GbE optics will be supported on ACX7100-32C only for Grand Master (GM) using QSA adaptor
[2] One of these ports supports 10GbE/25GbE only
[3] 4xx 25GbE and 4x 10 GbE breakout options are supported on any 2 ports of 4x 100GbE port groups

Features and Benefits

The ACX Series delivers essential levels of programmability, reliability, and scalability to service provider, large enterprise, and data center networks. The ACX7100 is designed to support the initiatives of converging network services onto a single network to deliver experience-first networking while lowering the total cost of operations, administration, maintenance, and provisioning (OAMP).

Multiservice Solution

The ACX7100 is designed to support all types of services and applications. Operators will find use case-specific features like VXLANs, which are popular in data centers, as well as universal features like MACsec on all the interfaces of the ACX7100-32C, or QSFP56-DD interfaces and ZR/ZR+ pluggable transceivers on Juniper 400GbE platforms enabling packet optical convergence.

These leading-edge solutions come equipped to address today's known challenges, and they are engineered to evolve to address tomorrow's unknown challenges. Unlike vertically targeted platforms from other vendors where organizationally siloed product development teams focus on the requirements of a specific market vertical, Juniper identifies specific features that support multiple use cases, offering network operators licensed software profiles that competitively align to the requirements and value expectations of the respective markets. ACX7100 enhancements created for one market that have universal appeal in other markets can be efficiently and effectively transferred across licensed profiles on the same platform.

Stringent Mobile Backhaul Requirements

Wholesale connectivity services, including mobile backhaul, cloud connect, branch office interconnect, and others, are a significant source of revenue for network operators. As mobile operators continue to build out their 5G physical and virtualized infrastructures and operations, metro operators will encounter increasing opportunities to showcase and profit from their network capabilities for connectivity services. For 5G services, this requires support for advanced timing and synchronization. To deliver upon the agility, scale, latency, and experience expectations of 5G mobile operators and consumers, new capabilities and architectures will be required, as prescribed by a Juniper Cloud Metro. This includes the essential and emerging capabilities of network slicing to create virtual, dynamic, and secured paths to connect users with resources that require different levels and types of SLAs. Advance timing and synchronization, CUPS, and network slicing are foundational capabilities of the ACX7100 routers.

Automation and Programmability

To stay ahead of your users' ever-changing business and personal requirements, your network must be more responsive, insightful, elastic, and resilient. In short, you need an automated, service-assured network. Juniper Paragon Automation, combined with an IP service fabric comprised of Cloud Metro-ready platforms featuring the ACX7100 Router, can help you gain a competitive advantage. The Paragon Automation Portfolio offers modular cloud-native software applications that deliver closed-loop automation, ensuring that end users receive an assured user experience throughout the life of their service at service provider, large enterprise, and cloud scale.

Juniper Paragon Automation will allow you to plan, model, and verify services before deployment, orchestrate end-to-end services, actively verify service quality across physical and virtual networks, and correlate network health by leveraging machine learning. Combined, these capabilities enable Juniper to provide operators with predictive analytics and gray failure analysis. The Paragon Automation Portfolio also simplifies path optimizations, slice creation, and management of your network. As an essential component of a Juniper Cloud Metro, Juniper Paragon Automation helps you quickly deploy new services and support your operational efforts to deliver and maintain high-quality network services.

Table 3: ACX7100 Router Platform Feature Matrix

Feature	ACX7100-32C	ACX7100-48L
System		
ASIC throughput	4.8 Tbps	4.8 Tbps
Chassis type	Fixed	Fixed
Cooling	6x fans, front-to-back	6x fans, front-to-back/back-to-front
Layer 2 Bridging		
IEEE 802.1ad (Q-in-Q)	Yes	Yes
Integrated routing and bridging (IRB)	Yes	Yes
IEEE 802.1Q VLAN encapsulation	Yes	Yes
Link Aggregation Control Protocol (LACP): IEEE 802.3ad	Yes	Yes
Static Media Access Control (MAC)	Yes	Yes
Jumbo frames	Yes	Yes
Layer two tunneling protocol (L2TP)	Yes	Yes
Layer 2 ingress access control l ist (ACL)	Yes	Yes
MPLS		
LDP	Yes	Yes
LDP: Tunneling (LDP over RSVP)	Yes	Yes
RSVP	Yes	Yes
IP		
IPv4/IPv6	Yes	Yes
Unicast reserve-path forwarding (uRPF)	Yes	Yes
128-way equal-cost multipath (ECMP)	Yes	Yes
RIP/RIPng	Yes	Yes
OSPF v2/v3	Yes	Yes
IS-IS	Yes	Yes
BGP	Yes	Yes
Layer 3 ingress and egress ACL	Yes	Yes
Virtual Router Redundancy Protocol (VRRP)	Yes	Yes
Basic Segment Routing (SR)	Yes	Yes
Path Computation Element Communication Protocol (PCEP)	Yes	Yes
MPLS Service (Layer 2 and Layer 3)		
L2VPN	Yes	Yes
L3VPN	Yes	Yes
VPLS	Yes	Yes

Feature	ACX7100-32C	ACX7100-48L
Timing and Synchronization		
PTP transparent clock	Yes	Yes
PTP master/client capability	Yes	Yes
IEEE 1588v2 boundary clock	Yes	Yes
Synchronous Ethernet (Sync-E) Enhanced (G.8262.1)	Yes	Yes
Class C	Yes	Yes
Operation, Administration, and Maintenance		
Connectivity fault management (CFM)	Yes	Yes
Link fault management (LFM)	Yes	Yes
Security		
MACsec	Yes (all ports)	No
Secure boot	Yes	Yes
SSH	Yes	Yes
Authentication, authorization, and accounting (AAA)	Yes	Yes
Quality of Service		
Behavior aggregate (BA) classification	Yes	Yes
Rewrite	Yes	Yes
Multifield classification	Yes	Yes
8 queues for traffic	Yes	Yes
Ingress policer	Yes	Yes
Automation		
Zero-touch provisioning (ZTP)	Yes	Yes
NETCONF	Yes	Yes
YANG	Yes	Yes
Openconfig	Yes	Yes
Python scripts	Yes	Yes

* Note: Features listed here are part of consecutive software releases following first release shipping.

ACX7100-32C

ACX7100-48L

Specifications

Here are basic specifications for the ACX7100 Router. For further details, please refer to the hardware installation manuals at www.juniper.net/techpubs.

Specification	ACX7100-32C	ACX7100-48L
Dimensions (W x H x D)	17.36 x 1.75 x 23.42 in. (44.09 x 4.45 x 59.49 cm)	17.36 x 1.75 x 23.42 in. (44.09 x 4.45 x 59.49 cm)
Weight (lb/kg) fully configured	28.0 lb / 12.7 kg	26.9 lb / 12.2 kg
Power (DC)	-48 VDC through -60 VDC	-48 VDC through -60 VDC
Power (AC)	115/240 VAC	115/240 VAC
Typical power draw (without optics)*	500 W	270 W
Maximum power draw (without Optics)	960 W	620 W
Operating temperature	Operating (0-40 C), short term (0-55 C) GR-63 NEBS-L3	Operating (0-40C), short term (0-55 C) GR-63 NEBS-L3
Humidity	5% through 90% noncondensing	5% through 90% noncondensing
Interfaces	32x 100GbE QSFP28/ QSFP-D 4x 400GbE QSFP56-DD	48x 10GbE/25GbE/50GbE SFP56 6x 400GbE QSFP56-DD
Synchronization interfaces	• 1x RJ-45 port + time of day (ToD) • 1 M/10 M PPS input and output	• 1x RJ-45 port + ToD • 1 M/10 M PPS input and output

*Typical power consumption measured at 25°C ambient with 50% load on all ports.

Approvals

	ACX7100-32C	ACX7100-48L
Safety Approvals		
CAN/CSA-C22.2 No. 60950-1 Information Technology Equipment - Safety	Yes	Yes
UL 60950-1 (2nd Edition) Information Technology Equipment - Safety	Yes	Yes
EN 60950-1: 2006/A2:2013 Information Technology Equipment - Safety	Yes	Yes
IEC 60950-1: 2005/A2:2013 Information Technology Equipment - Safety (All country deviations): CB Scheme	Yes	Yes
CAN/CSA-C22.2 No. 62368-1-14 Information Technology Equipment - Safety	Yes	Yes
UL 62368-1 Information Technology Equipment - Safety	Yes	Yes
EN 62368-1: 2014 Information Technology Equipment - Safety	Yes	Yes
IEC 62368-1: 2014 2nd Edition Information Technology Equipment - Safety (All country deviations): CB Scheme	Yes	Yes
EN 60825-1 Safety of Laser Products - Part 1: Equipment classification and requirements	Yes	Yes

	ACX7100-32C	ACX7100-48L
EMC		
EN 300 386 V1.6.1 Class A Telecom Network Equipment - EMC requirements	Yes	Yes
EN 300 386 V2.1.1 Class A Telecom Network Equipment - EMC requirements	Yes	Yes
FCC 47 CFR Part 15 Class A USA Radiated and Conducted Emissions	Yes	Yes
EN 55032 Class A European Radiated and Conducted Emissions	Yes	Yes
AS/NZS CISPR 32 Class A Australia/ New Zealand Radiated and Conducted Emissions	Yes	Yes
ICES-003 Class A Canada Radiated and Conducted Emissions	Yes	Yes
VCCI- CISPR 32 Class A Japanese Radiated and Conducted Emissions	Yes	Yes
BSMI CNS 13438 and NCC C6357 Taiwan Radiated and Conducted Emissions (at 10 meter)	Yes	Yes
KN32 Korea Radiated and Conducted Emission (at 10 meter)	Yes	Yes
TEC/EMI/TEL-001/FEB-09	Yes	Yes
TEC-SD-DD-EMC-221-05-OCT-16	Yes	Yes
Network Equipment Building System (NEBS)		
SR-3580 NEBS Criteria Levels (Level 3 Compliance)	Yes	Yes
GR-63-CORE: NEBS, Physical Protection	Yes	Yes
GR-1089-CORE: EMC and Electrical Safety for Network Telecommunications Equipment	Yes	Yes
Data Center DC 3160	Yes	Yes
Immunity		
EN 300 386 V1.6.1 Class A Telecom Network Equipment - Immunity requirements	Yes	Yes
EN 300 386 V2.1.1 Class A Telecom Network Equipment - Immunity requirements	Yes	Yes
EN 55024 (CISPR 24)	Yes	Yes
IEC/EN 61000-4-X (-2, -3, -4, -5, -6, -11)	Yes	Yes
KN35 Korea Immunity	Yes	Yes
KN61000-4-X (-2, -3, -4, -5, -6, -11) Korea Immunity	Yes	Yes
TEC/EMI/TEL-001/FEB-09 India Immunity	Yes	Yes
TEC-SD-DD-EMC-221-05-OCT-16	Yes	Yes
IG Surge	Yes	Yes
EN 55035 (CISPR 35:2016) Electromagnetic compatibility of multimedia equipment	Yes	Yes

Ordering Information

Product	Description
Hardware	
ACX7100-48L-AC-AI	ACX7100 chassis with 48 SFP56 / 6 QSFP56-DD multirate ports, AC PSU, AFI
ACX7100-48L-AC-AO	ACX7100 chassis with 48 SFP56 / 6 QSFP56-DD multirate ports, AC PSU, AFO
ACX7100-48L-DC-AI	ACX7100 chassis with 48 SFP56 / 6 QSFP56-DD multirate ports, DC PSU, AFI
ACX7100-48L-DC-AO	ACX7100 chassis with 48 SFP56 / 6 QSFP56-DD multirate ports, DC PSU, AFO
ACX7100-32C-AC-AO	ACX7100 chassis with 32 QSFP28 / 4 QSFP56-DD multirate ports, AC PSU, AFO
ACX7100-32C-DC-AO	ACX7100 chassis with 32 QSFP28 / 4 QSFP56-DD multirate ports, DC PSU, AFO
Metro Software	
S-EACX-100G-A-1	SW, EACX, per 100GbE capacity, supports IP/MPLS, timing, class of service (CoS), Ethernet OAM (EOAM), telemetry, RFC2544, with up to 256,000 forwarding information base (FIB), up to 1000 L2/L3 VPN, advanced, with SVC customer support, 1 year
S-EACX-100G-A-3	SW, EACX, per 100GbE capacity, supports IP/MPLS, timing, CoS, EOAM, telemetry, RFC2544, with up to 256,000 FIB, up to 1000 L2/L3 VPN, advanced, with SVC customer support, 3 years
S-EACX-100G-A-5	SW, EACX, per 100GbE capacity, supports IP/MPLS, timing, CoS, EOAM, telemetry, RFC2544, with up to 256,000 FIB, up to 1000 L2/L3 VPN, advanced, with SVC customer support, 5 years
S-EACX-100G-A1-P	SW, EACX, per 100GbE capacity, supports IP/MPLS, timing, CoS, EOAM, telemetry, RFC2544, with 256,000 FIB, up to 1000 L2/L3 VPN, advanced 1, without customer support, must purchase CS SKU separately, perpetual
S-EACX-100G-P-1	SW, EACX, per 100GbE capacity, includes ADV SW Subscription license with full platform scale, Premium, with SVC customer support, 1 year
S-EACX-100G-P-3	SW, EACX, per 100GbE capacity, includes ADV SW Subscription license with full platform scale, Premium, with SVC customer support, 3 years
S-EACX-100G-P-5	SW, EACX, per 100GbE capacity, includes ADV SW Subscription license with full platform scale, Premium, with SVC customer support, 5 years
S-EACX-100G-P1-P	SW, EACX, per 100GbE capacity, includes ADV SW Subscription license with full platform scale, Premium 1, without customer support, must purchase CS SKU separately, perpetual
S-EACX-400G-A-1	SW, EACX, per 400GbE capacity, supports IP/MPLS, timing, CoS, EOAM, telemetry, RFC2544, with up to 256,000 FIB, up to 1000 L2/L3 VPN, Advanced, with SVC customer support, 1 year
S-EACX-400G-A-3	SW, EACX, per 400GbE capacity, supports IP/MPLS, timing, CoS, EOAM, telemetry, RFC2544, with up to 256,000 FIB, up to 1000 L2/L3 VPN, Advanced, with SVC customer support, 3 years
S-EACX-400G-A-5	SW, EACX, per 400GbE capacity, supports IP/MPLS, timing, CoS, EOAM, telemetry, RFC2544, with up to 256,000 FIB, up to 1000 L2/L3 VPN, Advanced, with SVC customer support, 5 years
S-EACX-400G-A1-P	SW, EACX, per 400GbE capacity, supports IP/MPLS, timing, CoS, EOAM, telemetry, RFC2544, with 256,000 FIB, up to 1000 L2/L3 VPN, Advanced 1, without customer support, must purchase CS SKU separately, perpetual
S-EACX-400G-P-1	SW, EACX, per 400GbE capacity, includes ADV SW Subscription license with full platform scale, Premium, with SVC customer support, 1 year
S-EACX-400G-P-3	SW, EACX, per 400GbE capacity, includes ADV SW Subscription license with full platform scale, Premium, with SVC customer support, 3 years
S-EACX-400G-P-5	SW, EACX, per 400GbE capacity, includes ADV SW Subscription license with full platform scale, Premium, with SVC customer support, 5 years
S-EACX-400G-P1-P	SW, EACX, per 400GbE capacity, includes ADV SW Subscription license with full platform scale, Premium 1, without customer support, must purchase CS SKU separately, perpetual
Data Center Software	
S-ACXCLDDC48L-A1-1	SW, ACX7100-48L, Cloud Data Center (CLLDC), Advanced 1, with SVC customer support, 1 year
S-ACXCLDDC48L-A1-3	SW, ACX7100-48L, Cloud Data Center (CLLDC), Advanced 1, with SVC customer support, 3 years
S-ACXCLDDC48L-A1-5	SW, ACX7100-48L, Cloud Data Center (CLLDC), Advanced 1, with SVC customer support, 5 years
S-ACXCLDDC48L-A1-P	SW, ACX7100-48L, Cloud Data Center (CLLDC), Advanced 1, without customer support, must purchase CS SKU separately, perpetual
S-ACXCLDDC48L-A2-1	SW, ACX7100-48L, Cloud Data Center (CLLDC), Advanced 2, with SVC customer support, 1 year
S-ACXCLDDC48L-A2-3	SW, ACX7100-48L, Cloud Data Center (CLLDC), Advanced 2, with SVC customer support, 3 years
S-ACXCLDDC48L-A2-5	SW, ACX7100-48L, Cloud Data Center (CLLDC), Advanced 2, with SVC customer support, 5 years
S-ACXCLDDC48L-A2-P	SW, ACX7100-48L, Cloud Data Center (CLLDC), Advanced 2, without customer support, must purchase CS SKU separately, perpetual

Juniper Service and Support

Juniper Networks is the leader in performance-enabling services that are designed to accelerate, extend, and optimize your high-performance network. Our services allow you to maximize operational efficiency while reducing costs and minimizing risk, achieving a faster time to value for your network. Juniper Networks ensures operational excellence by optimizing the network to maintain required levels of performance, reliability, and availability. For more details, please visit www.juniper.net/us/en/products-services

About Juniper Networks

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

Corporate and Sales Headquarters
Juniper Networks, Inc.
1133 Innovation Way
Sunnyvale, CA 94089 USA
Phone: 888.JUNIPER (888.586.4737)
or +1.408.745.2000
www.juniper.net

APAC and EMEA Headquarters
Juniper Networks International B.V.
Boeing Avenue 240
1119 PZ Schiphol-Rijk
Amsterdam, The Netherlands
Phone: +31.0.207.125.700