

JUNIPER<sup>®</sup>  
NETWORKS

# ACX7000 FAMILY



Engineered Brilliance for Cloud Metro

# THE START OF ALL THINGS REVOLUTIONARY

Our enhanced Cloud Metro ACX7000 Family portfolio combines the latest generation forwarding ASICs, power innovations, chassis design, and more. Just as importantly, it achieves the right balance of density, scalability, and performance for today's metro demands, with ample room to grow.

## THE RESULTS

- The industry's **highest scalability for a metro portfolio**, from 1 Gbps up to 345 Tbps
- The **most flexible port options**, with support for 1/10/25/40/50/100/200/400GE and ready for tomorrow's ultra-dense 800G and 1.6T ports
- The **highest router line card capacity per slot**, up to 21.6 Tbps
- The **highest 400GE port density**, with support for high-power XR, ZR, and ZR+ digital coherent optics on all ports (up to 54 per slot) simultaneously
- The **highest timing accuracy (Class-D)**, verified by EANTC
- Accommodating up to **48 times bandwidth growth** within the same chassis with removable and modular power shelf design extends system lifetime and reduces e-waste
- The **highest rating for power-efficiency** - Titanium grade certified by CLEAResult 80Plus program
- Up to **77% lower energy consumption**, **71% lower total cost of ownership**, and **4~7 years longer system lifetime** than what's available in the market, verified by ACG Research

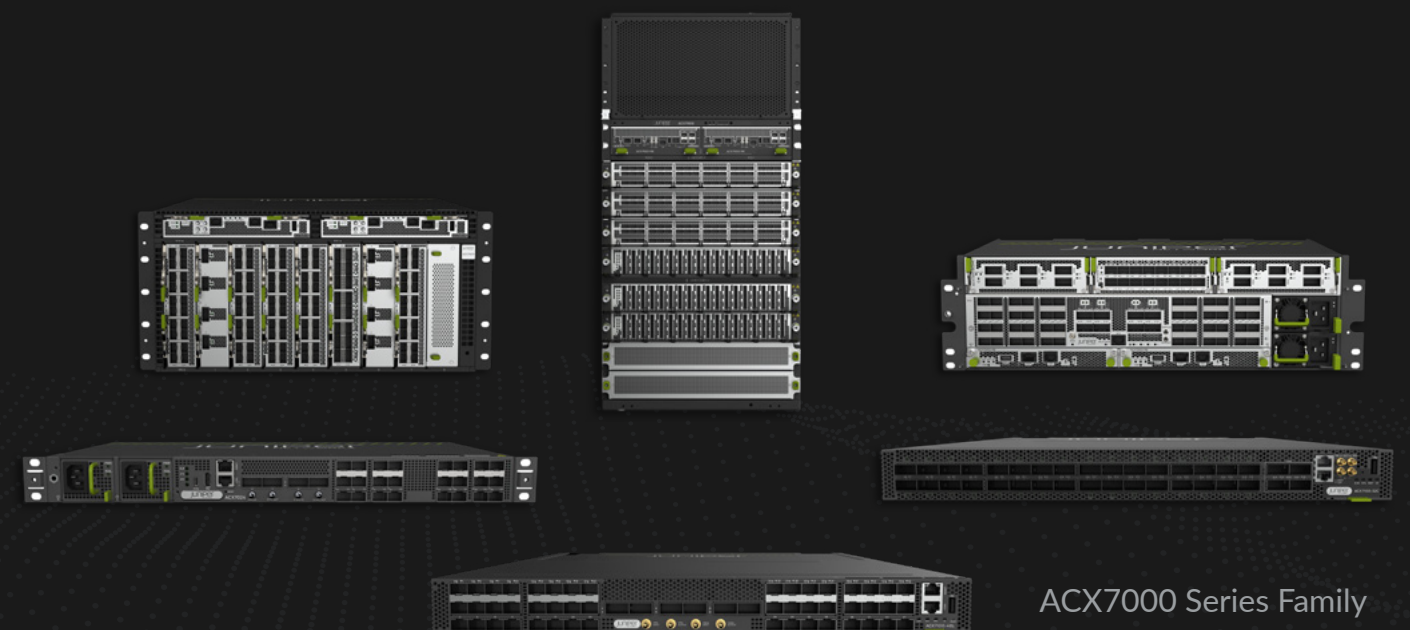
It adds up to the industry's most sustainable, highest-performing networking systems for the new Cloud Metro —leading today and well into the future.

# UNRAVEL THE POSSIBILITIES OF THE JUNIPER ACX7000 FAMILY OF CLOUD METRO ROUTERS

## KEY ATTRIBUTES

### Groundbreaking innovations, including:

- Latest-Generation Silicon
- Exceptional Port Flexibility, Density, and Scalability
- Optimized Airflow and Thermal Design
- Unrestricted high-power ZR/ZR+ support
- Ultra-high Precision Timing Accuracy
- Paragon Automation as a Service
- Embedded Paragon Active Assurance
- Built-in Zero Trust Security
- Assured, Automated Transport Network Slicing



ACX7000 Series Family

# ACX7000 FAMILY

## Fixed Platforms

Our fixed-system platform with multiservice options for the Cloud Metro is just as compelling and more compact. Sometimes the best things do come in small packages!

### ACX7024

**Hardened, compact, fixed, 1-100G Cloud Metro router**

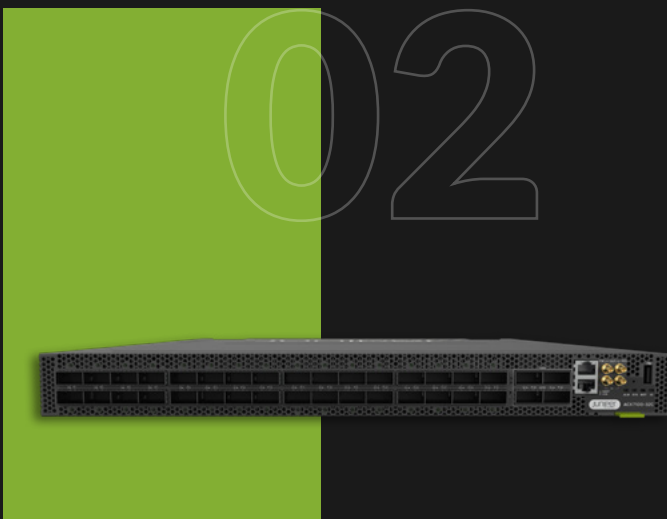
The ACX7024 sets a new benchmark with industry-leading access performance. A 5G-optimized Cell Site Router (CSR) offers highly accurate timing support, next-generation transport options such as SR/ SRv6 with EVPN, and compelling interface support including 1G, 10G, 25G, and 100G port options along with 100G high power transceiver use. 5G xHaul has never been so well supported – until now!



### ACX7100-32C

**High-capacity, secure, dense, fixed, 100-400G, Cloud Metro router**

The ACX7100-32C is unique in the industry by offering 32 ports of 100G QSFP28 ports, capable of supporting 100G ZR optics on each port simultaneously, along with 4 ports of 400G with ZR/ZR+/XR support. Juniper's ACX7100 series leads in sustainable expansion for the future, here today.



# ACX7000 FAMILY

## Fixed Platforms

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### ACX7100-48L

**High-capacity, dense, fixed, 10-400G, Cloud Metro router**

The ACX7100-48L offers category-leading port speed options to help customers grow in-place as their capacity needs grow, with 48 ports capable of supporting 10G, 25G, and even 50G interfaces on every port simultaneously to meet demanding bandwidth needs for 5G xHaul or Cable R-PHY aggregation, or even local connectivity for high-speed NICs from distributed edge compute nodes deep in the Cloud Metro. This is complemented by 6 ports of 400G with QSFP-DD optics for non-blocking uplinks, allowing easy growth from 100G to 400G with different choice of optics population, and support for 400G ZR/ZR+/XR on each port.



### ACX7348

**Hardened, secure, compact, fixed+ I/O bay design, 1-400G, Cloud Metro router**

We carried modular design innovations into a versatile fixed ACX7348 platform by combining the value of a fixed redundant platform with three bays of modularity that provide highly customizable build-as-you-grow scalability, high availability, density, and exceptional performance serving a variety of use cases.





# ACX7000 FAMILY

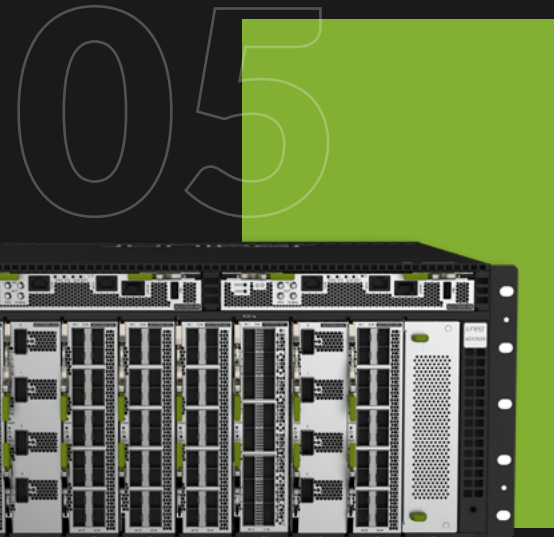
## Modular Platforms

Our innovative modular platforms are high-performance, power-efficient, and deliver flagship highest-capacity and market-leading density for different Cloud Metro locations and requirements.

### ACX7509

**Compact, dense, highly available, modular, 1-400G, Cloud Metro router**

The ACX7509 delivers compelling TCO advantages for customer networks, borrowing a page from Juniper's storied routing history to once again deliver a new router using centralized forwarding coupled with simple interface modules. It delivers the perfect, optimized balance of power, performance, price, and space for the Cloud Metro.



### ACX7908

**High-capacity, high-performance, ultra-dense, modular, 100-400G, Cloud Metro router**

The ACX7908 offers the highest capacity in an 8-slot modular chassis with distributed forwarding and a blistering bandwidth per slot. It also provides the ability to support high-power pluggable DWDM Digital Coherent Optics (DCO) such as 400G ZR, ZR+, or XR on all ports simultaneously. It delivers breakthrough port density and scale while optimally balancing high thermal tolerance yet low power consumption at the same time.



# REIMAGINING

## Operations Intelligently



### Cloud-Delivered Automation

Most automation tools function as standalone solutions, requiring complex specialized software and dedicated on-premises infrastructures. Juniper Paragon™ Automation can be consumed as a cloud-delivered service. Teams can instantly simplify and accelerate service delivery by consuming automation from the cloud as a SaaS solution, reducing time-to-service introduction from months to minutes with dramatic improvements in productivity and speed.

### AI-Enabled Intelligence with Conversational Assist

Drive down manual effort and timelines for Day-2 operations with AI-driven operations (AIOps). Networking operational staff can diagnose problems much more quickly, drawing on the proven Juniper AI expertise. With Juniper AIOps, the Cloud Metro network itself can more efficiently observe, predict, and remediate network failures and service degradations at the CSP scale.

# REINVENTING Metro Networking Systems



## Adaptive Power Innovation

Juniper ACX7000 family leverages the latest generation chipsets and system design, plus new energy innovations, to deliver industry's highest performance and 400G density with less space and power. More efficient cooling and the ability to automatically turn off Packet Forwarding Engines (PFEs) and software functions when not in use further optimizes energy consumption. Less power consumed means less OpEx, more profits, and a more sustainable future for the planet. This is the advantage of the next-generation Cloud Metro routers.

## Future-Proof Performance

The expanded Cloud Metro portfolio delivers the industry-leading scalability (from 1 Gbps up to 345 Tbps), the highest line card capacity per slot (up to 21.6 Tbps). We also offer the industry's highest 400GE port density and flexibility, and the ability to support high-power XR/ZR/ZR+ coherent optics on every port simultaneously. Looking ahead, these systems are ready for tomorrow's ultra-dense 800G and 1.6T ports, as well as low-latency applications of the future with the industry's only Class D-verified timing precision accuracy.

# BUILDING Scalable, Assured, and Secure Metro IP Services Fabric Architecture



## Embedded Active Assurance

The Cloud Metro ACX7000 family routers are designed for experience-first networking. Paragon Active Assurance test agents are now natively embedded into the Junos® OS Evolved in every ACX7000 platform. We've transformed the metro network into a "sensor" that proactively ensures user experience without requiring advanced expertise or time-consuming manual labor. For example, you will know if a new site is ready to serve customers or if edge clouds will meet SLA requirements for a new network slice. And, because most problems are resolved before they affect customers, incident response times can be cut in half, resulting in happier, more loyal subscribers.

# ZERO TRUST

## Security



ACX7000 Family features built-in Zero Trust Security. A unique Device ID is cryptographically bound to every ACX7000 platform during manufacturing and automatically verifies that the device hardware and software haven't been tampered with. These Cloud Metro platforms also feature data security, including native file encryption to protect at rest and MACsec encryption on all ports to safeguard data in motion. In addition, the new Juniper Paragon™ Automation as a service offering includes validation and reporting of network trust to provide insight into infrastructure security posture across an end-to-end network.

Together, these capabilities create a more scalable, assured, and secure metro IP services fabric that's optimized for the explosion of new devices and applications at the metro edge. They provide a powerful foundation to deliver next-generation metro edge services and network slices and achieve sustainable business outcomes.

# BUILDING

## For The Future



At Juniper, we balance design choices not just for today, but for the next decade. With a complete portfolio, state-of-the-art system design, and the industry's most flexible interface options, you can grow at your own pace, adding capacity where and when you need it. You can build a more sustainable business with Cloud Metro —for your people, the planet, and profit.





Scan this QR code to learn more about  
the Juniper ACX7000 Family Portfolio



#### Statement of Product Direction

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