

Apollo 9901X

Access OTN Switch for Rapid Provisioning of L1 Business Services

The Apollo 9901X changes the equation for provisioning L1 business services. Rather than mapping multiple colored interfaces onto a ring using muxponders, each requiring engineering, it enables supporting all services on a single 100G wavelength. L1 services connect to the 9901X via low-cost gray interfaces, and are added to the ring traffic under software control.



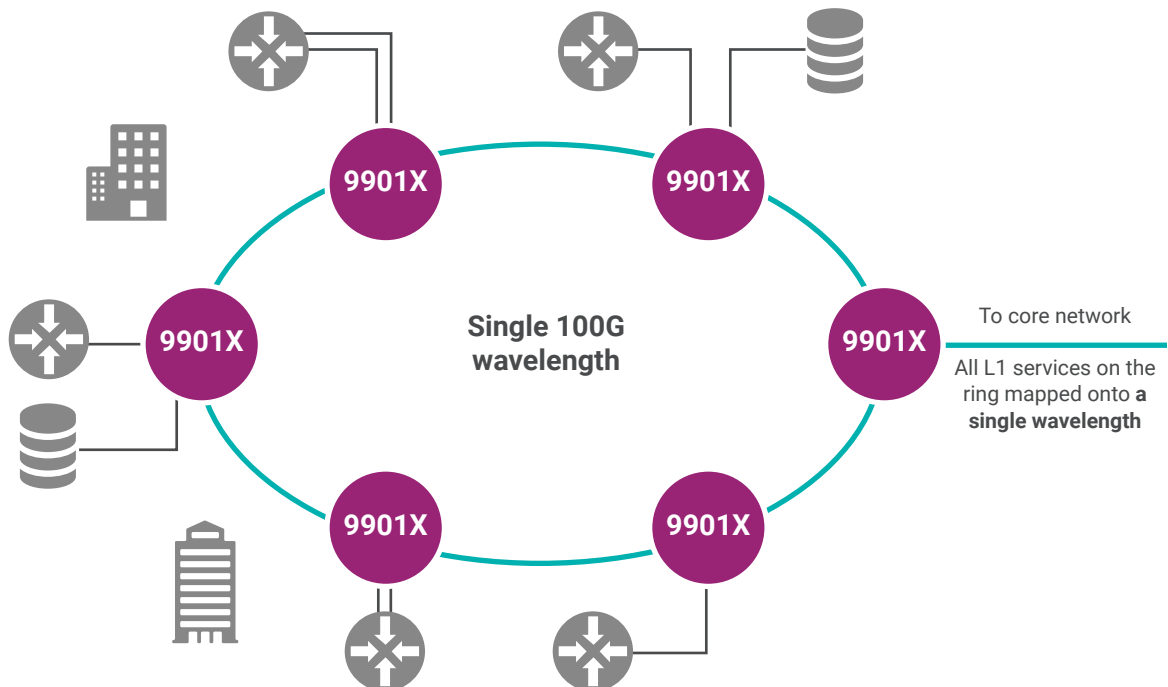
The 9901X works seamlessly with Apollo metro and core OTN switches, under a common management interface, to maximize the OTN switching benefits of rapid provisioning, wavelength grooming, and automated restoration throughout the optical network.

OTN Switching Flexibility
at the network edge

Multiservice Interfaces
for all L1 business services

Point-and-Click
L1 service provisioning

Open Interfaces
for disaggregated solutions



Technical Specifications

Applications	Edge OTN ADM or OTN CPE
Topologies	Ring, hub, terminal
Spectrum	Fixed grid: 50GHz/96ch and 100GHz/48ch
Switching capacity	400G OTN switching (ODUk cross-connect 0, 1, 2, 2e, 4, Flex)
Line interfaces	2 x 100G (OTU4) uplink <ul style="list-style-type: none"> • Colored-coherent up to 200km • Gray for up to 70Km
Client interfaces	20 x SFP/SFP+ clients <ul style="list-style-type: none"> • Ethernet: GbE, 10GbE, 100GbE • OTN: OTU2/2e • TDM: STM1/4/16/64, OC3/12/48/192 • SAN: FC1/2/4/8/10/16
Encryption	AES256-GCM with IV and MIC
Certification	X.509
Key exchange	Diffie-Hellman, Group 5
Optical card support	Amplifiers, XFP OTDR , XFP booster
Synchronization	SynchE and 1588V2 ready
Protection	OLP span protection
Restoration	Automatic Switched Optical Network (ASON) ODU SNC-N protection
Dimensions	1U height, 300mm depth, supports installation in ANSI 19", ETSI, and 23" racks Front access to all interfaces
Power input	Dual removable AC or DC power supplies Max power consumption <250W
Environmental	Operating temperature: -5°C to +55°C Relative humidity: 5% to 90% (non-condensing)
Network management	Muse™/LightSOFT® end-to-end, point-and-click network management
Control interfaces	Netconf/Yang complying with OpenROADM MSA

Specifications subject to change without notice

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About Ribbon

Ribbon Communications (Nasdaq: RBBN) delivers communications software, IP and optical networking solutions to service providers, enterprises and critical infrastructure sectors globally. We engage deeply with our customers, helping them modernize their networks for improved competitive positioning and business outcomes in today's smart, always-on and data-hungry world. Our innovative, end-to-end solutions portfolio delivers unparalleled scale, performance, and agility, including core to edge software-centric solutions, cloud-native offers, leading-edge security and analytics tools, along with IP and optical networking solutions for 5G. We maintain a keen focus on our commitments to Environmental, Social and Governance (ESG) matters, offering an annual Sustainability Report to our stakeholders. To learn more about Ribbon, please visit [rbbn.com](https://www.ribbon.com).