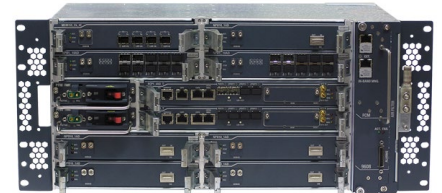




# Apollo 9608

## Powerful and Versatile Metro to Core Optical Transport

Apollo 9608 is a powerful and versatile 5RU optical transport platform for metro, core, and data center applications. It accommodates the entire range of Apollo transponder, muxponder, ROADM, and amplification blades. Each of its eight slots supports dual 400G density-power-cost-optimized blades, for a total client plus line platform capacity of 12.8T. It also supports double-slot blades that delivers two performance-optimized 600G lines, or a 1.2T line in a combined mode, for the most demanding transport applications.



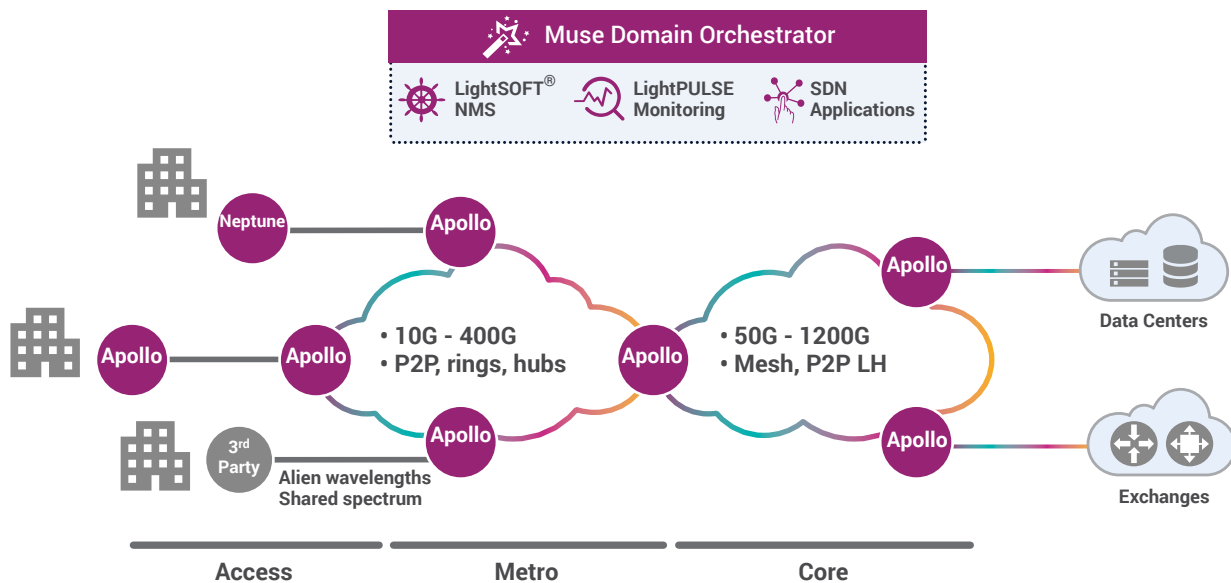
Apollo optical transport and switching platforms combine to deliver high-performance access-to-core optical networking solutions at the lowest cost per bit. Highly modular, they are tailorable into solutions that precisely meet current needs, and can evolve economically to accommodate traffic growth and new technologies. All Apollo platforms support multiservice client interfaces including 400GbE, as well as alien wavelengths, shared spectrum, and packet services. They are controllable through Muse Domain Orchestrator, or directly, via open industry-standard interfaces, and can stand by themselves in disaggregated networks such as for Open Optical Line Systems.

**Programmable**  
for SDN  
applications

**Open**  
for modular  
disaggregated solutions

**Self-aware**  
for E2E visibility  
and operability

**Efficient**  
low power and  
high density



## Technical Specifications

<b>Topologies</b>	Mesh, hub, ring, linear, point-to-point
<b>Spectrum</b>	Extended C-band Flexible grid at 6.25GHz resolution Fixed grid: 50GHz/96ch, 75GHz/64ch, 100GHz/48ch Super-channel up to 128 channels
<b>Capacity</b>	8 slots for blades, interchangeable across Apollo family of transport platforms Max platform capacity 12.8T (6.4T client capacity plus 6.4T line capacity)
<b>Service (client) interfaces</b>	Ethernet (1GbE, 10GbE, 40GbE, 100GbE, 400GbE) SDH/SONET (STM-1, 4, 16, 64/OC-3, 12, 48, 192) SAN (FC-1, 2, 4, 8, 10, 16, 32) Video (DVB-ASI, SDI 270, HD-SDI 1.5G/3G) OTU 1, 2, 2e, 3, 4; FlexO
<b>Layer 2 interfaces</b>	MEF Carrier Ethernet 2.0 virtual LAN services: E-Line, E-LAN, E-Tree, and E-Access Statistical multiplexing transport aggregation Connection-oriented transport using integrated 60G Q-in-Q or MPLS-TP switch
<b>Security and Encryption</b>	AES256-GCM encryption; Diffie-Hellman key exchange with X.509 node authentication, enhanceable with PQC algorithms; FIPS 140-2, level 2; CC EAL2
<b>Network (DWDM) interfaces</b>	OTU1 (2.5 Gbps)                      OTUC2 (200 Gbps) OTU2/2e (10 Gbps)                OTUC4 (400 Gbps) OTU3e (40 Gbps)                   OTUC6 (600 Gbps) OTU4 (100 Gbps)                   OTUA (100 to 1200Gbps, in 50Gbps increments)
<b>Optical add/drop multiplexers</b>	2-, 4-, 9-, and 20-degree ROADMs (flexible and fixed grid) with OCM and automatic power equalization and Colorless, Directionless, and Contentionless (CDC) wavelength routing Fixed OADM 100% add/drop capacity
<b>Amplification</b>	EDFA, Raman, Hybrid EDFA/Raman, with embedded optical leveling and control Output power: 16 dBm to 26 dBm Gain: up to 40 dB with/without 10 dB midstage
<b>Protection</b>	OCH 1+1, OLP, OMSP, Y Protection, DRI/DNI
<b>Restoration</b>	Spectrum Switched Optical Network (SSON) - spectrum level Wavelength Switched Optical Network (WSON) – wavelength level Automatic Switched Optical Network (ASON) – service level 1+1, 1+1 forever, preplanned/dynamic protection
<b>HW redundancy</b>	All common units/cards: power supply, controllers, fan units
<b>Dimensions</b>	19" width, 221 mm height, 253 mm depth, 8 service slots
<b>Power input</b>	-40.5 VDC to -75 VDC, AC mains
<b>Environmental</b>	Operating temperature: -5C to +55C Relative humidity: 5% to 90% (non-condensing)
<b>SDN</b>	Muse Optical Domain Controller and Applications
<b>Network management</b>	LightSOFT® end-to-end, point-and-click network management
<b>Performance monitoring</b>	LightPULSE™ integrated real-time OSNR and other parameters, and integrated OTDR
<b>Control interfaces</b>	Netconf/Yang open interface

Specifications subject to change without notice

**Contact Us**

We are here to help. Contact us about our IP Wave solutions.